

**IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA**

MAXWELL KADEL, *et al.*,

*Plaintiffs,*

v.

DALE FOLWELL, in his official capacity as  
State Treasurer of North Carolina, *et al.*,

*Defendants.*

Case No. 1:19-cv-00272-LCB-LPA

**PLAINTIFFS' MEMORANDUM OF LAW IN SUPPORT OF MOTION  
TO EXCLUDE EXPERT TESTIMONY OF DR. PATRICK W. LAPPERT**

## **TABLE OF CONTENTS**

INTRODUCTION .....	1
LEGAL STANDARD .....	3
ARGUMENT.....	5
I.    Dr. Lappert Is Not Qualified to Offer Any of His Purported Opinions. ....	5
A.    Dr. Lappert Has Never Performed Gender-Affirming Surgery and Is Not Qualified to Opine on Such Procedures. ....	6
B.    Dr. Lappert Has No Basis to Offer Opinions on Topics Outside of Plastic Surgery.....	9
II.   Dr. Lappert’s Opinions on Topics Outside of Gender-Affirming Surgery Do Not “Fit” the Disputed Issues, Are Unreliable, Or Both. ....	11
A.    Far from Being Generally Accepted, Dr. Lappert’s Opinions Have Been Rejected by the Scientific Community.....	11
B.    Dr. Lappert’s Critiques of WPATH, Endocrine Society Guidelines, DSM-V, and Other Organizations’ Positions Are Unreliable. ....	14
C.    Dr. Lappert’s Opinions About the Need for Randomized Clinical Trials Are Unreliable.....	16
D.    Dr. Lappert’s Speculation About “Detransitioners,” “Regret” and “Social Contagion” Is Unreliable. ....	18
E.    Dr. Lappert’s Opinions About Risks Communicated to Plaintiffs Are Unreliable. ....	19
III.  Dr. Lappert’s Opinions Are Based on His Personal Beliefs Rather than Science.....	20
CONCLUSION .....	23

Plaintiffs respectfully submit this memorandum of law in support of their motion to exclude the expert testimony of Dr. Patrick W. Lappert.

### **INTRODUCTION**<sup>1</sup>

Dr. Lappert holds himself out as being board-certified in both plastic surgery and general surgery. He is neither: his certification in plastic surgery lapsed in 2018, and he has not been board-certified in surgery since **2002**. Moreover, in his entire career, Dr. Lappert has never performed a single surgical procedure to treat gender dysphoria—which is not surprising, since he considers those procedures to be “intentional mutilation” and “child abuse.” Dr. Lappert has no reliable basis to opine about gender-affirming surgery, and his purported expert opinions about those procedures should be excluded.

And Dr. Lappert’s opinions outside of surgery are even more ripe for exclusion. Straying far afield from his surgical experience, Dr. Lappert gives a smorgasbord of opinions that he is not qualified to provide, and for which he has no basis. For example, he criticizes how organizations like the World Professional Association for Transgender Health (“WPATH”) and the Endocrine Society have developed guidelines for diagnosis and treatment of gender dysphoria, despite admitting that he does not know the first thing about how those guidelines were created. He speculates about whether puberty-blocking treatment is appropriate for adolescents, even though he is not an endocrinologist and he admits “that’s not [his] area of expertise.” He criticizes the process by which patients are

---

<sup>1</sup> Unless otherwise noted, all emphasis is added, and all citations, alterations, and ellipsis are omitted. Exhibits referenced herein are attached to the concurrently-filed Declaration of Dmitriy Tishyevich.

diagnosed with gender dysphoria, despite admitting that he has “very limited psychiatric / psychological knowledge,” is not “a licensed mental healthcare provider of any kind,” and is not qualified to make this diagnosis himself. And he also offers rank speculation about patients with gender dysphoria who “detransition” or experience “regret,” even though he concedes he has no reliable data to quantify these phenomena. These and other of Dr. Lappert’s many non-surgery opinions are both unreliable and irrelevant, and they should all be excluded accordingly.

Dr. Lappert’s deposition also made clear that he is certainly not a dispassionate expert who will offer neutral “specialized knowledge” to “help the trier of fact to understand the evidence,” as Rule 702 contemplates. Far from it. In addition to calling gender-affirming surgery “intentional mutilation,” Dr. Lappert says that parents who talk to their children about gender identity issues are “sexualizing them” and “grooming” them for abuse. He accuses doctors who provide gender-affirming treatment of being part of a “Transgender Treatment Industry” cabal—a term that he concedes is certainly not “commonly used” in his professional field, and is instead “idiosyncratic” to his report. He has given inflammatory presentations on gender-affirming surgery, opining that performing these surgeries is a “moral violation” for physicians and that “changing a person’s sex is a lie.” He tours the country, urging state legislatures to outlaw gender-affirming treatment for minors. And he also thinks that states should “criminally prosecute doctors” that provide this critically-needed treatment—even though *every* reputable



medical organization in the country, including his own professional society, has said that such treatment is medically necessary and appropriate.

Even if Dr. Lappert's opinions were reliable under Rule 702 (and they are not), and even if they had any minimal probative value (and they do not), that value would be far outweighed by unfair prejudice and confusion of the issues under Rule 403. For these reasons, and as explained below, all of Dr. Lappert's opinions should be excluded.

### **LEGAL STANDARD**

Federal Rule of Evidence 702 places “a special gatekeeping obligation” on the trial court to ensure that an expert's testimony is “relevant to the task at hand” and “rests on a reliable foundation.” *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993); *Sardis v. Overhead Door Corp.*, 10 F.4th 268, 281 (4th Cir. 2021). As the Fourth Circuit recently reaffirmed, “the importance of the gatekeeping function cannot be overstated.” *Sardis*, 10 F.4th at 283.

“The proponent of the testimony must establish its admissibility by a preponderance of proof.” *Mod. Auto. Network, LLC v. E. All. Ins. Co.*, 416 F. Supp. 3d 529, 537 (M.D.N.C. 2019). The first step is to determine if the expert is qualified to give the proffered opinion, which requires examining the expert's professional qualifications and “full range of experience and training.” *Belk, Inc. v. Meyer Corp.*, U.S., 679 F.3d 146, 162 (4th Cir. 2012). If the expert is not qualified, the testimony should be excluded. *See SMD Software, Inc. v. EMove, Inc.*, 945 F. Supp. 2d 628, 639 (E.D.N.C. 2013).

Even if the expert is qualified, the court must consider the relevancy of the expert's testimony as "a precondition to admissibility." *Sardis*, 10 F.4th at 282. To be relevant, the testimony must have "a valid scientific connection to the pertinent inquiry." *Id.* at 281. "If an opinion is not relevant to a fact at issue, *Daubert* requires that it be excluded." *Id.*

The opinion must also be based on a reliable foundation, with the inquiry focusing on the expert's "principles and methodology" to assess whether it is "based on scientific, technical, or other specialized knowledge and not on belief or speculation." *Id.* at 281-82. In evaluating reliability, courts consider, among other things, whether: (1) the theory "can be and has been tested"; (2) has been "subjected to peer review and publication"; (3) "the known or potential rate of error"; and (4) "whether the technique is generally accepted in the scientific community." *Id.* at 281.

When an expert relies upon experience and training rather than a specific methodology, the application of the *Daubert* factors is more limited. *See Freeman v. Case Corp.*, 118 F.3d 1011, 1016 n.6 (4th Cir. 1997). In those cases, courts consider: "1) how the expert's experience leads to the conclusion reached; 2) why that experience is a sufficient basis for the opinion; and 3) how that experience is reliably applied to the facts of the case." *SAS Inst., Inc. v. World Programming Ltd.*, 125 F. Supp. 3d 579, 589 (E.D.N.C. 2015).

Finally, the Fourth Circuit has cautioned that although the trial court has "broad latitude" to determine reliability, it must still engage in the gatekeeping process and not simply "delegate the issue to the jury." *Sardis*, 10 F.4th at 281. Even rigorous cross-

examination is not a substitute for the court's gatekeeping role. *See Nease v. Ford Motor Co.*, 848 F.3d 219, 231 (4th Cir. 2017).

## **ARGUMENT**

### **I. Dr. Lappert Is Not Qualified to Offer Any of His Purported Opinions.**

An expert witness must have “knowledge, skill, experience, training, or education” that would assist the trier of fact. *Kopf v. Skyrms*, 993 F.2d 374, 377 (4th Cir. 1993). “[Q]ualifications alone do not suffice,” however. *Clark v. Takata Corp.*, 192 F.3d 750, 759 n.5 (7th Cir. 1999); *Patel ex rel. Patel v. Menard, Inc.*, 2011 WL 4738339, at \*1 (S.D. Ind. Oct. 6, 2011). Even “a supremely qualified expert cannot waltz into the courtroom and render opinions unless those opinions are based upon some recognized scientific method and are reliable and relevant.” *Clark*, 192 F.3d at 759 n.5.

Moreover, “an expert’s qualifications must be within the same technical area as the subject matter of the expert’s testimony; in other words, a person with expertise may only testify as to matters within that person’s expertise.” *Martinez v. Sakurai Graphic Sys. Corp.*, 2007 WL 2570362, at \*2 (N.D. Ill. Aug. 30, 2007); *Lebron v. Sec. of Fla. Dept. of Children and Families*, 772 F.3d 1352, 1369 (11th Cir. 2014).

Importantly, this qualification inquiry is subject-specific, because “[g]eneralized knowledge of a particular subject will not necessarily enable an expert to testify as to a specific subset of the general field of the expert’s knowledge.” *Martinez*, 2007 WL 2570362, at \*2. “For example, no medical doctor is automatically an expert in every medical issue merely because he or she has graduated from medical school or has achieved

certification in a medical specialty.” *O’Conner v. Commonwealth Edison Co.*, 807 F. Supp. 1376, 1390 (C.D. Ill. 1992), *aff’d*, 13 F.3d 1090 (7th Cir. 1994). Dr. Lappert fails these requirements, for reasons below.

**A. Dr. Lappert Has Never Performed Gender-Affirming Surgery and Is Not Qualified to Opine on Such Procedures.**

Dr. Lappert’s report represents that he is “Board Certified in Surgery and Plastic Surgery.” (Ex. 1 at 1.) This is not true. As he admitted, his “plastic surgery board certificate expired at the end of 2018.” (Ex. 2 at 23.) His “board certification in surgery” expired “in 2002”; thus, he has not “been board-certified in surgery” for “over nineteen years.” (*Id.* at 31-32.)

These are not trivial fibs, because physicians are not allowed to hold themselves out as board-certified unless they actually have a *current* board certificate. The American Board of Plastic Surgeons unequivocally prohibits such misrepresentations, stating that “when a physician misrepresents certification status,” as Dr. Lappert did here, “ABPS may notify local credentialing bodies, licensing bodies, law enforcement agencies, and others.” (*Id.* at 30; Ex. 3 at 3.) And the American Board of Surgery takes a similarly dim view of such misrepresentations, as Dr. Lappert also acknowledged. (Ex. 2 at 32 (agreeing it does not “surprise [him] that the [ABS] does not allow doctors to represent that they are board-certified in surgery unless they have a current board certificate.”).)

Setting aside these misrepresentations about his credentials, Dr. Lappert is also not qualified to give expert opinions about gender-affirming surgery for a more basic reason: he has never even performed a single such procedure. He admitted that he has “never

performed facial feminization surgery” or “facial masculinization surgery” for any transgender patient. (*Id.* at 167.) The same is true for “transfeminine top surgery” and “chest reconstruction surgery.” (*Id.* at 167.) He has also never “performed a vaginoplasty” nor “metoidioplasty.” (*Id.* at 167-68.) In short, Dr. Lappert has “*never* performed *any kind* of gender-affirming surgery in transgender patients.” (*Id.* at 168; *id.* at 151 (“I have never treated a patient with gender dysphoria surgically.”).) He was also emphatic that he would never perform such surgeries, because he personally does not “see them as beneficial” and thinks that they are “incorrect treatments.” (*Id.* at 150.)

Dr. Lappert has not published any research on gender-affirming surgery either. He agreed that he has “not published any original research in peer-reviewed literature within the *last 23 years*” at all—and of the six total articles that he did publish a quarter-century ago, not one was on gender-affirming surgeries for patients with gender dysphoria. (*Id.* at 129; *see id.* at 130-134.)

As a substitute for first-hand experience, Dr. Lappert cites a handful of studies in his report about supposed complications from gender-affirming surgery. But reading studies does not make one an expert. That is just the sort of “generalized knowledge of a particular subject” that courts have rejected as a qualification under Rule 702. *Martinez*, 2007 WL 2570362, at \*2. As with the disqualified expert in *Lebron* who “reached his opinion . . . by relying on studies,” reading literature is not enough. 772 F.3d at 1369.

It is also telling that the Code of Ethics of the American Society of Plastic Surgeons (“ASPS”) prohibits members from giving this kind of unfounded testimony.<sup>2</sup> Section IV of that Code of Ethics says that “to help limit false, deceptive and/or misleading testimony, Members serving as expert witnesses *must*: 1. Have *recent and substantive experience* (as defined in the Glossary of the Code) in the area in which they testify[.]” (Ex. 4 at 6.) The Glossary, in turn, defines “recent and substantive experience” to mean (among other requirements) that the member “has performed the specific procedure in question within three (3) years of the date of being retained as an expert witness.” (*Id.* at 8.)

Dr. Lappert fails these requirements. Far from having actually performed any of the gender-affirming procedures that he criticizes in his report (*see* Ex. 1 at 29-39)—*ever*, let alone within the last three years—Dr. Lappert was emphatic that he would never perform such surgeries because he does not “see them as beneficial.” (Ex. 2 at 150.) To be sure, the ASPS Code of Ethics is not a substitute for the Court’s Rule 702 inquiry. But the fact that the ASPS prohibits members from providing these kinds of ill-informed expert opinions precisely to “help limit false, deceptive, and/or misleading [expert] testimony” from being offered in court (Ex. 4 at 6) should give the Court serious pause, to say the least, about allowing Dr. Lappert’s testimony.

---

<sup>2</sup> Dr. Lappert resigned from ASPS around the time his board certification lapsed (Ex. 2 at 100-101), but he was a member from 1997 to 2017, and he agreed that ASPS is a “reputable organization” to which “93 or so percent of all plastic surgeons” in the country belong. (*Id.* at 102-103.)

**B. Dr. Lappert Has No Basis to Offer Opinions on Topics Outside of Plastic Surgery.**

Dr. Lappert also offers a grab-bag of opinions on topics far outside his field of plastic surgery—including endocrinology (*e.g.*, opining whether puberty-blocking agents and cross-sex hormones like testosterone are appropriate treatments for gender dysphoria), psychiatry (*e.g.*, criticizing how patients are diagnosed with gender dysphoria), and more.

Dr. Lappert has no qualifications or any other basis to give any of these opinions, and they all should be excluded. For example, he has no basis to opine about purported risks of puberty-blocking treatments, given that he agreed that he is “not an endocrinologist” and has “no specialized training or expertise in endocrinology.” (Ex. 2 at 153, 204.) He also has “never prescribed any puberty-blocking drugs of any kind”; and indeed, he admitted: “I *do not* consider myself an expert in that area” and “that’s not my area of expertise.” (*Id.* at 201, 203.)

The same is true for Dr. Lappert’s opinions on cross-sex hormone treatments—given that he admits that he has “never prescribed cross-sex hormones for treatment of gender dysphoria,” and that he has “no firsthand experience with advising [his] patients about potential risks and benefits” of such treatment. (*Id.* at 214.) Here, again, Dr. Lappert conceded that he does not “hold [himself] out as an expert in endocrinology,” and that he does not plan to offer “any expert opinions in endocrinology in this case because that’s outside [his] scope of expertise.” (*Id.* at 204.) All of his purported opinions related to endocrinology should be excluded accordingly.

Dr. Lappert also has no qualifications—or any other basis—to opine about diagnosis or treatment of mental conditions. He admits that he has “very limited psychiatric/psychological knowledge”; he is “not a psychiatrist” or “a licensed mental healthcare provider of any kind”; and in his “professional day-to-day practice,” he “do[es] not diagnose mental health conditions of any kind.” (*Id.* at 68, 153-54.)<sup>3</sup> Thus, as Dr. Lappert conceded, “for any patient that presents to [him] with a mental health condition,” he would “send them to someone who is . . . trained in how to diagnose mental health conditions.” (*Id.* at 157.) And after all of these admissions, he also conceded that he “do[es] not hold [himself] out as an expert in **diagnosing** mental health conditions outside, potentially, of body dysmorphic disorder,” and that he also does “not have special[ized] training or expertise in **treating** mental health conditions.” (*Id.* at 75.)

In short, while Dr. Lappert does not even have the relevant expertise to opine about gender-affirming surgery, he certainly does not have the expertise to “waltz into the courtroom” and mislead a factfinder with purported expert testimony about endocrinology, psychiatry, or anything else. *See Clark*, 192 F.3d at 759 n.5. So at the very least, all of his opinions outside of plastic surgery should be excluded.

---

<sup>3</sup> Dr. Lappert said he feels qualified to identify a potential diagnosis of body dysmorphia, and to then “offer referral for psychiatric/psychological support and evaluation” to those patients. (Ex. 2 at 72.) Body dysmorphic disorder is a distinct condition from gender dysphoria, however, that “is primarily characterized by an excessive preoccupation with a perceived defect or flaw in appearance that others cannot see or would judge as slight in appearance.” (Ex. 17 at 1; Ex. 2 at 71 (“They see a defect that you don’t see.”).)



## **II. Dr. Lappert's Opinions on Topics Outside of Gender-Affirming Surgery Do Not "Fit" the Disputed Issues, Are Unreliable, Or Both.**

An expert's testimony should only be admitted if it is reliable. And "proffered evidence that has a greater potential to mislead than to enlighten should be excluded." *In re Lipitor (Atorvastatin Calcium) Mktg., Sales Pracs. & Prod. Liab. Litig. (No II) MDL 2502*, 892 F.3d 624, 632 (4th Cir. 2018).

Even if the testimony is reliable, the court must still "satisfy itself that the proffered testimony is relevant to the issue at hand, for that is a precondition to admissibility." *Sardis*, 10 F.4th at 282. "The test for relevance, or fit, considers whether expert testimony proffered in the case is sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute." *Viva Healthcare Packaging USA Inc. v. CTL Packaging USA Inc.*, 197 F. Supp. 3d 837, 846 (W.D.N.C. 2016).

This case turns on whether Defendants' exclusion of coverage for gender-confirming health care treatments violates Plaintiffs' rights under the equal protection clause, Title VII, and Section 1557 of the Affordable Care Act. Many of Dr. Lappert's opinions are both unreliable and irrelevant to this inquiry, as described below.

### **A. Far from Being Generally Accepted, Dr. Lappert's Opinions Have Been Rejected by the Scientific Community.**

General acceptance is a reliability factor, *Nease*, 848 F.3d at 229, and the fact that a particular theory "has been able to attract only minimal support within the community may properly be viewed with skepticism." *Daubert*, 509 U.S. at 594. Dr. Lappert asserts that gender-affirming surgical and hormonal treatments "have not been accepted by the relevant

scientific communities” (Ex. 1 at 40), but this is not true. In fact, it is Dr. Lappert’s opinions that are on the scientific fringe, to say the least.

Another court found as much just last year in addressing a challenge to Arkansas’ state-law ban on gender-affirming treatment for minors, where Dr. Lappert had offered virtually identical opinions to support that ban. *Brandt v. Rutledge*, 4:21-cv-450 (E.D. Ark.); Ex. 2 at 33-34; Ex. 5 (Lappert *Brandt* Declaration). In *Brandt*, Dr. Lappert asserted that “[g]ender affirming’ treatments are experimental,” which he agreed was “basically the same opinion that [he] offered in this case.” (Ex. 2 at 35.) Drs. Hruz and Levine had also submitted similar declarations in *Brandt* in support of the ban. (*See id.* at 33-34.)

The *Brandt* court preliminarily enjoined the ban on August 2, 2021 (Ex. 6), squarely rejecting these opinions. That court recognized that “the consensus recommendation of medical organizations is that the **only** effective treatment for . . . gender dysphoria is to provide gender-affirming care,” citing briefs from organizations like the American Medical Association, American Academy of Pediatrics, and many more. (*Id.* at 6 n.3; Br. of Am. Med. Ass’n, et al. (ECF No. 131 (expressing same views in this case).) *Brandt* also found that “gender-affirming treatment is supported by medical evidence that has been subject to rigorous study,” and that “**every** major expert medical association recognizes that gender-affirming care for transgender minors may be medically appropriate and necessary to improve the physical and mental health of transgender people.” (Ex. 6 at 7-8.)

As Dr. Lappert admitted, *Brandt*’s findings were “contrary to the opinions that [he] offered.” (Ex. 2 at 39.) And as he also agreed, “every major expert medical association

disagrees with [him] because they've all taken [the] position that this treatment is in fact medically necessary.” (*Id.* at 40; *see also id.* (agreeing the same is true regarding Drs. Hruz and Levine).) In fact, Dr. Lappert admits that there are at least “18 different professional medical organizations” that “take[] the view that’s contrary to the opinions that [he] and Dr. Hruz and Dr. Levine are offering” here, testifying that “there’s a consensus of consensus on this, exactly.” (*Id.* at 42.)

That consensus also includes Dr. Lappert’s own former association, the ASPS. While he says that gender-affirming surgery is experimental, the ASPS said the exact opposite in a February 2021 statement—stating that it “***firmly believes*** that plastic surgery services can help gender dysphoria patients align their bodies with whom they know themselves to be,” and promising to “continue its efforts to advocate across state legislatures for full access to medically necessary transition care.” (Ex. 8 at 3.) So as Dr. Lappert admitted, the ASPS also “does not agree with [his] opinions that gender-affirming surgery is experimental.” (Ex. 2 at 112-13.)

And it is not just professional medical associations either. ***Every major insurer*** in the country also says that gender-affirming surgical and hormonal treatments are medically necessary, as Dr. Lappert also admitted. (Ex. 2 at 334-38 & Ex. 9 at 2 (BCBS North Carolina policy, stating that “[s]ervices for gender affirming surgery and hormone therapy may be considered medically necessary when the criteria below are met”); Ex. 2 at 427-28 & Ex. 10 at 1 (similar for Aetna); Ex. 2 at 430-33 & Ex. 11 (similar for Cigna); Ex. 2 at 434-39 & Ex. 12 (similar for UnitedHealthCare).)

In short, this overwhelming consensus confirms that far from being generally accepted, Dr. Lappert's opinions are fringe and unreliable.

**B. Dr. Lappert's Critiques of WPATH, Endocrine Society Guidelines, DSM-V, and Other Organizations' Positions Are Unreliable.**

Aware that his views are contrary to those of every major medical society and professional organization, Dr. Lappert tries to dismiss every single one of them as partisan—part of the same supposed “Transgender Treatment Industry” that he crusades against. For example, he contends that the “WPATH, APA, AAP,” and “AMA” all supposedly rely on a “non-scientific” methodology, and that the guidelines and position statements issued by every one of those organizations are “political” and are “not the product of a reliable scientific method.” (Ex. 1 at 10-11.)

These opinions are—again—not generally accepted, to put it mildly. Just recently, the Fourth Circuit confirmed that the WPATH guidelines in particular “represent the consensus approach of the medical and mental health community” and “have been recognized by various courts, including [the Fourth Circuit], as the authoritative standards of care.” *Grimm v. Gloucester Cty. Sch. Bd.*, 972 F.3d 586, 595 (4th Cir. 2020). “There are *no* other competing, evidence-based standards that are accepted by any nationally or internationally recognized medical professional groups,” in fact. *Id.* at 595-596.

Dr. Lappert's deposition further confirmed that his critiques are baseless *ipse dixit* because he admitted that he has no idea how any of these standards of care were actually developed, and on what scientific basis. Take WPATH SOC Version 7 (“WPATH7”), for example. Dr. Lappert admits that he has “not been involved with the development” of

WPATH7; he does not “know what kind of scientific literature [review] the WPATH conducted as part of drafting” WPATH7; he does not know what kind of “peer review” or “outside experts” or “public comments” the WPATH may have relied on in developing WPATH7, or how many “different drafts” the WPATH7 went through, or “what may have gone on during [WPATH] meetings or conferences” to discuss the development of WPATH7. (Ex. 2 at 184-87.) And after these admissions, Dr. Lappert unsurprisingly conceded that he is “*not an expert* in how Version 7 of the WPATH was developed.” (*Id.* at 188.) The same is true for WPATH SOC Version 8. (*Id.* at 189 (agreeing he does not “hold [himself] out as an expert on how Version 8” is being developed).)

The same is also true with respect to Dr. Lappert’s critiques of other standards of care and position statements:

- Endocrine Society Guidelines for Treatment of Gender Dysphoria: Dr. Lappert does not know when these guidelines “were initially published” or “last revised”; he was “not involved with the[ir] development”; he does not know “what kind of scientific literature review” went into that development; thus, he agrees he is “*not an expert* in how the Endocrine Society developed the original 2009 guidelines” or “the 2017 updates” (Ex. 2 at 195-200);
- DSM-5: Dr. Lappert has “not been involved with the development of DSM-5”; does not know “what kind of scientific literature review was done” during that development; does not know what went on during “different meetings or conferences” to “discuss that development”; thus, he “do[es] *not* have expert firsthand knowledge of how the DSM-5 was developed” (*id.* at 190-93);
- AMA Position Statement on Gender-Affirming Treatment: Dr. Lappert “do[es] not know how the AMA came to issue this consensus statement” and has “no personal knowledge what scientific literature they reviewed”; thus, he has “*no idea* . . . how the AMA came to reach this consensus statement” (*id.* at 47-48);

- American Academy of Pediatrics Position Statement on Gender-Affirming Treatment: has no “personal knowledge” of how the AAP adopted this statement (*id.* at 48).

In the end, Dr. Lappert agreed more broadly that he does “not have firsthand knowledge of how **any** of those organizations came to reach these positions,” and that he “do[es] not know what scientific literature they relied on.” (*Id.* at 49-50.) He should not be allowed to mislead a factfinder with these unfounded *ipse dixit* critiques. *See Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

**C. Dr. Lappert’s Opinions About the Need for Randomized Clinical Trials Are Unreliable.**

A key component of Dr. Lappert’s opinions is that surgical and hormone gender-affirming treatments are supposedly experimental because they are unsupported by results from randomized clinical trials (“RCTs”). (*See, e.g.*, Ex. 1 at 5 (arguing that “properly conducted [RCTs] and long-term treatment outcome studies” are necessary to make “experimental procedures actual, proven treatments”). But his deposition confirmed that these critiques are baseless because he agreed that: (1) it is common for surgeons to perform procedures unsupported by RCT results; and (2) in any event, it is not possible to conduct RCTs for hormonal or surgical gender-affirming treatments.

First, RCTs in surgery are exceedingly rare. The ASPS’s *Plastics and Reconstructive Surgery Journal*—which Dr. Lappert agreed is the “premier peer-reviewed source for current information on reconstructive and cosmetic surgery” (Ex. 2 at 296)—confirms as much. As a 2019 study found, in 2018, “only **2.1 percent** of all publications” in the ASPS Journal “were level 1 [*i.e.*, RCT] evidence”; “in 2008 and 2013, those

percentages were **0.3** and **1.7 percent** respectively,” as he also agreed. (*Id.* at 299, 302; Ex. 7 (Sugrue study)). Given this paucity of RCTs, Dr. Lappert unsurprisingly conceded that surgeons in the real world do not actually wait for RCT results before deciding that a particular procedure is non-experimental. (Ex. 2 at 294-95 (agreeing it is “not uncommon for plastic surgeons to perform procedures that are not supported by results from an RCT”).) In fact, he *himself* does not even “think it’s necessary for a surgical procedure to be supported by results from a[n] . . . RCT before it can be considered effective.” (*Id.* at 285.) Rule 702 demands that experts apply “the same level of intellectual rigor [in the courtroom] that characterizes the practice of an expert in the relevant field.” *Cooper*, 259 F.3d at 200. Here, though, Dr. Lappert tries to impose an impossible RCT-based standard that he concedes surgeons in the real world—including himself—do not actually apply.

Second, it is not possible to perform RCTs for gender-affirming surgery or hormonal treatment. Dr. Lappert conceded this too: he agreed “it is not possible to perform RCTs for some surgical procedures because you can’t blind the patient or the investigator to what the procedure is” (meaning, it is impossible to do the surgery without the patient and the investigator knowing that it was done)—including for “phalloplasty,” “metoidioplasty,” and more generally for all types of what is “colloquially known as bottom surgery.” (Ex. 2 at 315-16.) He also agreed the same is true for “puberty-blocking hormones,” since they cause “observable physical effects”; thus, “it’s not possible to do an RCT for puberty-blocking hormones” either. (*Id.* at 316-18.) And he also conceded that the same is true for

cross-sex hormones, because those also cause “physical effects” and thus “it’s not possible to design a double-blind RCT” for those treatments. (*Id.* at 318-19.)

Given all this, Dr. Lappert should not be permitted to offer his misleading opinion that gender-affirming surgery and hormone treatments are experimental in the absence of RCT support.

**D. Dr. Lappert’s Speculation About “Detransitioners,” “Regret” and “Social Contagion” Is Unreliable.**

Dr. Lappert also opines that some patients will “drop out of transitioning or reverse the process” (so-called “detransitioners”); others will experience “regret” after surgery; and yet others supposedly develop gender dysphoria as a result of “social contagion” like “peer group, social media, [and] YouTube role modeling.” (Ex. 1 at 21-22, 40.)

None of this passes *Daubert* muster. To start, none of these opinions are even remotely connected to Dr. Lappert’s experience as a plastic surgeon, given that he studiously avoids performing gender-affirming surgical procedures due to his personal beliefs, and has “never treated a single patient for gender dysphoria.” (Ex. 2 at 150-51; *SAS Inst., Inc.*, 125 F. Supp. 3d at 589 (when an expert relies on experience, he must show how his “experience leads to the conclusion reached” and “why that experience is a sufficient basis for the opinion”).)

Next, Dr. Lappert’s own report makes clear that these are all speculative hypotheses at best. For instance, he admits that the extent of “social contagion” is unknown, writing: “a currently unknown percentage and number of patients reporting gender dysphoria are being manipulated by . . . social contagion and social pressure processes.” (Ex. 1 at 40



(underlining in original).) He also wrote the same thing about “desistance” and “regret,” stating that these phenomena have “to my knowledge *not been quantified or well-studied.*” (*Id.* at 21 (emphasis in original).)

Dr. Lappert’s deposition confirmed that these opinions are pure guesswork. He conceded that he is “not aware of any peer-reviewed studies that quantifies the number of people” affected by social contagion, and that “we don’t know the numbers.” (Ex. 2 at 367-38; *id.* at 373 (“At present, we’re *hypothesizing* about the actual cause.”).) The same was true for his “regret” opinions. (*Id.* at 329 (agreeing “there’s no data available on the percentage of people” treated for “gender dysphoria who experience regret.”).

But “the courtroom is not the place for scientific guesswork, even of the inspired sort.” *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 319 (7th Cir. 1996); *accord, e.g., Small v. WellDyne, Inc.*, 927 F.3d 169, 176-77 (4th Cir. 2019) (expert testimony “must not be based on belief or speculation”). Dr. Lappert’s speculation about regret, de-transitioning, and social contagion should be excluded accordingly.

**E. Dr. Lappert’s Opinions About Risks Communicated to Plaintiffs Are Unreliable.**

Dr. Lappert also purports to opine about what risks were or were not communicated to individual Plaintiffs before they started gender dysphoria treatment. (*See, e.g.,* Ex. 1 at 50 (for C.B., asserting there is no evidence that “the parents were counseled concerning” risks of “off-label use of puberty blocker”); *id.* (opining there was a “failure to obtain proper informed consent” for Plaintiff “CT-F”).)

There is no basis for these opinions either. Dr. Lappert “did not meet with any of the plaintiffs” and has “never spoken” with any of them about what risks their doctors discussed. (Ex. 2 at 417-18.) He was “not present in any meetings that any of these plaintiffs may have had with their mental health professionals,” or their “endocrinologists,” or their “surgeons”; thus, outside of reviewing medical records, he has no idea “what was said or not said during those meetings.” (*Id.* at 418-19.) With no reliable basis to say what was or was not communicated during these meetings, Dr. Lappert should not be permitted to create confusion with this speculation. *See, e.g., Small*, 927 F.3d at 176-77.

### **III. Dr. Lappert’s Opinions Are Based on His Personal Beliefs Rather than Science.**

Reliability is a flexible inquiry, under which “courts must ensure that an expert’s opinion is based on scientific, technical, or other specialized knowledge and not on belief or speculation.” *Sardis*, 10 F.4th at 281. There is ample evidence that Dr. Lappert’s opinions are so tainted by his strong personal views against gender-affirming care as to make those opinions unreliable. To be clear, Plaintiffs do not seek to impugn whatever moral or religious views Dr. Lappert may hold. But because those views plainly inform the opinions that he offers here—indeed, they seem to be the main driver of those opinions—they are something the Court should consider in assessing their reliability.

Dr. Lappert readily admits that he has “strong personal opinions on whether doctors should be providing gender-affirming treatment to minors.” (Ex. 2 at 79.) That’s putting it mildly. He has urged state legislatures in Utah, Arkansas, Alabama, and Texas (at least) to pass laws that would ban doctors from being able to provide this medical care for

adolescents. (*Id.* at 57, 61-62; *id.* at 54-55 (agreeing he has “actively lobbied to get these kinds of bans passed”).) For example, he spoke in favor of the ban before the Alabama legislature and “publish[ed] an op-ed” that urged the legislature to protect what he called “gender-confused children.” (Ex. 2 at 77, 64, 76 & Ex. 14.) He likewise threw his support behind a similar proposed ban in Utah—arguing to the legislature that “you can’t change a person’s sex,” and that “all that is happening is that the patient is undergoing an intentional mutilation in order to create a counterfeit appearance of the other sex.” (Ex. 13 at 5).

Dr. Lappert was unapologetic about these opinions at his deposition. He testified that he “absolutely” stands by them, and that he “absolutely” considers “gender reassignment surgery to be an intentional mutilation.” (Ex. 2 at 60.) What’s more, he also wants doctors who perform these gender-affirming surgeries to be “criminally prosecute[d]”—agreeing that he thinks “that’s a good idea.” (*Id.* at 52.)

And even though Dr. Lappert was understandably more careful in how he phrased his expert report—avoiding inflammatory language that he uses outside of litigation, like calling gender-affirming care “intentional mutilation”—sometimes the mask slips. For instance, his report accuses every single doctor and organization who oppose his views of being part of some made-up “Transgender Treatment Industry.” That is obviously not “a commonly used term in the field of treatment and diagnosis of gender dysphoria,” as he admitted; instead, it is “idiosyncratic” to his report. (*Id.* at 21-22.)

Dr. Lappert has also worked closely with the Alliance Defending Freedom (“ADF”), an organization he agreed has “moral objections” to gender-affirming healthcare. (*Id.* at

83, 82.) Among other things, he attended an ADF conference that discussed the “poverty of [experts] who are willing to testify” about these anti-gender-affirming treatments. (*Id.* at 90-91.) Attendees at that conference “were asked whether they would be willing as participate as expert witnesses”; not coincidentally, Dr. Lappert became an expert witness for the first time after attending that conference. (*Id.* at 91.)

Dr. Lappert’s report also unapologetically misgenders individual Plaintiffs—“referring to [them] in a way that doesn’t align with their gender”—because in Dr. Lappert’s view, he is “obliged to honor objective biological realities” (*id.* at 447), which is to say that he does not believe that a person’s birth-assigned sex can ever be changed. (*See also id.* at 448 (“I think it’s essential that we stick to the biological reality that . . . biological sex is *immutable*.”).)

And then there are Dr. Lappert’s many public interviews and presentations where he crusades against gender-affirming care. These include, for example, his views that the religious conception of “the human person” “defines the ‘end’ of medical and surgical care.” (Ex. 2 at 459.) They also include his opinions that “changing a person’s sex is a lie and also a moral violation for a physician,” and that gender-affirming surgery is “diabolical in every sense of the word.” (*Id.* at 464 & Ex. 16 at 1, 7; Ex. 2 at 465 (agreeing that he “hold[s] those views”). And finally, these also include his inflammatory views that parents who “discuss[] gender identity issues with children” are “sexualizing them” (Ex. 2 at 462), and that these conversations are “grooming a generation” for abuse. (*Id.* at 461 & Ex. 15 (Dr. Lappert’s presentation titled “Transgender Surgery & Christian Anthropology”) at 23;

*see also* Ex. 16 at 1, 2 (another interview with Dr. Lappert titled “Plastic surgeon: sex-change operation ‘utterly unacceptable’ and a form of ‘child abuse’”; reporting that “regarding children, Lappert said, sexualizing them at a young age with these ideas is grooming them for later abuse.”).)

These are obviously not neutral, well-reasoned scientific opinions by a dispassionate expert. It is moral opprobrium masquerading as science, and it should be excluded as such.

### **CONCLUSION**

For the foregoing reasons, the Court should exclude Dr. Lappert’s opinions in full.

Dated: February 2, 2022

/s/ Amy E. Richardson

Amy E. Richardson  
(N.C. Bar No. 28768)  
Lauren E. Snyder  
(N.C. Bar No. 54150)  
HARRIS, WILTSHIRE & GRANNIS LLP  
1033 Wade Avenue, Suite 100  
Raleigh, NC 27605-1155  
Phone: 919-429-7386 | Fax: 202-730-1301  
arichardson@hwglaw.com

Deepika H. Ravi\*  
HARRIS, WILTSHIRE & GRANNIS LLP  
1919 M Street N.W., 8th Floor,  
Washington, D.C. 20036  
Phone: 202-730-1300 | Fax: 202-730-1301  
dravi@hwglaw.com

Michael W. Weaver\*  
Adam M. Safer\*  
McDERMOTT WILL & EMERY  
444 W. Lake St., Suite 4000  
Chicago, IL 60606  
Phone: 312-984-5820 | Fax: 312-984-7700  
mweaver@mwe.com

Lauren H. Evans\*  
McDERMOTT WILL & EMERY  
500 N. Capitol St., NW  
Washington, D.C. 20001  
Phone: 202-756-8864 | Fax: 202-591-2900  
levans@mwe.com

Respectfully submitted,

/s/ Dmitriy Tishyevich

Dmitriy Tishyevich\*  
Warren Haskel\*  
McDERMOTT WILL & EMERY LLP  
One Vanderbilt Avenue  
New York, NY 10017-3852  
Phone: 212-547-5534  
Fax: 646-417-7668  
dtishyevich@mwe.com

Tara Borelli\*  
Carl S. Charles\*  
LAMBDA LEGAL DEFENSE AND  
EDUCATION FUND, INC.  
1 West Court Square, Ste. 105  
Decatur, GA 30030  
Telephone: 404-897-1880  
Facsimile: 404-506-9320  
tborelli@lambdalegal.org

Omar Gonzalez-Pagan\*  
LAMBDA LEGAL DEFENSE AND  
EDUCATION FUND, INC.  
120 Wall Street, 19th Floor  
New York, NY 10005  
Telephone: 212-809-8585  
Facsimile: 212-809-0055  
ogonzalez-pagan@lambdalegal.org

David Brown\*  
TRANSGENDER LEGAL DEFENSE AND  
EDUCATION FUND, INC.  
520 8th Ave, Ste. 2204  
New York, NY 10018  
Telephone: 646-993-1680  
Facsimile: 646-993-1686  
dbrown@transgenderlegal.org

*Counsel for Plaintiffs*

\* Appearing by special appearance pursuant to L.R. 83.1(d).

### **CERTIFICATE OF COMPLIANCE**

I hereby certify that the foregoing brief is in compliance with Local Rule 7.3(d)(1) because the body of this brief, including headings and footnotes, does not exceed 6,250 words as indicated by Microsoft Word, the program used to prepare this document.

Dated: February 2, 2022

/s/ Dmitriy Tishyevich  
Dmitriy Tishyevich\*  
MCDERMOTT WILL & EMERY LLP  
One Vanderbilt Avenue  
New York, NY 10017  
Telephone: 212-547-5534  
Facsimile: 212-547-5444  
dtishyevich@mwe.com

### **CERTIFICATE OF SERVICE**

I hereby certify that the foregoing document was filed electronically with the Clerk of Court using the CM/ECF system, which will send notification of such filing to all registered users.

Dated: February 2, 2022

/s/ Dmitriy Tishyevich  
Dmitriy Tishyevich  
MCDERMOTT WILL & EMERY LLP  
One Vanderbilt Avenue  
New York, NY 10017-3852  
Phone: 212-547-5534  
Fax: 646-417-7668  
dtishyevich@mwe.com

**IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA**

MAXWELL KADEL, *et al.*,

*Plaintiffs,*

v.

DALE FOLWELL, in his official capacity as  
State Treasurer of North Carolina, *et al.*,

*Defendants.*

Case No. 1:19-cv-00272-LCB-LPA

**DECLARATION OF DMITRIY TISHYEVICH**

Pursuant to 28 U.S.C. § 1746, I, Dmitriy Tishyevich, do hereby declare as follows:

1. I am over 18 years of age.
2. I am a partner at the law firm McDermott Will & Emery LLP, and I serve as counsel of record for the Plaintiffs in the above-captioned matter.
3. I have personal knowledge of the facts stated herein, except those stated on information and belief, and if called upon, could and would testify competently to them.
4. I submit this declaration in support of Plaintiffs' Motion to Exclude Expert Testimony of Dr. Patrick Lappert.
5. Attached as **Exhibit 1** is a true and correct copy of Dr. Lappert's May 1, 2021 expert report submitted by Defendants in this matter. (Pages 47 to 55 of this report reference confidential medical information for individual Plaintiffs, are subject to the



concurrently-filed Plaintiffs’ Motion to Seal, and have been redacted from this exhibit accordingly.)

6. Attached as **Exhibit 2** is a true and correct copy of the transcript of the September 30, 2021 deposition of Dr. Lappert in this matter.

7. Attached as **Exhibit 3** is a true and correct copy of a printout of the webpage “Guidelines for Stating Certification Status,” published by the American Society of Plastic Surgeons, entered as Exhibit 2 at Dr. Lappert’s deposition.

8. Attached as **Exhibit 4** is a true and correct copy of the Code of Ethics of the American Society of Plastic Surgeons, updated September 25, 2017, entered as Exhibit 10 at Dr. Lappert’s deposition.

9. Attached as **Exhibit 5** is a true and correct copy of the Declaration of Dr. Patrick W. Lappert, filed on July 9, 2021 in *Brandt, et al. v. Rutledge, et al.*, E.D. Ark. (Case No. 4:12-cv-450-JM), entered as Exhibit 3 at Dr. Lappert’s deposition.

10. Attached as **Exhibit 6** is a true and correct copy of the August 2, 2021 Supplemental Order from *Brandt, et al. v. Rutledge, et al.*, E.D. Ark. (Case No. 4:12-cv-450-JM), entered as Exhibit 4 at Dr. Lappert’s deposition.

11. Attached as **Exhibit 7** is a true and correct copy of “Levels of Evidence in Plastic and Reconstructive Surgery Research: Have We Improved Over the Past 10 Years?,” by Conor M. Sugrue, FRCS, et al., published in *Plastic Reconstructive Surgery—Global Open* in September 2019, entered as Exhibit 17 at Dr. Lappert’s deposition.

12. Attached as **Exhibit 8** is a true and correct copy of a printout of the webpage “State Focus on Gender Affirmation Intensifies,” published by the American Society of Plastic Surgeons on February 25, 2021, entered as Exhibit 7 at Dr. Lappert’s deposition.

13. Attached as **Exhibit 9** is a true and correct copy of the Blue Cross Blue Shield of North Carolina Corporate Medical Policy, Gender Affirmation Surgery and Hormone Therapy, updated March 2021, entered as Exhibit 23 at Dr. Lappert’s deposition.

14. Attached as **Exhibit 10** is a true and correct copy of a printout of the webpage “Gender Affirming Surgery—Medical Clinical Policy Bulletins,” published by Aetna, updated January 2021, entered as Exhibit 30 at Dr. Lappert’s deposition.

15. Attached as **Exhibit 11** is a true and correct copy of the Cigna Medical Coverage Policy, Treatment of Gender Dysphoria, updated May 2021, entered as Exhibit 31 at Dr. Lappert’s deposition.

16. Attached as **Exhibit 12** is a true and correct copy of the United HealthCare Commercial Medical Policy, Gender Dysphoria Treatment, updated April 2021, entered as Exhibit 32 at Dr. Lappert’s deposition.

17. Attached as **Exhibit 13** is a true and correct copy of a document titled “Transgender ‘Transition’ Procedures Performed on Minors, Answers to Questions and Information for Joint Interim Committee, Submitted by [Utah House of Representatives member] Rep. Rex. P. Shipp,” dated June 10, 2021, entered as Exhibit 5 at Dr. Lappert’s deposition.

18. Attached as **Exhibit 14** is a true and correct copy of a printout of a webpage titled “Alabama bill that would criminalize treatment for transgender minors headed to full Alabama Senate,” published on [www.rocketcitynow.com](http://www.rocketcitynow.com), dated February 14, 2021, entered as Exhibit 6 at Dr. Lappert’s deposition.

19. Attached as **Exhibit 15** is a true and correct copy of a presentation by Dr. Lappert titled “Transgender Surgery & Christian Anthropology,” entered as Exhibit 33 at Dr. Lappert’s deposition.

20. Attached as **Exhibit 16** is a true and correct copy of a printout of a webpage titled “Plastic surgeon: Sex-change operation ‘utterly unacceptable’ and a form of ‘child abuse,’” published on [www.lifesitenews.com](http://www.lifesitenews.com), entered as Exhibit 34 at Dr. Lappert’s deposition.

21. Attached as **Exhibit 17** is a true and correct copy of an abstract from C.M. Elliott & S. Wilhelm, “Body Dysmorphic Disorder,” in the Encyclopedia of Mental Health (2d ed., 2016), *available at* <https://doi.org/10.1016/B978-0-12-397045-9.00081-1>.

I declare under penalty of perjury that the foregoing is true and correct.

Dated this 2nd of February 2022.

/s/ Dmitriy Tishyevich  
Dmitriy Tishyevich

# EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA  
Case No.: 1:19-cv-272-LCB-LPA

---

MAXWELL KADEL, et al.,	)
	)
Plaintiffs;	)
v.	)
	)
DALE FOLWELL, in his official	)
capacity as State Treasurer of North	)
Carolina, et al,	)
	)
Defendants.	)

---

Declaration of  
Patrick W. Lappert, MD  
Board Certified in Surgery and Plastic Surgery  
Decatur, AL 35603

**Knowledge Training and Experience :**

1. **Education and Training :** I received my Bachelor of Arts in Biological Sciences at the University of California, Santa Barbara, 1979. There I was engaged in research in cell membrane physiology with Dr. Philip C. Laris, studying stoichiometry of the sodium: potassium ATPase pump. I received my M.D., Doctor of Medicine degree at the Uniformed Services University of the Health Sciences, 1983 at Bethesda, Md. I served my General Surgery Residency at the Naval Hospital Oakland/ UC Davis East Bay Consortium, 1987-1991 and served as Chief Resident, Department of Surgery, Naval Hospital Oakland, 1990-1991. I also served a Plastic Surgery Residency at the University of Tennessee- Memphis, 1992-1994. My

professional background, experience, and publications are described in more detail in my curriculum vitae. An updated copy of my CV is attached as Exhibit A to this declaration.

2. **Board Certifications in Medicine :** I have been Board Certified in Surgery (American Board of Surgery, 1992), in Plastic Surgery (American Board of Plastic Surgery, 1997; American Board of Plastic Surgery, 2008).

3. **Medical Staff Appointments :** I served as the Staff General Surgeon at the Naval Hospital Oakland, CA 1991-1992 and as Associate Professor of Surgery, UC Davis-East Bay, 1991-1992. I also served as a Plastic and Reconstructive Surgeon, Naval Medical Center, Portsmouth, VA 1994-2002 and as Chairman, Department of Plastic and Reconstructive Surgery, Naval Hospital Portsmouth, VA 1996-2002. I later served as Clinical Assistant Professor, Department of Surgery, Uniformed Services University of the Health Sciences, 1995-2002 and as Founding Director, Pediatric Cleft Palate and Craniofacial Deformities Clinic, Naval Hospital Portsmouth, VA 1996-2002 also as the Founding Director, Wound Care Center, Naval Hospital Portsmouth, VA 1995-2002. I have also served as a Staff Plastic Surgeon in Nebraska, and Alabama.

4. **U.S. Surgeon General Service:** I served as a Specialty Leader, Plastic and Reconstructive Surgery, Office of the Surgeon General-USN, 1997-2002

5. **Faculty Appointments:** I served as Teaching Faculty at Eastern Virginia Medical School, Division of Plastic Surgery, 1995-2002

6. **Military Service :** I served as an Aviation Officer Candidate, Naval Aviation Schools Command, NAS Pensacola, 1978 and was Commissioned an Ensign, MC, USNR 1979 and Commissioned as a Lieutenant, MC, USN 1983 . I served as a Designated Naval Flight

Surgeon, Naval Aerospace Medical Institute, 1985 and was Assigned Marine Fighter/ Attack Squadron-451, serving as Flight Surgeon, and serving as Radar Intercept Officer in the Marine F-4S Phantom, accumulating 235 flight hours, and trained for qualification as an Air Combat Tactics Instructor. Deployed to the Western Pacific as UDP forward deployed fighter squadron in Korea, Japan, and the Philippines. I served in the US Navy for 24 years, served in the USMC for 3 years. I retired with the rank of Captain, USN in 2002

7. **Publications - Peer Reviewed Medical Journals :** Lappert PW. Peritoneal Fluid in Human Acute Pancreatitis. *Surgery*. 1987 Sep;102(3):553-4 ; Toth B, Lappert P. Modified Skin Incisions for Mastectomy: The Need for Plastic Surgical Input in Preoperative Planning. *J Plastic and Reconstructive Surgery*. 1991; 87 (6): 1048-53 ; Lappert P. Patch Esophagoplasty. *J Plastic and Reconstructive Surgery*. 1993; 91 (5): 967-8 ; Smoot E C III, Bowen D G, Lappert P, Ruiz J A. Delayed development of an ectopic frontal sinus mucocele after pediatric cranial trauma. *J Craniofacial Surg*. 1995;6(4):327-331 ; Lappert PW. Scarless Fetal Skin Repair: "Unborn Patients" and "Fetal Material". *J Plastic and Reconstructive Surgery*. 1996 Nov;98(6):1125 ; Lappert PW, Lee JW. Treatment of an isolated outer table frontal sinus fracture using endoscopic reduction and fixation. *Plastic and Reconstructive Surgery* 1998;102(5):1642-5.

8. **Publications - Medical Textbooks:** Wound Management in the Military. Lappert PW, Weiss DD, Eriksson E. *Plastic Surgery: Indications, Operations, and Outcomes*, Vol. 1; 53-63. Mosby. St. Louis, MO 2000

9. **Operations and Clinical Experience - Consultations and Discussions :** As a physician and surgeon, I have treated many thousands of patients in 7 states and 4 foreign

nations. My practice has included Primary Care, Family Medicine, Aerospace Medicine, General Surgery, Reconstructive Surgery for combat injured, cancer reconstructive surgeries including extensive experience with microvascular surgery, Pediatric Congenital Deformity, and the care of chronic wounds. I have practiced in rural medicine, urban trauma centers, military field hospitals, university teaching hospitals, and as a solo private practitioner. In my private practice I have had occasion to treat many self-identified transgender patients for skin pathologies related to their use of high dose sex steroids, laser therapies for management of facial hair both in transitioners and detransitioners. I have performed breast reversal surgeries for detransitioning patients. My practice is rated as "LGBTQ friendly" on social media. I have consulted with families with children who are experiencing gender discordance. I have given many presentations to professional meetings of educators and counselors on the subject of transgender, and the present state of the science and treatment. I have discussed the scientific issues relevant to the case with many physicians and experts over a number of years and also discussed related issues with parents and others.

10. **Retained as an Expert Witness - Compensation - Bases for Opinions:** I have been retained as an expert witness by John G. Knepper, JD for the defense in connection with the Kadal, et al. vs. Folwell, et al litigation. I have actual knowledge of the matters stated in this declaration. I am being compensated at an hourly rate for actual time devoted, at the rate of \$400 per hour including report drafting, travel, testimony, and consultation. My compensation does not depend on the outcome of this litigation. I am paid in advance for all written opinions or testimony to avoid any conflict of interest. To formulate opinions in this case I have reviewed



many scientific publications, the plaintiff's medical records, the Complaint and Answer, and all expert witness declarations.

11. **Affirmation Treatments are Currently *Experimental*** — as they have not been competently tested, not proven effective, are not generally accepted by the relevant scientific community, and have no documented error rates: Patients who experience a gender identity that is discordant with biological sex have an alarmingly high incidence of serious psychosocial morbidity including depression, anxiety, eating disorders, substance abuse, HIV infection, suicidality, and homelessness [ Connolly, M. D., M. J. Zervos, C. J. Barone, C. C. Johnson, and 2nd C. L. Joseph. 2016. “*The Mental Health of Transgender Youth: Advances in Understanding.*” *Journal of Adolescent Health* 59:489–95. :10.1016/j.jadohealth.2016.06.012. ] . While a need for effective treatment modalities is clear, *there are currently significant deficiencies in our understanding the etiology of this condition, the risks and benefits of the current experimental (unproven, untested) medical interventions, and the long-term success of various affirmation experimental treatments in achieving the primary desired goal of reducing mental illness including reductions in suicide risk.* Multiple recent studies and reviews including the recent national science summaries and guidelines from England-NICE, Sweden, Finland, the Cochrane Review, the British Royal College of Psychiatrists and others *all document significant deficits in our current understanding of these complex disorders and signifigant defects in the existing science.* As we strive to provide real, effective, and sustained treatment to patients who experience gender dysphoria within established ethical boundaries, it is essential that we properly and scientifically research the causes of gender dysphoria as well as conduct competent, properly conducted *randomized clinical trials and long-term treatment*

*outcome studies*. These basic, foundational tasks — the tasks that make experimental procedures actual, proven treatments worthy of trust — have never been accomplished in the highly controversial field of the Transgender Treatment Industry. Why? Suffering and vulnerable patients and their families continue to wait for this basic, foundational scientific work to be completed. Meanwhile, affirmation “treatments” must continue to be properly viewed as experimental.

The science and medical world have — in just the past few years — become increasingly aware of and deeply concerned about the glaring science and ethical defects of the Transgender Treatment Industry. For example, the very recently released 2020 Finland national science review and guidelines documented “a lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria.”. The new strict Finnish guidance prioritizes psychological therapy over treatment with hormones or surgery thus directly contradicting the non-science-based association protocols of WPATH]. The 2020 Finland national science review and guidelines also document the ongoing lack of scientific basis for the Transgender Treatment Industry stating “Only limited research has been conducted on transgender identity and other gender identity conflicts, and comparative studies are very rare.” In sum, the Finland National Science Review and Guidelines, like the new Sweden Review and Guidelines, and other reviews, and the collapse and recantation of the 2020 Branstrom long-term treatment outcome study claims under withering methodological criticisms, all appear contrary to the opinions of Drs Brown and Schechter and WPATH. See, e.g., <https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/>

Meanwhile, practitioners in this troubled field continue to offer defective research and politicized endorsements from politicized, union-like associations (WPATH, APA, ACP, etc) rather than competent, credible, valid and reliable, peer reviewed and published scientific evidence. As with the plaintiffs' experts in this case, they continue to refuse the serious defects and methodological limits of their data and experimental practices. 50 years of experimenting is enough! Its time for the Transgender Treatment Industry to come up with real, competently constructed scientific evidence that they are helping more people than they are hurting. As the recent recent national science reviews from England, Sweden, and Finland have all noted, its time to step back, slow down, and prudently investigate a range of approaches to vulnerable patients struggling with gender discordance issues.

**12. My Opinions regarding the Plaintiff's Expert Reports in this Case by Drs Schechter and Brown :**

As a physician and surgeon for decades, I have dedicated my life to helping the injured, the wounded, the sick, the vulnerable, and those in distress. As a physician and surgeon, I have a duty to carefully assess the available scientific research literature and determine what surgical procedures have been *scientifically proven safe and effective for use on patients — and which procedures are still experimental*, potentially dangerous, and may well do more harm than good for patients. Such an assessment requires prudentially reviewing scientific publications and being familiar with *the ongoing methodological and scientific debates in the field*. In my opinion, the expert reports from Drs. Schechter and Brown in this case demonstrate little or no knowledge of the ongoing, raging scientific debates over the safety and effectiveness of “gender affirming” medical procedures. The reports of Drs. Schechter and Brown offer no disclosure and

demonstrate no awareness of the serious methodological defects and controversies exposing the lack of scientific foundations for the Transgender Treatment Industry (TTI). Over the past few years, scientific review after scientific review and multiple methodological exposes and national reviews in England, Sweden, Finland plus other reviews (e.g. Cochrane, Griffin, Carmichael, etc) have raised *urgent warnings and serious questions about the quality and the integrity of the scientific foundation for this very controversial field*. It is troubling that Drs Schechter and Brown appears to have financial and professional conflicts of interest as they appear to have admitted that much of their practices and income are derived from the experimental, unproven, potentially harmful methods and procedures of “affirmation” medical treatments. My review of the declarations of Drs Brown Schechter produced the following list of errors, omissions, and failures:

FAILURE TO DISCLOSE THE ONGOING CONTROVERSIES : Drs Schechter and Brown failed to properly disclose and discuss the international debates and controversies surrounding transgender affirmation methods and procedures. (See, the multiple journal articles, news reports, court cases, international reviews, etc cited below).

DEFECTIVE RESEARCH — Drs Schechter and Brown failed to properly disclose and discuss multiple peer-reviewed published exposes of significant methodological defects in research on transgender affirmation methods and procedures (e.g. the defective studies by Branstrom, Turban, and others discussed in detail below).

FAILURE TO DISCUSS CONTRARY STUDIES: Drs Schechter and Brown also failed to properly disclose and discuss recent scientific studies and reviews including the Cochrane Review, the Carmichael study, the Griffin review and the devastating scientific critiques of the

ill-fated and recanted Branstrom et al study including the many multiple, detailed, methodologically sophisticated letters to the editor.

TRANSGENDER, AFFIRMATION BREAST SURGERY IS EXPERIMENTAL and THUS NOT MEDICALLY NECESSARY: Drs Schechter and Brown failed to properly disclose and discuss the methodological and ethical controversies involving transgender breast surgery. The diagnostic process for such surgery is based solely on the patient's subjective report of dysphoria, but the medical necessity is based on the expectation that surgery will relieve the patient of the risk of, among other things, major depression, self-harm behaviors, and suicide. Competent, credible research demonstrating such benefits does *not* yet exist. *None of the papers cited by Dr. Schechter (20, 21, 22, 23, 24, 25) address themselves to the question of medical necessity for either masculinizing surgery, or feminizing surgery.* They only address technical issues, management of complications, and subjective outcomes that employ precisely the same language that is used to assess cosmetic (not medically necessary) surgery of the breast. In summary, the medical necessity of transgender chest surgery is *not supported by credible, competent, methodologically rigorous scientific evidence, and appears to be firmly in the category of cosmetic (not medically necessary) surgery.*

THE ENGLAND-SWEDEN-FINLAND-COCHRANE-CARMICHAEL-GRIFFIN-BRANSTROM (Retraction) — NATIONAL SCIENCE REVIEWS and/or GUIDELINES ALL APPARENTLY CONTRADICT WPATH and the other ASSOCIATION NON-SCIENCE ENDORSEMENTS BASED ON VOTING PROCESSES : Drs Schechter and Brown also failed to properly disclose and discuss the internationally reported national reviews from England (NICE), Sweden, and Finland. These new science-based guidelines recommend different

methods, approaches, foci, and treatments than the controversial, unproven WPATH model supported by Drs. Schechter and Brown in this case. Where is the concern of WPATH and Drs. Schechter and Brown for the suffering, vulnerable patients who deserve properly tested, proven, reliable, and efficacious treatments?

EXPERIMENTAL, UNPROVEN TREATMENTS ARE NOT “MEDICALLY NECESSARY” : Drs Schechter and Brown also failed to properly disclose and discuss the opinion of the relevant scientific community that all Transgender Transition affirmation “treatments” remain — after 50 years — controversial, untested, unproven, and thus clearly still experimental — and thus *cannot be medically necessary* — given the state of current research. (See, national reviews of England, Sweden, Finland, the Cochrane Review, the Griffin review, the Carmichael study, the Branstrom (recanted) study and others as cited in detail below).

THE ASSOCIATION VOTES CITED BY DRS BROWN and SCHECHTER ARE NOT THE PRODUCT OF A RELIABLE SCIENTIFIC METHOD, NOT ACCEPTED BY THE RELEVANT SCIENTIFIC COMMUNITY, HAVE NO KNOWN ERROR RATE. SUCH METHODS HAVE NOTABLY PRODUCED SOME HISTORIC, DISASTROUS RESULTS : — Drs Schechter and Brown also failed to disclose and properly discuss the methodological defects in the *non-scientific, unreliable, consensus-seeking, “voting” methodology* of “associations” (e.g. WPATH, APA, ES, AAP, etc) in contrast to reliable-valid scientific research undergoing peer review, publication, then public review? Where is their concern for the suffering, vulnerable patients who deserve properly tested, proven, reliable, and efficacious treatments?

Professional associations and similar organizations have a tainted history of supporting unproven, controversial notions that were later shown to be improper, unreliable, and/or unethical. For example, it has been widely reported by historians that the American Medical Association supported (by voting) eugenic proposals to “improve the quality of the human stock” by coercive sterilization of “defective and undesirable Americans” and selective breeding. During the 1890s the renowned surgeon Albert Ochsner was invited to speak about his vasectomy procedure to the meeting of the American Medical Association. He recommended vasectomies to prevent the reproduction of “criminals, chronic inebriates, imbeciles, perverts, and paupers.” (See, Ochsner, AJ, Surgical treatment of habitual criminals. JAMA, 1899;32:867-868). Similar to the political-policy-voting support of associations such as WPATH and APA for the Transgender Treatment Industry methods, the AMA’s policy support for eugenics was a political not a scientific process. The unproven, political, experimental “treatments” of this movement were focused on “terminating the bloodlines” of the “submerged lower ten percent of the population with ‘defective germ-plasm’”. (See, Black, E. War Against the Weak, New York, NY, 2003). With the political-policy-voting support of the AMA, a Model Eugenics Sterilization Law was proposed to authorize sterilization of those supported in institutions or maintained at public expense. The model law encompassed the “feeble-minded, insane, criminalistic, epileptic, inebriate, diseased, blind, deaf, deformed, and dependent” — including “orphans, ne’er-do-wells, tramps, the homeless and paupers”. Eighteen states passed laws based on the 1922 model legislation and *sixty-four thousand people were forcibly sterilized*. The lesson from the eugenics era is that associations can lend their weight and prestige to social movements believing that they are speaking from a foundation of science when

in fact they are articulating political or ideological concepts. Such pseudoscientific voting consensus processes are neither valid, reliable, nor evidence-based — whether they vote for experimental eugenics “treatments” or experimental transgender affirmation “treatments”. Suffering patients deserve more than political posturing they deserved competent, scientifically validated, tested and proven, effective and safe treatments. We are all still waiting for the politicized Transgender Treatment Industry to provide competent scientific support for their controversial, experimental methods and theories.

A similar methodological critique is relevant to the understanding of WPATH, the American Academy of Pediatrics, the American Endocrine Society, the American Psychiatric Association, the American Psychological Association and similar groups as they declare supportive policies that are not based on credible, reliable-valid science. These policies often do not acknowledge the glaring scientific deficiencies of proposed guidelines. Beyond such policy voting statements is the absence of controlled studies, the absence of prospective follow up studies and no discussion nor proof of the error rates of interventions. It might be useful to examine what has been called the “Transgender Treatment Industry” (TTI). The TTI generates considerable income for hospitals, clinicians, and pharmaceutical companies. Members of the TTI have a vested interest in believing that science has already justified their existence. As sterilization is the expected adult outcome of endocrine and surgical treatments of the procedures undertaken in youth prior, the TTI must have developed strong rationalizations to justify creating infertility. Will one day the medical profession look at support for transitioning youth in the same manner the eugenics movement is now regarded? (See, Hruz, PW, Mayer, LS, and McHugh, PR, "Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria," The New



Atlantis, Number 52, Spring 2017 pp. 3 -36 ; See also, McHugh, P., Psychiatric Misadventures, The American Scholar, Vol. 62, No. 2 (Spring 1993), pp. 316-320

Why did Drs Brown and Schechter fail to report this issue? Where is their concern for the suffering, vulnerable patients who deserve properly tested, proven, reliable, and efficacious treatments?

ANECDOTAL PATIENT STORIES ARE NOT DATA: — Drs Schechter and Brown also *failed* to disclose and properly discuss that Anecdotal Data unverified patient reports without control groups, randomized trials, or other scientific protections for the integrity of the medical system — are NOT reliable science. Tragically, much of the Transgender Treatment Industry support seems to come from personal patient stories claiming the “transitioning treatments” helped them. *This is unreliable Anecdotal Data* and it is not credible, *scientific* information. For example, for hundreds of years physicians/barbers would use “bleeding and leeching” to remove “unhealthy blood” as a “treatment” for a range of disorders including fevers. Many people were killed by such untested, unproven procedures but the patients who survived offered wonderful marketing by naively and unscientifically claiming that “bleeding and leeching” cured them.

PATIENTS SHOULD NOT RUN THE HOSPITAL — Drs Schechter and Brown also *failed* to disclose and properly discuss that surgeons are not permitted to give patients whatever they ask for (see e.g. Body Identity Disorder patients in the grip of a delusion demanding amputations ) without credible research demonstrating safety and effectiveness Much of the Transgender Treatment Industry support comes from personal patient stories (unreliable anecdotal evidence) claiming the “treatments” will help them. Such patient stories are

Anecdotal Data. Such data is well known to be highly unreliable unscientific information. For example, for hundreds of years physicians/barbers would use “bleeding and leeching” to remove “unhealthy blood” as a “treatment” for a wide range of illnesses. Many people were killed by such procedures (including reportedly George Washington) but the ones who survived often offered wonderful marketing by naively and unscientifically believing and claiming that “bleeding and leeching” cured them. If the patient died during bleeding the physician could say “if she had only come in sooner so we could take more of the bad blood out” and alternatively if the patient recovered from the fever the physician could claim a treatment success. This failure to understand or apply fundamental scientific principles used in clinical trial research doomed millions to death and injury by quackery. It appears that the Transgender Treatment Industry is following in this destructive, unscientific footsteps.

CONFIRMATION BIAS — A POTENTIALLY DEADLY ERROR: — Drs Schechter and Brown also *failed* to disclose and properly discuss the wide spread foundational error of Confirmation Bias in the Transgender Treatment Industry. Providers in this troubled field apply a uni-causal hypothesis for very complex psychological disturbances, in spite of the fact that gender dysphoria can appear in different ways at different stages of development, and that the demographics show exponential growth and a radical switch in demographics. Whereas gender dysphoria historically affected boys 80% of the time, now the majority of new patients are adolescent females. In the politically tainted process of the Transgender Treatment industry the dangerous error of Confirmation Bias is built in to the system and institutionalized because the process of competent diagnosis and treatment — *seeking and testing scientifically validated alternative theories, methods, and treatments* — is demonized as “conversion therapy” when

actually such treatments are scientifically proven methods for reducing anxiety, depression, suicidality (e.g. Cognitive Behavioral Therapy that would not challenge any of the patients' beliefs regarding gender orientation or identity). In fact, an alternative hypothesis for investigation is that the "affirmation" providers want the patient to suffer depression and anxiety *such untreated suffering motivates vulnerable patients* to undergo the often painful and damaging experimental "transitioning" process. Once again, Drs. Brown and Schechter's defective expert reports somehow ignored all of these key issues. Where is their concern for the suffering, vulnerable patients who deserve properly tested, proven, reliable, and efficacious treatments?

THE DSM IS A DICTIONARY, NOT RELIABLE, VALID, PROVEN, METHODOLOGICALLY COMPETENT SCIENCE: — Drs Schechter and Brown also *failed* to disclose and properly discuss the *fundamentally unreliable, defective and dangerous mis-diagnostic processes* at the heart of the Transgender Treatment Industry. Basing life changing surgeries that damage and destroy the natural functions of perfectly healthy organs on nothing more than the *unverified self-reports (conversations) of often disturbed patients* as part of untested, unproven, experimental "treatments" that are "supported" by a methodologically defective research base when competent reviews have called such research "low quality" evidence and noted the "lack of any randomized clinical trials" — should be properly investigated as unethical, misconduct and an abuse of a vulnerable patient population. In addition, the reliance upon the DSM category of "gender dysphoria". It is important for legal professionals to understand that the DSM was created using a consensual, political process of small committees using *voting methodologies. Voting by DSM committees is not a reliable-*

*valid scientific, evidence-based process.* In the DSM methodology, small groups of professionals, often with ideological agendas and potentially with financial conflicts of interest, would form committees and create diagnoses to be “voted” into the DSM. The field has increasingly come to see the DSM as controversial and unreliable and in need of significant reform or retirement as a diagnostic methodology. The serious defects and limitations of DSM methodology are now well known leading to calls for reform by the relevant scientific community. See, e.g., Lee, C., *The NIMH Withdraws Support for DSM-5: The latest development is a humiliating blow to the APA*. Psychology Today News Blog at <https://www.psychologytoday.com/us/blog/side-effects/201305/the-nimh-withdraws-support-dsm-5> [“Just two weeks before DSM-5 is due to appear, the National Institute of Mental Health, the world's largest funding agency for research into mental health, has indicated that it is withdrawing support for the APA’s manual. In a humiliating blow to the American Psychiatric Association, Thomas R. Insel, M.D., Director of the NIMH, made clear the agency would no longer fund research projects that rely exclusively on DSM criteria. Henceforth, the NIMH, which had thrown its weight and funding behind earlier editions of the manual, would be “re-orienting its research away from DSM categories.” See, NIMH Director Thomas Insel: Transforming Diagnosis, April 29, 2013, See, <https://www.nimh.nih.gov/about/directors/thomas-insel/blog/2013/transforming-diagnosis.shtml> The National Institute of Mental Health website documents the defects in DSM methodology. “Unlike our definitions of ischemic heart disease, lymphoma, or AIDS, the *DSM diagnoses are based on a consensus about clusters of clinical symptoms, not any objective laboratory measure. In the rest of medicine, this would be equivalent to creating diagnostic systems based on the nature of chest pain or the quality of*

*fever*. Indeed, symptom-based diagnosis, once common in other areas of medicine, *has been largely replaced* in the past half century as we have understood that *symptoms alone rarely indicate the best choice of treatment. Patients with mental disorders deserve better*. NIMH has launched the Research Domain Criteria (RDoC) project to transform diagnosis by incorporating genetics, imaging, cognitive science, and other levels of information to lay the foundation for a new classification system.”] In my opinion, these views are generally accepted by the relevant scientific community and sound the death knell for the diagnostic practices of the experimental Transgender Treatment Industry. In sum, the field has come to agree that the DSM was indeed based upon a less than optimal process.

DRS BROWN AND SCHECHTER DID NOT REPORT RISKS AND DANGERS TO “TRANSGENDER TREATMENTS” INCLUDING: — Drs Schechter and Brown also *failed* to disclose and properly discuss serious risks with their experimental “treatments”:

Sterilization. Sex Reassignment Surgery (SRS) that removes testes, ovaries, or the uterus is *inevitably sterilizing and irreversible*. While by no means all transgender adults elect SRS, many patients do ultimately feel compelled to take this serious step in their effort to “live fully as the opposite sex”. More immediately, practitioners recognize that the administration of cross-sex hormones, which is often viewed as a less radical measure, and is now increasingly done to minors, creates a risk of irreversible sterility. 31 These risks have never been properly studied nor quantified in a systematic manner. As a result, even when treating a child, the MHP, patient, and parents must consider *permanent loss of reproductive capacity (sterilization) to be one of the major risks of starting down the road*. The risk that supporting social transition may put the child on a pathway that leads to intentional or unintentional permanent sterilization is

particularly concerning given *the disproportionate representation of minority and other vulnerable groups* among children reporting a transgender or gender-nonconforming identity. See C. Guss et al., *TGN Adolescent Care* at 4 (“a side effect [of cross-sex hormones] may be infertility”) and 5 (“cross-sex hormones . . . may have irreversible effects”); Tishelman et al., *Serving TG Youth* at 8 (Cross-sex hormones are “irreversible interventions” with “significant ramifications for fertility”).

Loss of sexual response. Puberty-blockers prevent maturation of the sexual organs and response. Some and perhaps many transgender individuals who transitioned as children and thus did not go through puberty consistent with their sex face significantly diminished sexual response as they enter adulthood, and are unable ever to experience orgasm. To my knowledge, data quantifying this impact has not been published. In the case of males, the cross-sex administration of estrogen limits penile genital function. Much has been written about the negative psychological and relational consequences of anorgasmia among non-transgender individuals that is ultimately applicable to the transgendered. (Levine, *Informed Consent*, at 6.) (Perelman and Watters, 2016) Delayed Ejaculation in Handbook of Clinical Sexuality for. Mental Health Professionals 3rd edition, New York, Routledge)

The long-term health risks of this major alteration of hormonal levels *have not yet been quantified* in terms of exact risk *thus appropriate, ethical, complete informed consent is not yet possible for such experimental “treatments”*. However, a recent study found *greatly elevated levels of strokes and other acute cardiovascular events among male-to-female transgender individuals* taking estrogen. Those authors concluded, “it is critical to keep in mind that the risk for these cardiovascular events in this population must be weighed against the benefits of

hormone. See Tishelman et al., *Serving TG Youth* at 6-7 (Long-term effect of cross-sex hormones “is an area where *we currently have little research to guide us*”). treatment.” See, D. Getahun et al. (2018), *Cross-Sex Hormones and Acute Cardiovascular Events in Transgender Persons: A Cohort Study*, *Annals of Internal Medicine* at 8, DOI:10.7326/M17-2785.

Others similarly noted that administration of cross-sex hormones creates “an additional *risk of thromboembolic events*”—*which is to say blood clots* (Guss et al., *TGN Adolescent Care* at 5), *which are associated with strokes, heart attack, and lung and liver failure*. The young patient may feel, “I don’t care if I die young, just as long I get to live as a woman.” The mature adult may take a different view.

Health risks inherent in complex surgery. Complications of surgery exist for each procedure, and complications in surgery affecting the reproductive organs and urinary tract can have significant anatomical and functional complications for the patient's quality of life.

Disease and mortality generally. The MHP, the patient, and in the case of a child the parent, must also be aware of the wide sweep of strongly negative health outcomes among transgender individuals. *Shortened life expectancy has been repeatedly documented* in Sweden, US, and Denmark. See, Levine, *Informed Consent*, at 5 (citing T. van de Grift, G. Pigot et al. (2017), *A Longitudinal Study of Motivations Before & Psychosexual Outcomes After Genital Gender-Confirming Surgery in Transmen*, *J. Sexual Medicine* 14(12) 1621.).

Whatever the reason, transgender individuals including transgender youth certainly experience greatly increased rates of mental health problems. I have detailed this above with respect to adults living under a transgender identity. Indeed, Swedish researchers in a long-term study (up to 30 years since Sex Reassignment Surgery (SRS), with a median time since SRS of >



10 years) concluded that *individuals who have SRS should have postoperative lifelong psychiatric care*. (Dhejne, Long Term, at 6-7.) With respect to youths a cohort study found that transgender youth had an elevated risk of depression (50.6% vs. 20.6%) and anxiety (26.7% vs. 10.0%); a higher risk of suicidal ideation (31.1% vs. 11.1%), suicide attempts (17.2% vs. 6.1%), and self-harm without lethal intent (16.7% vs. 4.4%) relative to the matched controls; and a significantly greater proportion of transgender youth accessed inpatient mental health care (22.8% vs. 11.1%) and outpatient mental health care (45.6% vs. 16.1%) services.

AFFIRMATION IGNORES MANY OTHER WAYS TO HELP THE SUFFERING— Drs Schechter and Brown also *failed* to disclose and properly discuss that the *diagnosis of “gender dysphoria” encompasses a diverse and controversial array of conditions*, with widely differing pathways and characteristics depending on age of onset, the complexities introduced by co-occurring mental illnesses, social contagion and other environmental factors, among other things. Data from one population (e.g. adults, those struggling with complex mental illnesses ) should not naively be assumed to be easily applicable to others (e.g. children, those changed by social contagion ) and other factors. The developmental and mental health patterns for of these groups are sufficiently different that data developed in connection with one of these populations *cannot be assumed to be reliably applicable to another*. See, K. Zucker (2018), The Myth of Persistence: Response to “A Critical Commentary on Follow-Up Studies & ‘Desistance’ Theories about Transgender & Gender Non-Conforming Children” by Temple Newhook et al., INT’L J. OF TRANSGENDERISM at 10, DOI: 10.1080/15532739.2018.1468293 (“Myth of Persistence”).



NOT FDA APPROVED: — Drs Schechter and Brown also *failed* to disclose and properly discuss that the Food and Drug Administration has not approved the medications/hormones used in the Transgender Treatment Industry for the treatment of gender dysphoria. The treatment research appears to document that such hormone treatments are of little if any benefit to patients and can cause severe damage to bone density and prevent normal psychological development during the key adolescent phase of life. (See, Carmichael, national science reviews of England-Sweden-Finland, and other publications cited in the Notes section of this declaration). Such off-label (not FDA approved) use of these powerful, permanently life-altering, medications is further evidence of the experimental nature of these scientifically unsupported treatments.

FAILURE TO DISCUSS THE FAILURE TO CONDUCT COMPETENT RESEARCH ON the ***UNKNOWN NUMBER AND PERCENTAGE of PATIENTS*** WHO DROP OUT OF TRANSITIONING OR REVERSE THE PROCESS (Detransitioners) : — Drs Schechter and Brown also *failed* to disclose and properly discuss — the phenomenon of desistance or regret experienced *later* than adolescence or young adulthood, or among older transgender individuals, has to my knowledge *not been quantified or well-studied*. However, it is a real phenomenon. I myself have worked with multiple individuals who have abandoned trans female identity after living in that identity for years, and who would describe their experiences as “regret”. More dramatically, a surgical group prominently active in the SRS field has published a report on a series of seven male-to-female patients requesting surgery to transform their surgically constructed female genitalia back to their original male form. See Djordjevic ML, Bizic MR, Duisin D, Bouman MB, Buncamper M. Reversal Surgery in Regretful Male-to-Female

Transsexuals After Sex Reassignment Surgery. J Sex Med. 2016 Jun;13(6):1000-7. doi: 10.1016/j.jsxm.2016.02.173. Epub 2016 May 4. PMID: 27156012. An increasingly visible online community of young women who have desisted after claiming a male gender identity at some point during their teen years. Given the rapid increase in the number of girls presenting to gender clinics within the last few years, the phenomena of regret and desistance by young women deserves careful attention and study by MHPs. As reported by one author in 2021, *60,000 testimonies of personal de-transition can be found on the Internet*. See, Pablo Exposito-Campos. A typology of gender detransition and its implications for health care providers J Sex & Marital Therapy 2020 <https://doi.org/10.1080/0092623x.2020.1869126>; See also, reportedly one Reddit subthread [ See, <https://www.reddit.com/r/detrans/new/> ] for detransitioners currently has more than 17,000 members, and a facility in Sweden, the Lundstrom Gender Clinic, provides trauma therapy for detransitioners. [ See, The Trans Train and Teenage Girls (Swedish documentary with English subtitles) at <https://www.youtube.com/watch?v=oDV-ZL6-Gu0> ]

NOT GENERALLY ACCEPTED — Drs Schechter and Brown also *failed* to honestly and properly disclose that the A) underlying defective science, B) unreliable diagnostic methods, C) confirmation bias riddled treatment selection procedures, and the still unproven-experimental treatments of the Transgender Treatment Industry have never been generally accepted by the relevant scientific community.

NO ERROR RATES — Drs Schechter and Brown also *failed* to honestly and properly disclose that the A) underlying defective science, B) unreliable diagnostic methods, C) confirmation bias riddled treatment selection procedures, and the still unproven-experimental

treatments of the Transgender Treatment Industry have no known error rates thus more patients could be injured than helped by such methods and procedures as recent studies demonstrate (See Branstrom critiques, Carmichael study, etc.)

FAILURES TO DISCLOSE INFORMED CONSENT ERRORS: In the present treatment paradigm that is supported by Dr. Schechter, and applied to self-identified transgender persons, the diagnosis is made by the patient, and affirmed by counselors, primary care providers, pediatricians, and psychological services providers. Confirmation of the diagnosis amounts to the use of questionnaires that often are identical to questionnaires found on line. The questions, and their answers use highly rehearsed language that is the same whether asked by the school nurse, or the licensed psychologist. They are based upon the affirmation model of the condition, and assumes that the condition is biologically determined, even though there is little to no scientific evidence to support this hypothesis. No alternative hypotheses of causation of the patient's condition are permitted.

By the time the patient presents to the transgender surgeon, they have been the subject of affirmation processes that include everything from social transitioning, to hormonal manipulation. The surgical services provider does not question the diagnosis, nor investigate the science upon which it is based. Essentially the surgeon is performing permanently life-altering surgical interventions to cure a psychological condition that was diagnosed by the patient, and sometimes the patient made the diagnosis before they even entered puberty. *Since the abandonment of frontal lobotomies in 1967, there has been no other psychological condition for which surgery is performed*, and there is no other area of surgical care where the

diagnostician is the patient themselves, and the surgeon has no means of confirming or rejecting the diagnosis.

Valid surgical consent requires that the surgeon is ultimately responsible for the accuracy of the diagnosis. For example, if an endocrinologist refers a patient for thyroidectomy because they have diagnosed a malignant thyroid nodule, the operating surgeon is still obliged to ensure the validity of the diagnosis. He has to entertain alternative diagnoses. Is it a benign nodule? Can it be treated with non-surgical means at lower risk to the patient. What do the scans show? What do the hormone levels show? Having evaluated all the alternative possibilities in the differential diagnosis, the surgeon can then counsel the patient and their family on the options of care, the likelihood of cure, and proper informed consent can be obtained.

The Transgender Treatment Industry, employing the scientifically unsupported WPATH guidelines, co-authored by Dr. Schechter, essentially excuse the surgeon from any responsibility for the diagnostic process or its consequences if the diagnosis is incorrect.

The 7th edition of the WPATH guidelines only requires two letters written by psychologists, and a period of social transition. There is no action taken to verify the diagnosis on the part of the surgeon. The surgeon has no means by which to anticipate who might benefit or who might be harmed by surgery.

Transgender surgeons like Dr. Schechter have no means of evaluating the diagnostic error rate because there is no body of reliable scientific evidence that can be used to counsel the patient about what their risk of transgender regret is. The ever growing population of de-transitioning patients suggests that the error rate may be considerable, and the future medico-legal consequences may be proportionate.

In sum, in my opinion the expert reports of Drs Brown and Schechter — are misleading, un-scientific, advocacy statements of two providers that appear deeply embedded — politically, ideologically, and financially — in the Transgender Treatment Industry. It is currently not clear whether the “treatment” efforts of that industry and providers like Drs Schechter and Brown are causing more harm than benefit to the vulnerable, suffering patients we should seek to help and support with treatments proven safe and effective by validated, competent scientific research. *After 50 years of experimental, unproven, treatments in this area, the vulnerable, suffering patients are still waiting for scientifically validated treatments.*

13. Review of Dr. Brown’s Opinions Regarding the Plaintiff’s Medical Records and My Review of the Plaintiff’s Medical Records:

Dr Brown’s updated (2nd) report on the plaintiff’s medical records continued his avoidance of the many controversies, methodological defects, ongoing debates, and incongruous findings of the Transgender Treatment Industry. Once again, he failed to mention the significant hazards involved with these experimental treatments and the published reviews documents documented the lack of benefits and harms of “transitioning” treatments. My own review of the plaintiff’s medical records found a demonstration of the errors in the industry described below including :

— *lack of appropriate informed consent* including failure to disclose and discuss the “low quality” of evidence this industry is based upon and the lack of randomized trial research and the lack of long-term research indicating such experimental treatments are more helpful than harmful to most patients.

— *failure to carefully investigate the psychosocial alternative hypotheses regarding the etiology of the patient's disorder* (See, new treatment guidelines from Sweden and Finland seeking psychological evaluations over years prior to intrusive medical “treatments” leading to harm to otherwise healthy organs

— *failure to acknowledge that the “association” endorsements of these experimental treatments are based upon consensus-seeking (committee voting) and not evidence-seeking, scientific methodologies.*

and the other errors and failures to disclose as discussed above.

**14. Why I Do Not Engage in *Experimental* Treatments Lacking Reliable, Credible Scientific Support with Gender Dysphoric (Transgender) Patients — or Any Other Patients:** As multiple national science reviews and multiple peer reviewed science publications demonstrate, the relevant scientific community has never accepted the reliability, validity, safety or effectiveness of “gender affirmation” treatment procedures — including surgical procedures. Significant medical, ethical, and potential legal problems are created when health care providers employ experimental, unproven, treatment including surgical procedures. As multiple national science reviews (e.g. Sweden, Great Britain, Finland), a Cochrane Review and multiple other published reviews of this controversial research field have recently noted, current Transgender Treatment Industry procedures are only supported by “low quality” methodologically flawed, research lacking general acceptance and lacking any published error rates. (See, eg. the Branstrom, et al study with accompanying multiple exposes of the researchers’ serious methodological errors and failures to report the data accurately). For example, the current assortment of “gender affirmation” surgical procedures lack credible,

reliable and valid scientific support as there are currently no published randomized trials, nor and competent long-term research studies demonstrating safety, efficacy, and scientific validity for these currently controversial, unproven, experimental treatment protocols. Due to this well-documented lack of scientific support and only low quality evidence of efficacy and safety, I will not personally engage in the delivery of experimental gender affirming medical interventions to patients of any age. I will not consider doing such invasive, potentially harmful surgical procedures — that can lead to life-long sterilization of vulnerable patients — until reliable-valid, credible scientific research supports such methods.

15. **The biological basis of sex** — Sex is not “assigned at birth” but permanently “assigned” at conception by DNA. Medical technology can be used to determine a fetus’s sex *before birth*. It is thus not scientifically correct to talk of doctors “assigning” the sex of a child at birth; almost anyone can accurately and reliably identify the sex of an infant by genital inspection with approx 99.9% accuracy. Every nucleated cell of an individual’s body is chromosomally identifiably male or female—XY or XX. Claims that patients can — via hormonal and surgical treatments — obtain a “sex change” or a “gender transition” process are *misleading and scientifically impossible*. In reality, the typical “transgender” Gender Discordant patient has normal healthy sex organs but struggles with Gender Discordant *feelings and perceived identity — a psychiatric and not a medical problem*.

16. ARE PATIENTS and PARENTS UNETHICALLY MISINFORMED BY PROVIDERS WHO FAIL TO DISCUSS THE KNOWN RISKS AND DANGERS OF “TRANSITIONING” TREATMENTS AND THE INTERNATIONAL CONTROVERSIES IN



THIS FIELD? : Putting a patient of any age on a pathway towards life as a transgender person puts that individual at risk of a wide range of long-term or even life-long harms, including:

- sterilization (whether chemical or surgical) and associated regret and sense of loss;
- inability to experience orgasm (for trans women);
- physical health risks associated with exposure to elevated levels of cross-sex hormones;

- surgical complications and life-long after-care;
- alienation of family relationships;
- inability to form healthy romantic relationships and attract a desirable mate;
- elevated mental health risks including increased depression, suicidality, and completed suicide.

Given that Drs Schechter and Brown failed to inform this court of the defects, uncertainties and controversies surrounding the entire field of Transgender Treatments, it seems difficult to imagine that they are properly informing patients of these defects, uncertainties and controversies.

17. VIRTUALLY ALL TRANSGENDER PATIENTS ARE BORN WITH HEALTHY NORMAL SEX ORGANS AND NO KNOWN BRAIN OR GENETIC ABNORMALITIES and NO SCIENTIFICALLY VALIDATED REASON TO SURGICALLY DAMAGE THEIR HEALTHY ORGANS - Transgender surgery is currently experimental and thus not medically necessary, as it seeks goals and benefits that have not yet been scientifically tested, validated, and proven. The long-term research on transgender surgical outcomes FAILED to show benefits and



suggested injuries from these experimental procedures (See Branstrom et al. research cited and discussed in the notes section of this declaration).

Contrary to assertions and hopes that medicine and society can fulfill the aspiration of the trans individual to become “a complete man” or “a complete woman,” *this is not biologically attainable*. It is possible for some adolescents and adults to pass unnoticed as the opposite gender that they aspire to be—but with unknown levels of limitations, costs, and risks.

18. INDIVIDUAL PATIENTS and THE FIELD AS A WHOLE SHOULD CAREFULLY REVIEW AND CONSIDER THE POTENTIAL SURGICAL COMPLICATIONS and/or IATROGENIC INJURIES WITH EXPERIMENTAL TRANSGENDER SURGERY of UNKNOWN LONG-TERM SAFETY AND EFFECTIVENESS :

EXAMPLES OF SURGICAL RISKS: “Masculinizing” Female to “Male” - Complications:

“Transgender Procedures Metoidioplasty: Following hormonally induced clitoromegally, the clitoris is released so that it hangs dependently, mimicking a small phallus, the urethra is lengthened by the use of mucosal, and/ or cutaneous flaps and/or grafts so that the urinary stream emerges from the tip of the counterfeit phallus. Reported complications with varying degrees of frequency:

1. Urethral strictures producing varying degrees of urinary obstruction and retention. a. Requires re-operation to open or dilate the scar strictures, additional grafts, urinary diversion through the use of a bladder catheter through the lower abdominal skin (suprapubic catheter)

2. Urethral- cutaneous fistulae (urine leaking from holes in the neo-urethra caused by wound healing problems and obstruction as in 1. above) a. Requires re-operative procedures as in 1. a. above.

3. Recurrent lower urinary tract infections caused by 1, and 2 above.

4. Chronic cysto-cutaneous fistula (urine leaking from the bladder through the skin of the lower abdomen) caused by the need for suprapubic catheter to divert the urinary stream to protect the neo-urethra construct if chronic distal urinary obstruction results from original or subsequent re-operation.

5. **Life-long reproductive sterilization**, since metoidioplasty is often accompanied by previous or subsequent hysterectomy and oophorectomy.

Phalloplasty: The construction of a counterfeit “neo-phallus”. Typically accomplished by the transplantation of a vascularized, sensate flap of skin and associated soft tissue from the non-dominant forearm (Sensate Radial Forearm Flap). Blood vessels and sensory nerves in the flap are connected to blood vessels and nerve in the area of the native genital structures. A highly technical procedure requiring microscopic assistance. Many published studies do NOT report complication rates. Overall, the reported complication rate is above 50% for the most favored operation to construct counterfeit phallus (1). The most frequent complications involve stricture or leakage of urine, and occurs in approximately 40% of all patients (2, 3, 4), requiring surgical correction. Infectious complication rate of 9%, with associated complete flap loss in 2% of patients have been reported in a patient series by Leriche et al., as is cited in a comprehensive review of phalloplasty complications (5). One single center review of a 20 year experience shows that blockage of blood flow to the pseudo-phallus, requiring reoperation occurs 11% of

the time (6). This same review showed complete loss of the construct occurred in 3% of patients, and 17% of patients showed significant wound healing issues requiring re-operation and long term wound care. In a comprehensive review of the most common phalloplasty surgeries, published in Clinics of Plastic Surgery in 2018, the authors state, ***“Phalloplasty is known for its high rate of complication”***. Their systematic review of the literature showed complete flap loss approaching 2%, partial loss of the flap in 5-7% of cases, opening of wounds (dehiscence) in 11% of patients, and a high rate of blood clot formation in the patient’s legs with risk of pulmonary embolization due to the long operative time, patient positioning for surgery, and the prolonged bed rest required (5). Similar complication rates have been reported in a review of 269 phalloplasties performed at a single center in Germany over a 22 year period. A review of patients whose phalloplasties included the use of prosthetic implants ***showed implant associated complication rate of 44%, including infection, extrusion, surgical replacement, and the need for surgical removal*** (8). There is also a high complication rate associated with the defect caused by harvesting the forearm tissue that is used in the construction of the counterfeit phallus. Kuran et al. in a 2019 article reviewing 940 radial forearm flap surgeries (730 of which were in transgender patients) showed an overall complication rate of 8%. ***Infection in 16%, chronic pain in 10%***, loss of strength and sensation in the limb in 5%, contracture with loss of mobility requiring occupational therapy in 6.5%, and failure of the covering skin graft in 4.5%. (9) In addition to the cosmetic result, and the ability to urinate while standing, ***it would be expected that the transgender scientific literature would rigorously investigate the effects of these surgeries on erotic sensibility but they have not. Human sexuality and gender identity discordance is at the heart of the justification for these very elaborate surgeries which carry high***

*complication rates, however, a review of outcomes in this area shows the low quality of outcomes data, and thus the experimental nature of these operations. In a 2019 literature review by Morrison et al. (10) the authors found that of 341 articles that had been published in peer reviewed journals, only 26 were found suitable for analysis.*

*The authors summarize by saying, “ Little data are available on genital sensibility outcomes after phalloplasty, and there are no standardized approaches for assessment of either sensibility or erogenous perception.” They then conclude by confessing, “ it is difficult to draw evidence-based conclusions.” This is a remarkable finding given that the human genital apparatus has two basic functions, namely reproduction and erotic sensibility. We know that reproduction is irreversibly destroyed by these operations, and now we see that erotic sensibility is degraded if not destroyed as well. Having thus excluded the entirety of genital function, all that remains is a cosmetic result, which is not a scientifically quantifiable product. In summary, masculinizing female to “male” surgeries are highly complex procedures with a very high complication rate. The scientific literature in this area of medicine is largely of low quality, and evidences the experimental nature of these operations. The most scientifically rigorous long-term studies (11, ) show that the stated goals of the surgeries, including decreased anxiety, decreased psychiatric hospitalization, decreased substance abuse, decreased self harm, and decreased suicide are not met. The long term cohort study from Sweden shows that persons who have completed all transition steps from female to “male”, when compared with a population matched cohort, have a substance abuse rate that is 3.5 times higher, a psychiatric hospitalization rate that is 3.5 times higher, a rate of incarceration for violent crime that is 9.9 times higher, and a suicide rate that is 40 times higher than the control group. When the authors graphed these*

*findings over time, they show that any improvement in these markers begins to disappear within 6 to 8 years following completion of surgery. This largely explains the suggestion of improvement seen in the low quality data that is tainted by short follow-up, and self-selection bias. The best population based, cohort matched, longitudinal studies appear to show that all that is achieved by these surgeries is a cosmetic result, and reproductive sterilization.*

**COMPLICATIONS:**

*1. Complete loss of the microvascular flap. Typically caused by technical failure of the venous connection, may also result from clot formation in the blood vessels, or pressure of swelling that compresses the blood supply. a. Requires major re-operation to remove the dead flap, and placement or retention of urinary diversion with the use of a suprapubic bladder catheter.*

*2. Partial loss of the microvascular flap. Caused by transient or persistent insufficiency of blood flow, with similar etiologies as in 1 above. a. Requires re-operation to debride (remove) dead tissue, and chronic wound care involving daily dressing changes, wound care visits. b. Requires placement or retention of urinary diversion with suprapubic catheter to prevent urinary contamination of the chronic wound.*

*3. Urethro-cutaneous fistulae (urine leakage from the counterfeit phallus). Caused by wound healing problems within the construct that may result from inadequate blood flow, pressure, or distal urinary obstruction. a. Requires placement or long term retention of the suprapubic catheter, and surgical procedures to repair the wound openings.*

4. Urethral strictures with associated urinary obstruction of varying degrees. a. Repeated urethral dilation and/ or catheterization, or re-operation to relieve chronic strictures, and will likely require urinary diversion as above.

5. Lower Urinary Tract Infections: resulting from any or the above complications of surgery. 6. Extrusion of erectile and or testicular prostheses. Cause by presence of bacteria on the implanted devices. Bacteria may have been introduced at time of surgical placement, or may result from above complications of partial flap loss or lower urinary tract infections that result from above complications.

7. Partial or complete loss of erotic sensibility. Native clitoris is typically placed at the base of the counterfeit phallus as part of the construct. Some degree of incidental surgical injury to sensory nerves is expected. Sensation from the shaft of the counterfeit phallus, provided by the surgical connection of the forearm nerve to the groin nerves, is considered successful if it provides any tactile sensation. It is not expected to produces the erotic provocation that the sensory apparatus of the native vagina produces.

8. Upper extremity complications. Common problems with the donor site can include: partial or complete loss of the skin grafts used to cover the exposed muscles and tendons that results from harvesting the forearm flap. Uncommon, but nonetheless possible, ischemic hand injury (inadequate blood flow to hand). a. Chronic wound care to achieve healing, and to protect exposed tendons. b. Scarring and tendon injuries from exposure may result in loss of range of motion. This is typically temporary, but may become permanent, depending on the age of the patient, and will require occupational therapy (OT). c. Chronic pain from harvest of the flap, or complications of healing as above.

*9. Lifelong Reproductive Sterilization. These surgeries are typically preceded by or followed by hysterectomy and oophorectomy. An essential human function is being destroyed in order to produce a cosmetic result.'*

***Vaginoplasty - Complications :***

Feminizing surgeries, performed on male persons, include the creation of external and internal structures that mimic the appearance and function of female genitalia. The most commonly performed surgery, called "inversion vaginoplasty" uses tissues from the patient's native genital structures to create neo-vaginal labia majora and minora, and a skin sleeve that is inverted into the pelvis to create a receptive passage capable of receptive copulation. In the process of this operation, the patient is castrated, the penis is opened, the erectile tissues removed, a portion of the glans is preserved while trying to preserve the erotic innervation so that it can be used to create a neo-clitoris, the skin of the penis is surgically closed and inverted into the pelvis, while preserving its native blood supply. The scrotal skin is used to construct the labia, and the urethra is shortened to an opening at the base of the neo-clitoris. Other vaginoplasty operations may involve the use of vascularized flaps from the thighs or abdomen to create the receptive neo-vaginal structure. Portions of the lower intestinal tract may be used to create the receptive sleeve of the neo-vagina. These operations are often used when prior surgeries have failed for a variety of reasons that will be presented below, or they may be a first choice if the patient has a poverty of genital tissue. Such poverty is a common result of prior use of puberty blockade and cross-sex hormones if the patient has been the subject of treatments that began in early adolescence.



*As documented in the NOTES section of this declaration, The scientific literature offered in support of the efficacy, safety, and cost-effectiveness of these procedures is of low quality, and comprised almost entirely of case-series reports that lack controls, are of short duration, suffer from various biases including self-selection and confirmation bias.* These problems are attested to by citations offered by Dr. Schechter in his expert testimony for the plaintiff. Dr. Schechter, in support of the efficacy of vaginoplasty surgery, cites a 2014 paper (20) which is typical. It reports outcomes on a consecutive case series of 254 male to “female” surgical patients. The data presented in support of the efficacy of surgery was in the form of a *questionnaire* that asked questions about satisfaction with the result (subjective data). The average follow up interval was 5 years, with the longest follow up in a single patient at 7 years (short follow-up), and only 46% of patients completed the questionnaire (self-selection bias). In another of Dr. Schechter’s cited articles, the authors present a prospective study of **only 39 patients (a very small sample)**, who are given *questionnaires* about their quality of life (subjective data), and the final evaluation of outcomes is *only 6 months post operation* (very short follow up given that research shows deep regret often begins on average *10 years after surgery*). Based upon such *low quality data*, the authors conclude by claiming that their study result, “endorses sex reassignment surgery as a valuable option for these patients.”

In his expert testimony, Dr. Schechter, having defined gender dysphoria, then goes on to justify surgical treatment based upon “medical necessity”. He states, “Gender dysphoria can lead to debilitating anxiety and depression, as well as serious incidents of self-harm, including self-mutilation, suicide attempts, and suicide. Yet with only a single exception, *no measure was made of the effects of surgery* on what is claimed to constitute the “medical necessity” for these





procedures. The long term research — the Branstrom study cited in detail in the Notes Section of this declaration showed NO benefits for transgender surgery and NO reduction in succeed and an *increase* in serious suicide attempts requiring hospitalization in patients *receiving* the surgery. *These recent, long-term, published, peer reviewed, credible research findings are quite contrary to the claims of Dr Schechter and Dr Brown — as are the National Science Reviews in this area from England-NICE, Sweden, and Finland (see Notes section in this declaration).*

Scientific rigor would demand an examination of such outcomes as: rates of substance abuse, psychiatric hospitalization, self-harm, or suicide, and how they were changed by surgery. The only paper in Dr. Schechter's list of citations that asks these crucial questions concerning efficacy is a very comprehensive, long term, longitudinal population cohort study (11) *which actually shows the opposite* of what Dr. Schechter claims for these patient outcomes. When followed beyond 8 years post operatively, this paper shows patients receiving Dr Schechter's treatments have *the same alarmingly high rates of hospitalization, substance abuse, self-harm, and completed suicide as persons who have had no medical or surgical intervention*. The fact that the citation is included by Dr. Schechter, but never discussed in his opinion regarding efficacy is troubling. In summary, on the issue of the safety and efficacy of these surgeries, the scientific support is very weak, *while the scientific evidence rejecting the hypothesis of efficacy is quite strong.*

#### **BREAST SURGERY - COMPLICATIONS:**

Mastectomy/ Chest Masculinization, Breast Augmentation/ Chest Feminization

The surgical removal of the breasts, and the re-contouring of the chest through liposuction is a common procedure for women who seek to present as men. These operations are

performed in both men and women, for a variety of reasons, are very safe, and typically performed in the outpatient setting. It is important to understand that the only way of distinguishing cosmetic breast surgery from “medically indicated” surgery is based upon the diagnosis of underlying pathology. For example, breast reduction may be cosmetic, or it may be medically indicated. In both cases, the patient presents with a complaint that her breast are too big. The distinction between cosmetic breast reduction, and medically indicated breast reduction, is based upon the presenting symptoms of orthopedic problems caused by the weight of the breasts, but even then, the weight of the removed tissue is factored into the objective verification that the surgery was “medically necessary”.

The same issues are at stake in breast enhancement for men seeking to present as women. Cross-sex hormones will have caused varying degrees of gynecomastia (breast enlargement in men). Surgical enhancement procedures are exactly the same in both men and women. Medically necessary surgery in women is based upon the diagnosis of an objective medical condition, such as Poland’s syndrome (congenital absence of a breast), surgical absence of the breast following cancer care. In men, the objective diagnosis of gynecomastia might warrant surgery based upon medical necessity, but it would be a removal of tissue. A rare diagnosis of breast cancer in a man might warrant chest wall reconstruction after cancer care. On the other hand, cosmetic surgery of the breast is entirely about the subjective feelings of the patient, and that is all that we have in the case of the self-identified transgender patient.

In the case of transgender chest surgery, the diagnosis is based on the patient’s subjective report of dysphoria, but the medical necessity is based on the expectation that surgery will relieve the patient of the risk of, among other things, major depression, self-harm behaviors, and

suicide. None of the papers cited by Dr. Schechter (20, 21, 22, 23, 24, 25 )address themselves to the question of medical necessity for either masculinizing surgery, or feminizing surgery. They only address technical issues, management of complications, and subjective outcomes that employ precisely the same language that is used to assess cosmetic surgery of the breast. In summary, the medical necessity of transgender chest surgery is not supported by scientific evidence, and appears to be firmly in the category of cosmetic surgery.

**19. SUMMARY OF OPINIONS:**

— There are no currently no competently conducted, long-term, peer-reviewed published, reliable and valid, research studies documenting the number or percentage of patients receiving gender affirming medical interventions who are helped by such procedures.

— There are no long-term, peer-reviewed published, reliable and valid, research studies documenting the number or percentage of patients receiving gender affirming medical interventions who are injured or harmed by such procedures.

— There are no long-term, peer-reviewed published, reliable and valid, research studies documenting the reliability and validity of assessing gender identity by relying solely upon the expressed desires of a patient.

— There are no long-term, peer-reviewed published, reliable and valid, research studies documenting any valid and reliable biological, medical, surgical, radiological, psychological, or other objective assessment of gender identity or gender dysphoria.

— A currently unknown percentage and number of patients reporting gender dysphoria suffer from mental illness(es) that complicate and may distort their judgments and perceptions of gender identity.

— A currently unknown percentage and number of patients reporting gender dysphoria are being manipulated by a — peer group, social media, YouTube role modeling, and/or parental — social contagion and social pressure processes.

— Patients suffering from gender dysphoria or related issues have a right to be protected from experimental, potentially harmful treatments lacking reliable and valid, peer reviewed, published, long-term scientific evidence of safety and effectiveness.

— It would be a serious violation of licensing rules, ethical rules, and professional standards of care for a health care professional to provide gender transition or related procedures to any patient without first properly obtaining informed consent including informing the patient and/or guardian(s) of the lack of valid and reliable on the long-term risks and benefits of “affirmation” treatments.

— A large percentage of children (over 80% in some studies) who questioned their gender identity will, if left alone, develop an acceptance of their natal (biological) sex.

— Medical treatments may differ significantly by sex according to chromosomal assessment but not gender identity. Misinforming physicians of a patient’s biological sex can have deleterious effects on treatment for medical conditions.

— NOT GENERALLY ACCEPTED: Affirmation medical treatments — hormones and surgery — for gender dysphoria and “transitioning” have not been accepted by the relevant scientific communities (biology, genetics, neonatology, medicine, psychology, etc).

— NO KNOWN NOR PUBLISHED ERROR RATES: Gender transition “Affirmation” medical assessments and treatments — hormones and surgery — for gender dysphoria and

“transitioning” have no known, peer reviewed and published error rates — the treatments and assessment methods lack demonstrated, reliable and valid error rates.

— ASSOCIATION GUIDELINES AND ENDORSEMENTS ARE NOT SCIENCE : Political activists, political activist physicians, and politically active medical organizations that operate by voting methodologies (e.g, WPATH, the American Medical Association, the American Academy of Pediatrics, the American Endocrine Society) are not the relevant scientific community, they are politically active professional organizations. These organizations operate via consensus-seeking methodology (voting) and political ideologies (e.g., Critical Theory) rather than evidence-based scientific methodologies.

— ETHICAL RESTRICTIONS ON EXPERTS - WILL THERE BE A PROPER INVESTIGATION OF MISINFORMATION? : Experts in legal cases have an ethical obligation to honestly, fairly, and accurately disclose and discuss the international controversies regarding the safety, effectiveness, reliability, and credibility of the Gender Transition Industry. It is astonishing that in their expert declarations, Drs Schechter and Brown *failed* to disclose and discuss the controversies, complex issues, debates, and contrary national science review recommendations in this field. Dr Brown even swore in his declaration that... “*Nor is there any uncertainty or dispute in the medical field regarding the medical necessity of this care.*” It is difficult to imagine a more inaccurate summary of the state of the embattled, experimental Transgender Treatment Industry. Will such mis-information be properly investigated by the relevant authorities?

20. DR LAPPERT’S RESEARCH NOTES: To assist in my testimony in this case. I include my notes, references and citations documenting the depth and breadth of the serious

controversies in this field. Over the past few years, the glaring defects in the research foundations of the Transgender Treatment Industry have been exposed for all the world to see.

**Controversy** - 2015 Dutch Study by Vrouenraets et al, *Early Medical Treatment of Children and Adolescents With Gender Dysphoria: An Empirical Ethical Study*, Journal of Adolescent Health 57 (2015) 367e373. ...no consensus exists whether to use these early medical interventions....Results: Seven themes give rise to different, and even opposing, views on treatment: (1) the lack of an explanatory model for GD; (2) the unknown nature of GD (normal variation?, social construct?, or mental illness?); (3) the role of physiological puberty in developing gender identity; (4) the role of comorbidity [with severe mental illnesses]; (5) unknown possible physical or psychological effects of (refraining from) early medical interventions; (6) child competence and decision making authority [to give truly informed consent to be sterilized for experimental procedures?]; and (7) the role of social context ...how GD is perceived. Strikingly, the guidelines are debated both for being too liberal and for being too limiting. Conclusions: As long as *debate* remains on these seven themes and *only limited long-term data are available*, there will be **no consensus on treatment**. Therefore, more systematic interdisciplinary and (worldwide) multi-center research is required. It is striking that Drs. Brown and Schechter somehow both failed to properly report this ongoing international debate within their claimed field of expertise.

---

**2011 - Dhejne et al. (2011)**, Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden, PLOS ONE 6(2) e16885 ("Long Term"); See also, R. K. Simonsen et al. (2016), Long-Term Follow-Up of Individuals Undergoing Sex Reassignment Surgery: Psychiatric Morbidity & Mortality, Nordic J. of Psychiatry 70(4). Swedish follow-up study of patients who underwent sex-reassignment surgery over a 30-year period found a **suicide rate in the post-Sex Reassignment Surgery (SRS) population 19.1 times greater** — after affirmation treatment — than that of the controls; both studies demonstrated elevated mortality rates from medical and psychiatric conditions.

---

**2021-2020 Carmichael P, Butler G, Masic U, et al.** Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. medRxiv 2020.12.01.20241653 ... Self-harm did NOT improve and "no changes in psychological function," meaning no improvement. (Also, "YSR [Youth Self Report] data at 36 months (n = 6) were not analyzed."... no significant effect on their psychological function, thoughts of self-harm, or body image, a study has found... children experienced reduced growth in height and bone strength by the time they finished their treatment at age 16. The findings, from a study of 44 children treated by the Gender Identity Development Service (GIDS) run by the Tavistock and Portman NHS Foundation Trust in London, have emerged as the trust prepares to appeal against a High Court ruling that led NHS England to pause referrals of under 16s for puberty blockers.

---

See, 2020 Bränström and Panchankis long term surgical results NO benefit (data



suggests and suggests an increased risk of serious suicide attempts) ...See also See, Kalin, N.H., Reassessing Mental Health Treatment Utilization Reduction in Transgender Individuals After Gender-Affirming Surgeries: A Comment by the Editor on the Process by the Editor-in-Chief The American Journal of Psychiatry, Am J Psychiatry 2020; 177:764; doi: 10.1176/appi.ajp.2020.20060803; See also, Anckarsäter, H., (MD, Ph.D.) and Gillberg, C., (M.D., Ph.D.) Methodological Shortcomings Undercut Statement in Support of Gender-Affirming Surgery, Am J Psychiatry 2020; 177:764–765; doi: 10.1176/appi.ajp.2020.19111117.

---

**DEMOGRAPHICS...** no biological explanation... The radical change in patient demographics from early onset in boys to teen girls with rapid onset— has been termed late-, adolescent-, or rapid-onset gender dysphoria — has now been seen in every gender clinic in the western world, and there has been a huge surge in the number of cases. "National College Health Assessment: ACHA-NCHA s://www.acha.org/NCHA/ACHA-NCHA\_Data/Publications\_and\_Reports/NCHA/Data/Publications\_and\_Reports.aspx?hkey=d5fb767c-d15d-4efc-8c41-3546d92032c5 See, Kaltiala-Heino, Riittakerttu, Hannah Bergman, Marja Työläjärvä, and Louise Frisen. "Gender Dysphoria in Adolescence: Current Perspectives." Adolescent Health, Medicine and Therapeutics Volume9 (March 2018): 31–41. <https://doi.org/10.2147/AHMT.S135432> See, Vries, Annelou L.C. de. "Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents." Pediatrics 146, no. 4 (October 2020): e2020010611. <https://doi.org/10.1542/peds.2020-010611>. See, Zucker, Kenneth J. "Adolescents with Gender Dysphoria: Reflections on Some Contemporary Clinical and Research Issues." Archives of Sexual Behavior 48, no. 7 (October 2019): 1983–92. <https://doi.org/10.1007/s10508-019-01518-8>. and reportedly Australia.

---

2020 See National Review for Great Britain (NICE), Deborah Cohen and Hannah Barnes, Evidence for puberty blockers use very low, says NICE at <https://www.bbc.com/news/health-56601386> [ "The evidence for using puberty blocking drugs to treat young people struggling with their gender identity is "very low", an official review has found. The National Institute of Health and Care Excellence (NICE) said existing studies of the drugs were small and "subject to bias and confounding".;

---

See, Asscheman H, Giltay EJ, Megens JA, et al. A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones. *Eur J Endocrinol.* 2011;164:635-642. *"There is no evidence that transition reduces suicide when we look past 10 years, and there is some suggestion that suicide rates may actually increase after the transition honeymoon phase is over,"* says Malone, stressing the importance of providing proper evaluation and appropriate psychological treatment for any suicidal tendencies. ( Supports the Branson conclusions after recantation and correction).

---

**Sweden** = Review of Gender dysphoria in children and adolescents: an inventory of the literature, SBU Policy Support no 307, 2019 [www.sbu.se/en](http://www.sbu.se/en) • [registrator@sbu.se](mailto:registrator@sbu.se)  
Contact SBU: Jan Adolfsson, Medical Advisor, Project Manager, [jan.adolfsson@sbu.se](mailto:jan.adolfsson@sbu.se),



English Proofreading: Project group and Jan Adolfsson, SBU [“ No relevant randomized controlled (treatment outcome) trials in children and adolescents were found.”] ; See, also e.g., FINLAND Issues Strict Guidelines for Treating Gender Dysphoria at <https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/>. In 2020, Finland reportedly became the first country in the world to issue new guidelines for this group of patients when it concluded similarly to the UK High Court that there is a lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria.... they also issued the guideline ordering “No surgical interventions are allowed for children under the age of 18”. ). As the methodological quality of the studies was already poor based on the type of study, thus no actual quality assessment or determination of the degree of evidence was performed.”] ;

**See, Cochrane Review** (See, Haupt, C., Henke, M. et. al., Cochrane Database of Systematic Reviews Review - Intervention, Antiandrogen or estradiol treatment or both during hormone therapy in transitioning transgender women, 28 November 2020.)

---

**See, Griffin, L., Clyde, K., Byng, R., Bewley, S., Sex, gender and gender identity: a re-evaluation of the evidence. BJPsych Bulletin (2020) doi:10.1192/bjb.2020.73, Cambridge University Press, 21 July 2020,** the authors noted *the hazardous error of mandating “affirmation treatments”* — thus requiring the negligent practice of Confirmation Bias — rather than properly and carefully exploring alternative hypotheses — the standard, required ethical, medical standard of practice. ... As Griffin discussed, “Attempts to properly explore, formulate and treat coexisting mental illness in gender dysphoric populations, including that relating to childhood trauma, might be considered tantamount to ‘conversion therapy’. Although mental illness is overrepresented in the trans population it is important to note that gender non-conformity itself is not a mental illness or disorder. *As there is evidence that many psychiatric disorders persist despite positive affirmation and medical transition, it is puzzling why transition would come to be seen as a key goal rather than other outcomes, such as improved quality of life and reduced morbidity.* When the phenomena related to identity disorders and the evidence base are uncertain, it might be wiser for the profession to admit the uncertainties. Taking a supportive, exploratory (psychotherapy) approach with gender-questioning patients should not be considered conversion therapy.”... In addition, Griffin et al wrote: “Transgender support groups have emphasized the risk of suicide. After controlling for coexisting mental health problems, studies show an increased risk of suicidal behaviour and self-harm in the transgender population, although *underlying causality has not been convincingly demonstrated.*”

---

**See, Dyer, C., Puberty blockers do not alleviate negative thoughts in children with gender dysphoria, finds study BMJ 2021; 372 doi: <https://doi.org/10.1136/bmj.n356> (Published 08 February 2021) Cite this as: BMJ 2021;372:n356** [ Puberty blockers used to treat children aged 12 to 15 who have severe and persistent gender dysphoria had no significant effect on their psychological function, thoughts of self-harm, or body image, a study has found. However, as expected, the children experienced reduced growth in height and bone strength by the time they finished their treatment at age 16]

---

See, e.g., Wold, A. (M.D., Ph.D.) Gender-Corrective Surgery Promoting Mental Health in Persons With Gender Dysphoria Not Supported by Data Presented in Article, *Am J Psychiatry* 2020; 177:768; doi: 10.1176/appi.ajp.2020.19111170. [ among the individuals examined in the Bränström study, the risk of being hospitalized for a suicide attempt was 2.4 times HIGHER if they had undergone gender-corrective surgery than if they had not.... the data presented in the Bränström article do not support the conclusion that surgery is beneficial to mental health in individuals with gender dysphoria.” ]  
 “Therefore, ... the data in the article ... **OVERTURNS the authors’ stated conclusions, suggesting that sex reassignment surgery is in fact associated with INCREASED mental health treatment** See, Ring, A. (PhD) and Malone, W. , Confounding Effects on Mental Health Observations After Sex Reassignment Surgery, *Am J Psychiatry* 2020; 177:768–769; doi: 10.1176/appi.ajp.2020.19111169.

See, See, Van Mol, A., , Laidlaw, M. K., Grossman, M., McHugh, P. , Gender-Affirmation Surgery Conclusion Lacks Evidence, *Am J Psychiatry* 177:8, August 2020 [ajp.psychiatryonline.org](http://ajp.psychiatryonline.org) 765. “The study confirms the strong association between psychiatric morbidity and the experience of incongruity between gender identity and biological sex. However, the study does NOT demonstrate that either hormonal treatment or surgery has ANY effect on this morbidity. It seems that the main message of this article is that the incidence of mental health problems and suicide attempts is especially HIGH in the year AFTER the completion of gender-affirming surgery [ It is telling that the authors somehow ignored this most essential finding ] ...” See, Curtis, D. (M.D., Ph.D. ), Study of Transgender Patients: Conclusions Are Not Supported by Findings, *Am J Psychiatry* 2020; 177:766; doi: 10.1176/appi.ajp.2020.19111131.

See, Malone, W. and Roman, S. , Calling Into Question Whether Gender-Affirming Surgery Relieves Psychological Distress, *Am J Psychiatry* 2020; 177:766–767; doi: 10.1176/appi.ajp.2020.19111149. “Bränström and Pachankis study on mental health treatment and suicide attempts ... is misleading because the study design is flawed.” “The authors first found what was already known ... the rate of psychiatric morbidity is much higher in persons with gender dysphoria compared with the general population (both before AND after “transitioning”). The authors then explored if the risk for mental health treatment changes as a function of years since starting HORMONAL treatment. They find NO effect (odds ratio = 1.0), but they do find a trend toward INCREASED risk of suicide attempts as a function of years since starting [ gender affirmation ] HORMONAL treatment. They somehow failed to publish this essential finding.

See, Landén, M. ( M.D., Ph.D. ) The Effect of Gender-Affirming Treatment on Psychiatric Morbidity Is Still Undecided, *Am J Psychiatry* 2020; 177:767–768; doi: 10.1176/appi.ajp.2020.19111165. this conclusion is not supported by the data presented in the article.

See, Bränström, R. and Pachankis, J. , Toward Rigorous Methodologies for Strengthening Causal Inference in the Association Between Gender-Affirming Care and Transgender Individuals’ Mental Health: Response to Letters, *Am J Psychiatry* 2020; 177:769–772; doi: 10.1176/appi.ajp.2020.20050599.

---

2020 - Sweden, following a national review of transgender science, published a new guideline that is NOT consistent with WPATH protocols nor the opinions of Drs Schechter and Brown in this case. [ <https://genderreport.ca/finland-strict-guidelines->

for-treating-gender-dysphoria/ The SWEDISH NATIONAL GUIDELINES appear quite contrary to the opinions of Drs Brown and Schechter and WPATH.

---

2020 - Finland following a review of transgender science, became the first country in the world to issue new guidelines for this group of patients when it concluded similarly to the UK High Court that *there is a lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria*. This new Finnish guidance *prioritizes psychological therapy over treatment with hormones or surgery* and suggests different care plans for early-onset vs late-onset childhood gender dysphoria. The 2020 Finland guidelines state "*Only limited research has been conducted on transgender identity and other gender identity conflicts, and comparative studies are very rare.*" The Finland National Guidelines appear quite contrary to the opinions of Drs Brown and Schechter and WPATH.

See, <https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/> Finland Clinical Guidelines and Conclusions Three reports were created by COHERE in Finland. The report "Medical treatment methods for dysphoria associated with variations in gender identity in minors – recommendation" clarifies the roles of different healthcare providers in a situation where a minor is uncertain about their gender identity. They also produced general recommendations for the treatment of transgender people, which applies to adults. And interestingly, a third and separate set of recommendations for the treatment of gender dysphoria related to non-binary people and people with gender identities other than opposite-sex gender identities. The summaries are available for download here:

[Summary-transgender enDownload](#)

[Summary minors enDownload](#)

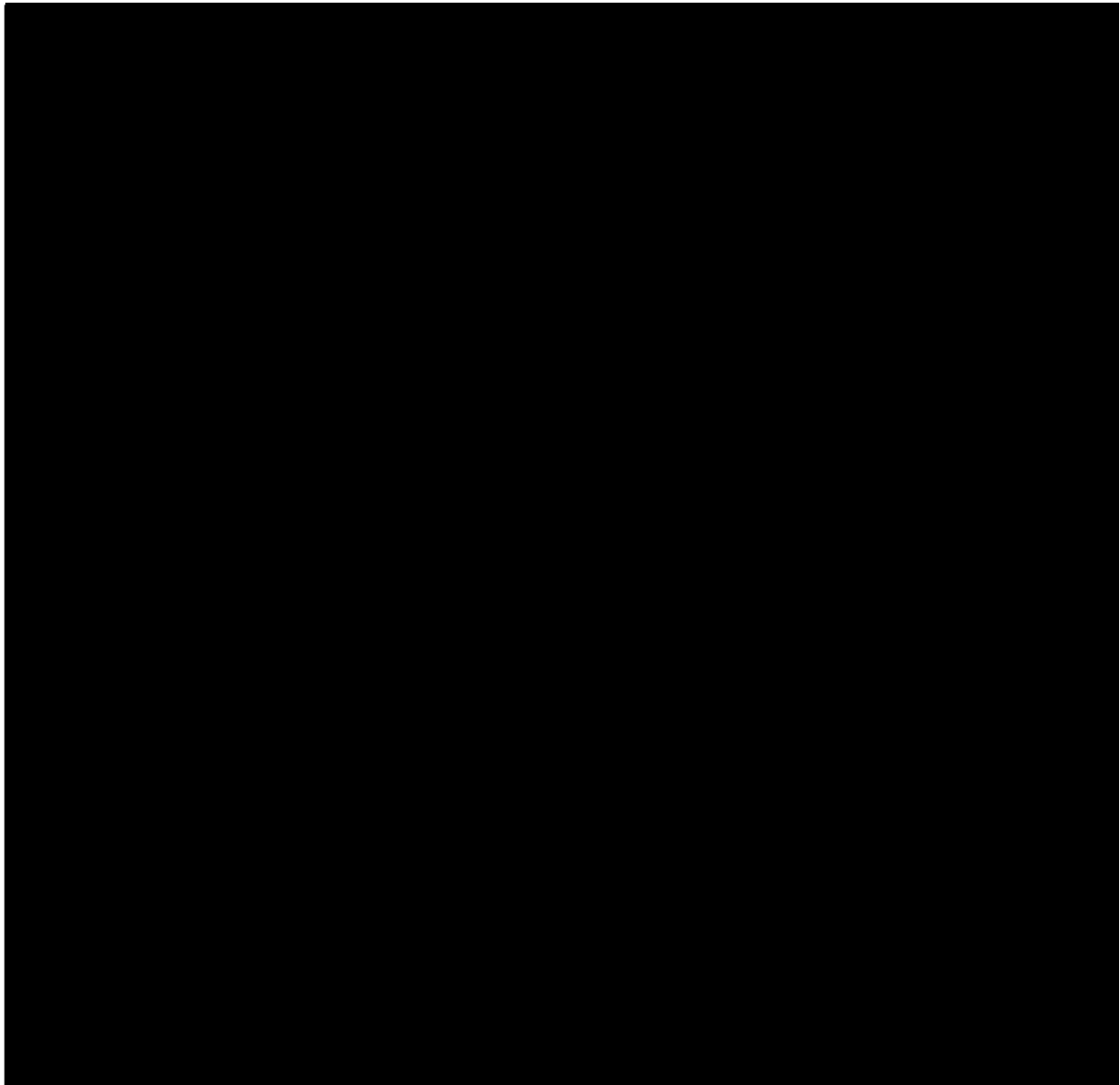
[Summary non-binary enDownload](#)

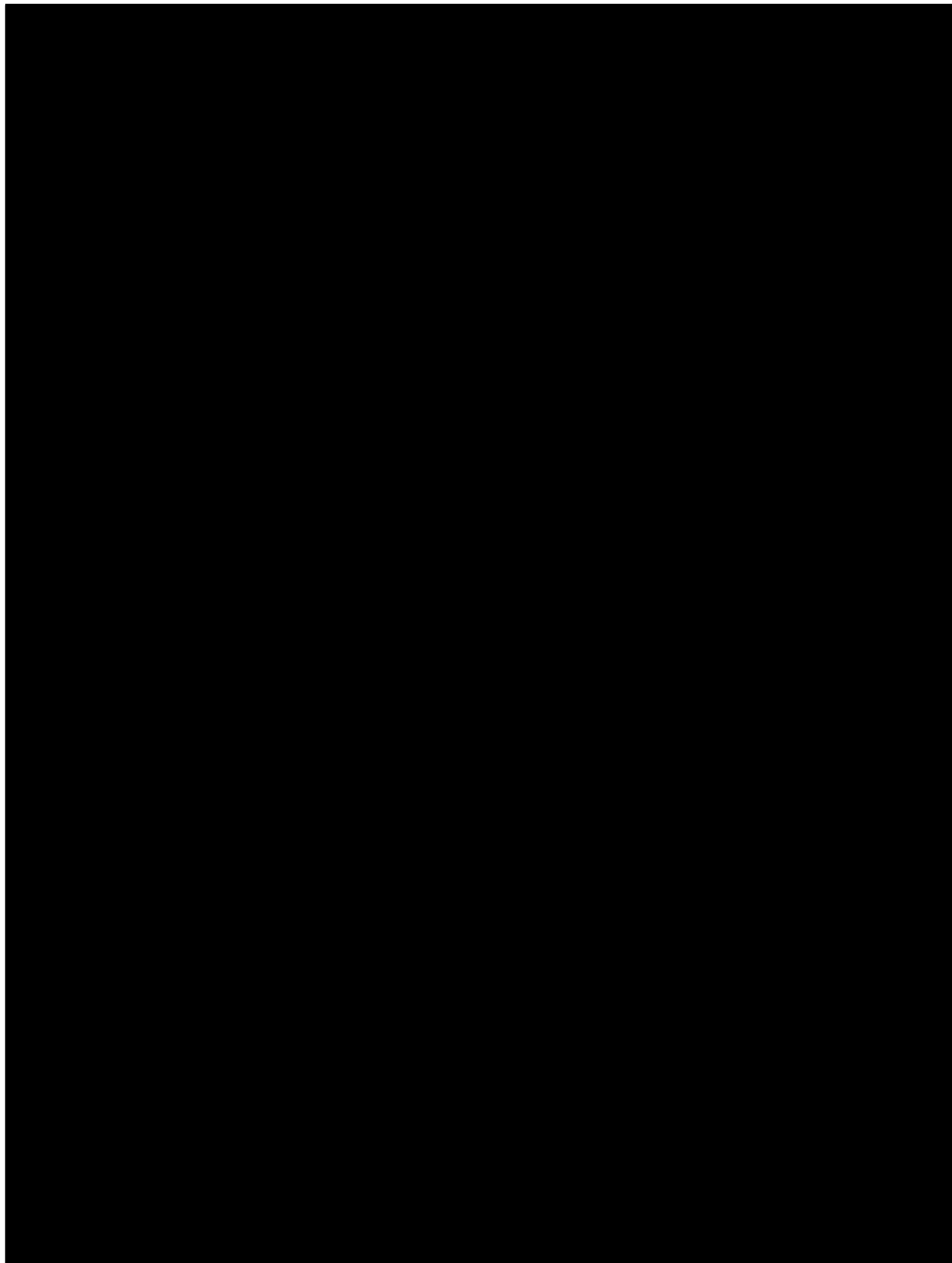
---

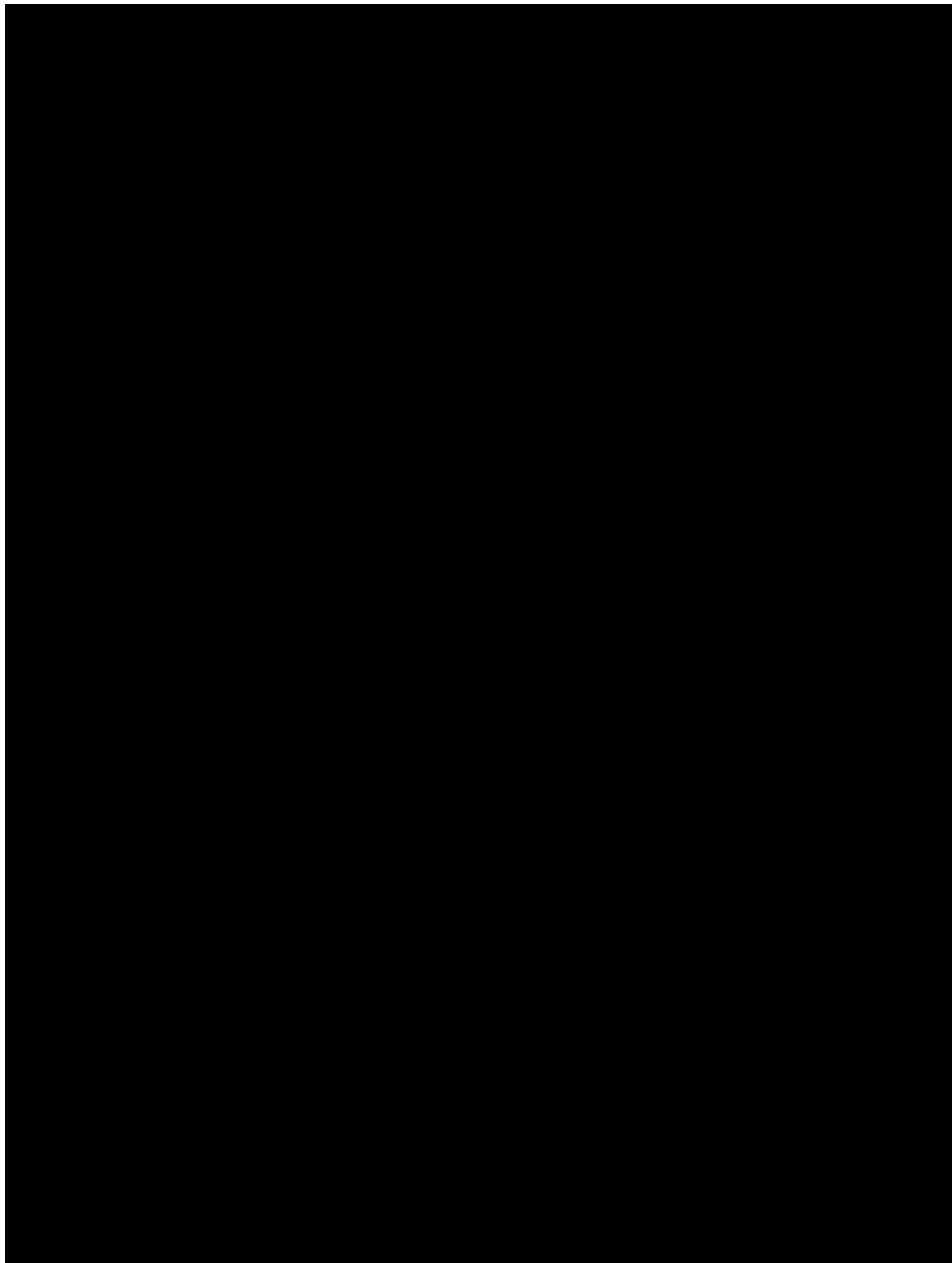
**21. Expert Report Limitations:** My opinions and hypotheses in this matter are — as in all expert witness reports — subject to the limitations of documentary and related evidence, the impossibility of absolute predictions, as well as the limitations of social, biological, and medical science. All opinions have been offered to a reasonable degree of medical certainty. I have not met with, nor personally interviewed, anyone in this case. As always, I have no expert opinions regarding the veracity of witnesses in this case. I have not yet reviewed all of the evidence in this case and my opinions are subject to change at any time as new information becomes available to me. Only the trier of fact can determine the credibility of witnesses and how scientific research may or may not be related to the specific facts of any particular case. In

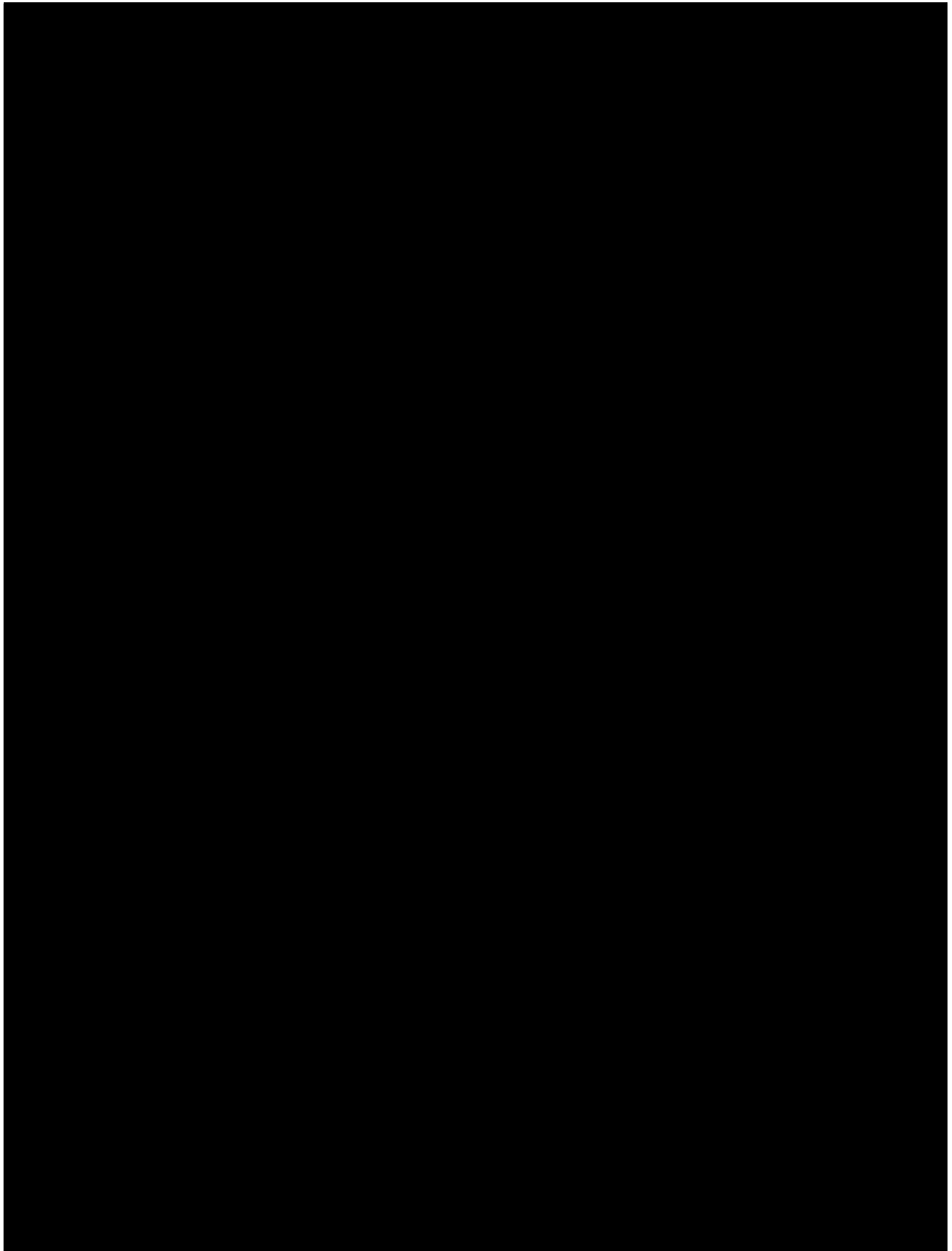
my opinion, a key role of an expert witness is to help the court, lawyers, parties, and the public understand and apply reliable scientific, technical, and investigative principles, hypotheses, methods, and information. I have transmitted this confidential expert report directly to attorney John G. Knepper, J.D. for distribution as consistent with the laws of the appropriate jurisdiction for this case.

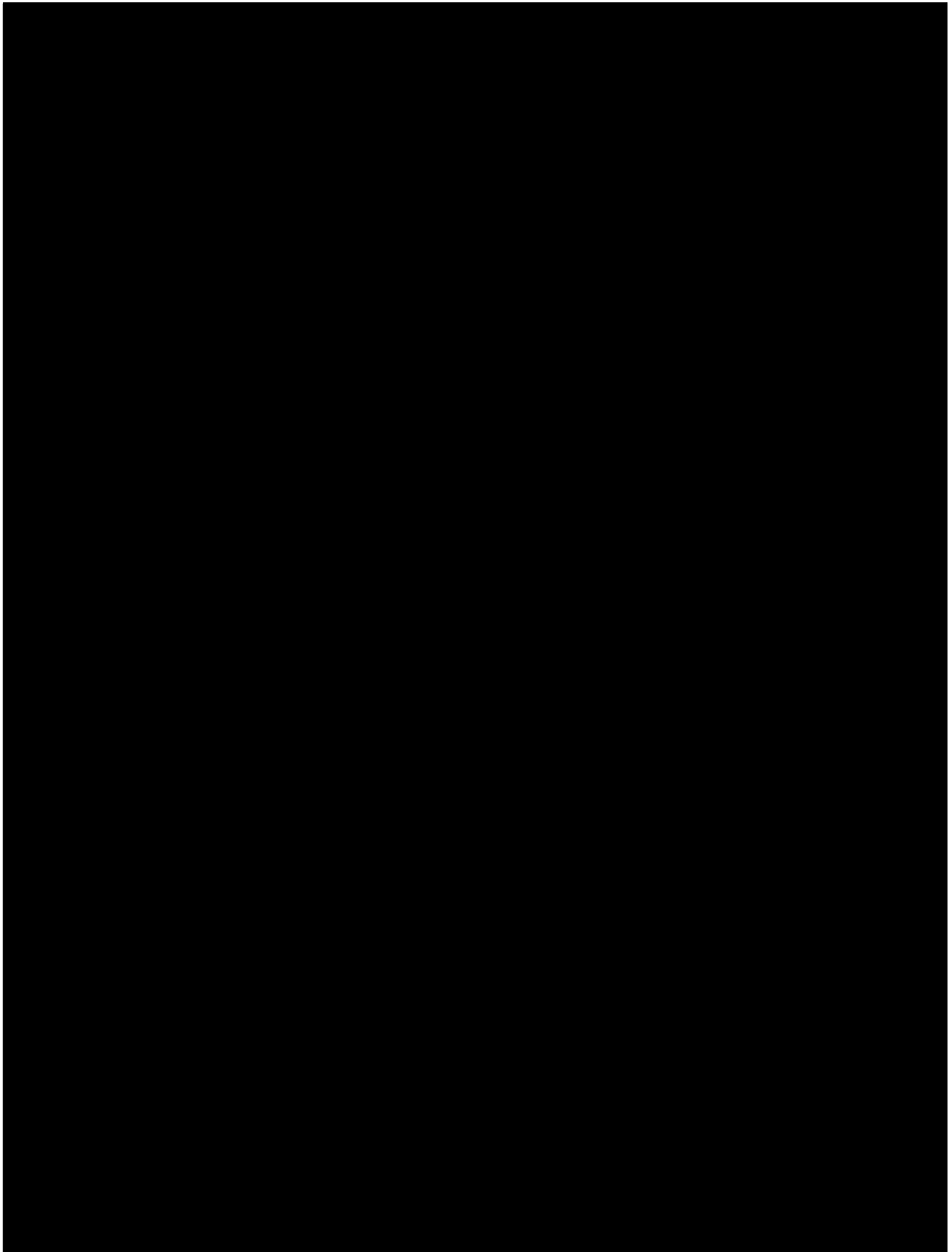
**CONFIDENTIAL INFORMATION SECTION BELOW**



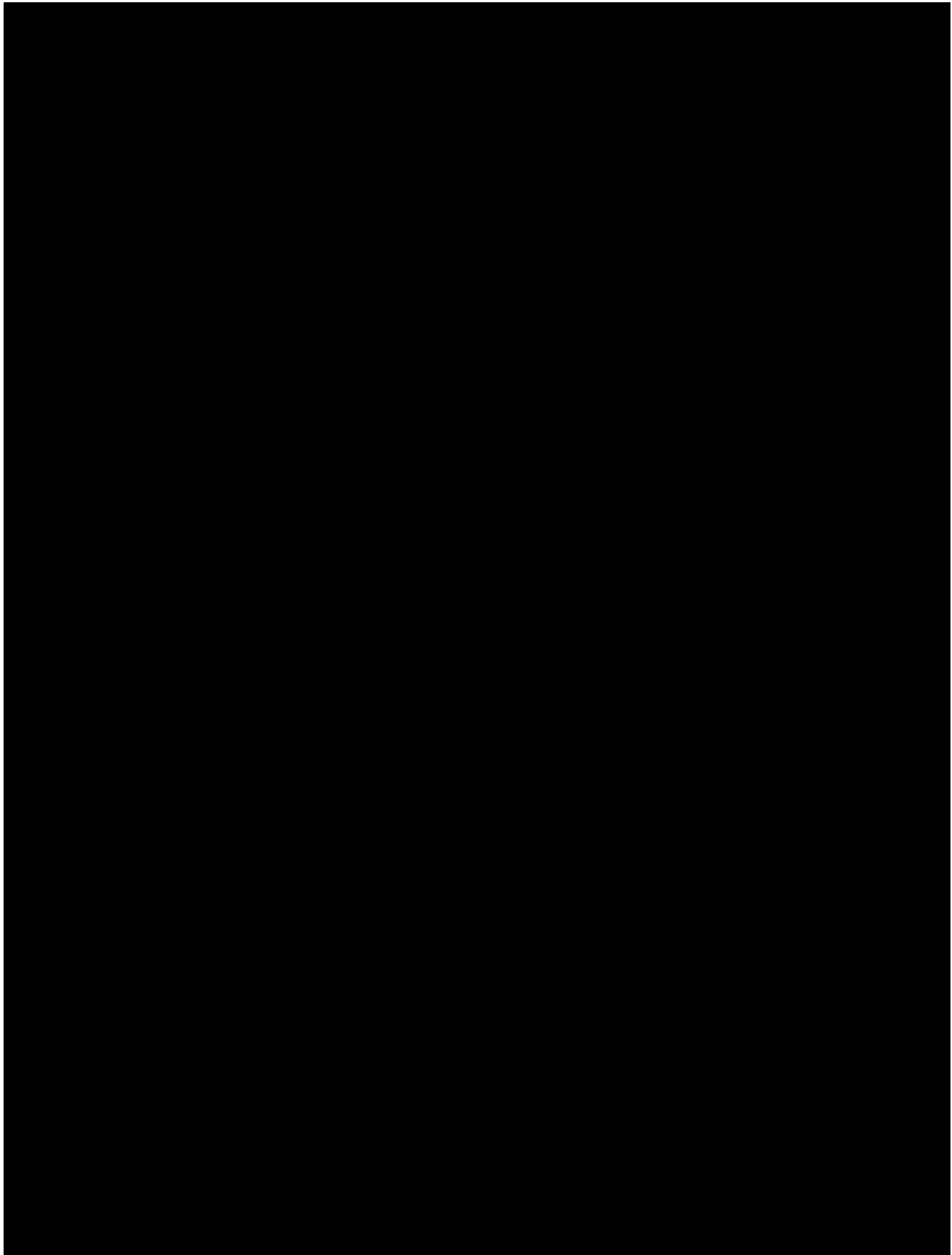


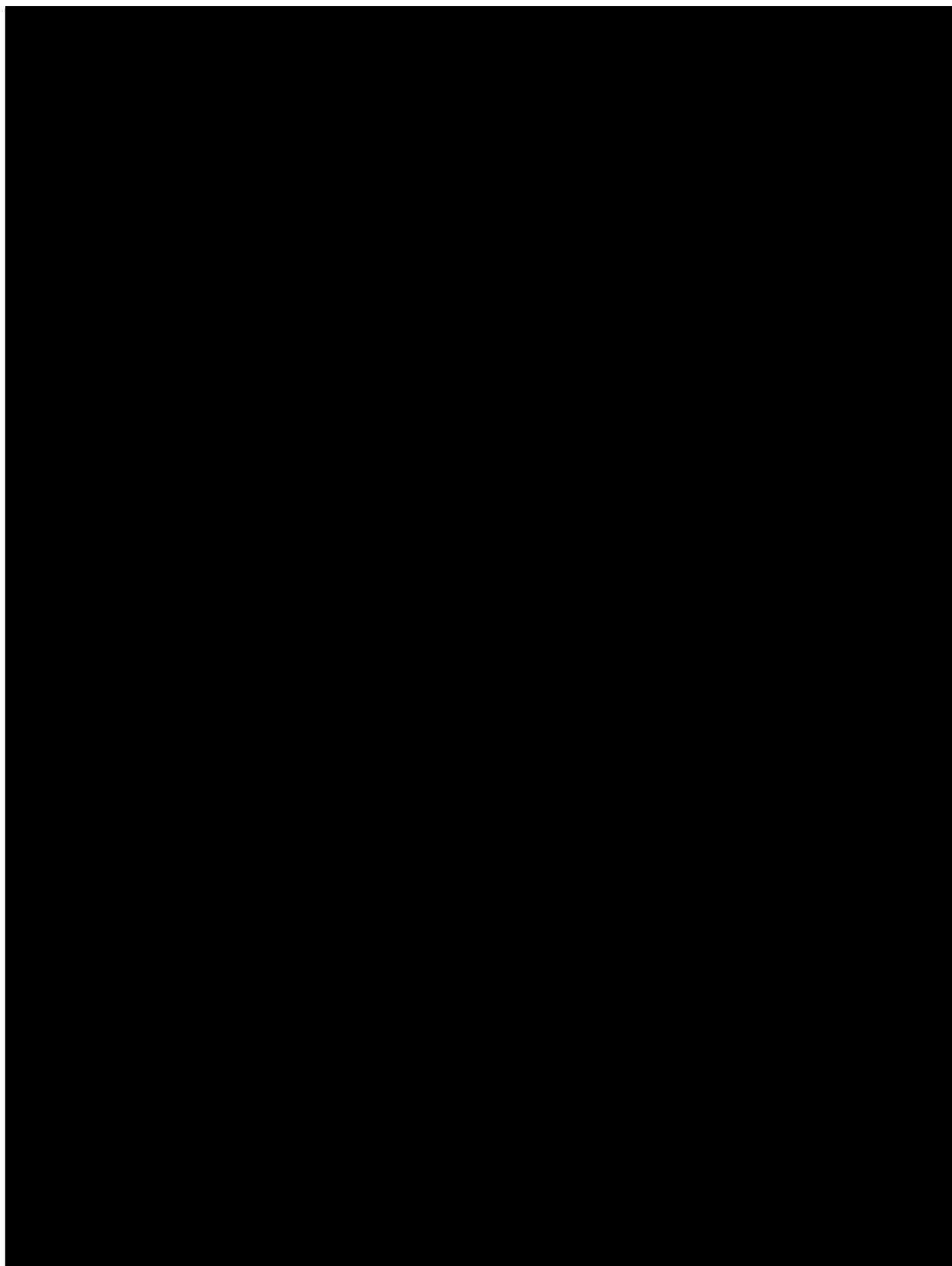


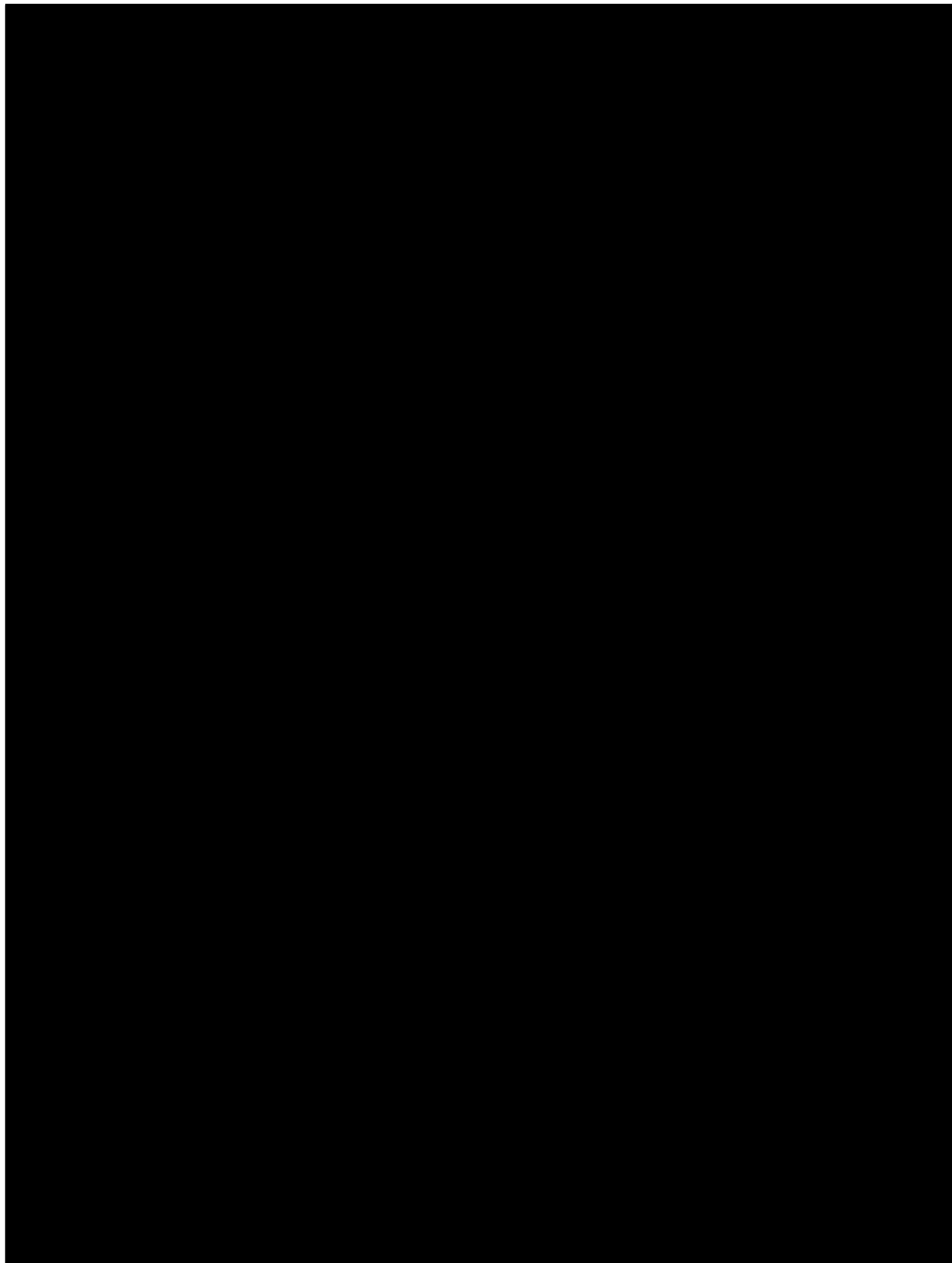


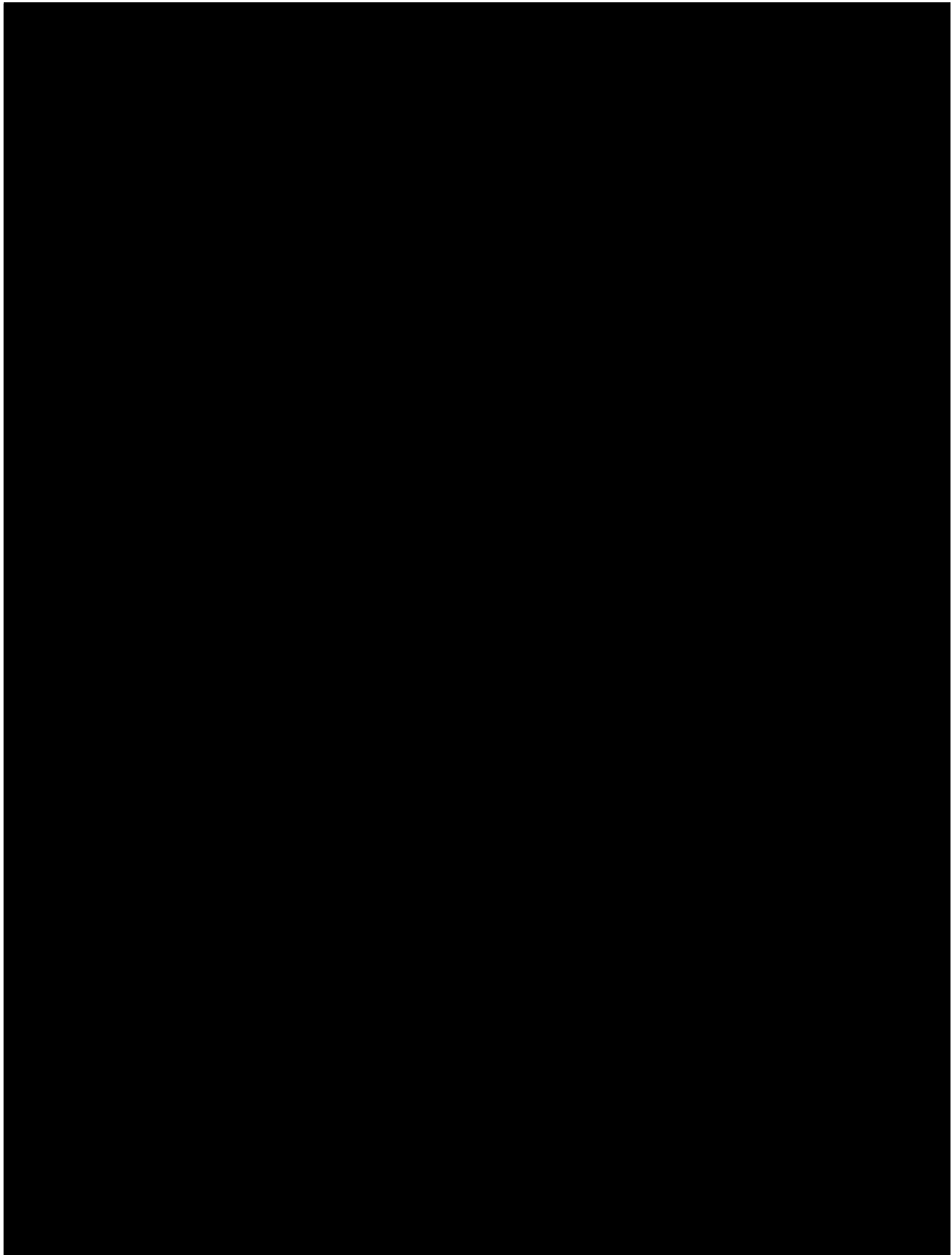












Pursuant to 28 U.S.C § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Date: \_\_\_\_\_

Signed:  \_\_\_\_\_ May 1, 2021

**Patrick W. Lappert, MD**

# EXHIBIT 2



Deposition of:  
**Patrick Lappert, M.D.**

*September 30, 2021*

In the Matter of:  
**Kadel, et al vs. Folwell**

Veritext Legal Solutions  
800-734-5292 | [calendar-dmv@veritext.com](mailto:calendar-dmv@veritext.com) |

1           IN THE UNITED STATES DISTRICT COURT  
2           FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

3  
4  
5  
6  
7           CIVIL ACTION NO.:   1:19-cv-272-LCB-LPA

8  
9           MAXWELL KADEL, et al.

10                   Plaintiffs

11  
12           v.

13  
14           DALE FOLWELL, et al.

15                   Defendants

16  
17  
18           REMOTE VIDEOTAPED VIDEOCONFERENCE

19                   DEPOSITION TESTIMONY OF:

20                           PATRICK LAPPERT, M.D.

21                               September 30, 2021



A P P E A R A N C E S

FOR THE PLAINTIFFS (via remote  
videoconference):

Dmitriy Tishyevich, Esq.

MCDERMOTT, WILL & EMERY

One Vanderbilt Avenue

New York, New York 10017

dtishyevich@mwe.com

Tara L. Borelli, Esq.

LAMBDA LEGAL DEFENSE AND EDUCATION FUND

158 West Ponce de Leon Avenue, Suite 105

Decatur, Georgia 30030

tborelli@lambdalegal.com

Omar Gonzalez-Pagan, Esq.

LAMBDA LEGAL DEFENSE AND EDUCATION FUND

120 Wall Street, 19th Floor

New York, New York 1005

ogonzalez-pagan@lambdalegal.com

1 FOR THE DEFENDANTS (via remote  
2 videoconference):  
3

4 John G. Knepper, Esq.  
5 LAW OFFICE OF JOHN G. KNEPPER LLC  
6 1720 Carey Avenue, Suite 590  
7 Cheyenne, Wyoming 82001  
8 john@knepperllc.com  
9

10 Kevin G. Williams, Esq.  
11 BELL, DAVIS & PITT  
12 100 North Cherry Street, Suite 600  
13 Winston-Salem, North Carolina 27101  
14 kwilliams@belldavispitt.com  
15  
16

17 ALSO PRESENT (via remote  
18 videoconference):  
19

20 Andrew Baker, Videographer  
21  
22  
23

## I N D E X

EXAMINATION BY:	PAGE
Mr. Tishyevich	11
Mr. Knepper	472
REEXAMINATION BY:	
Mr. Tishyevich	489

## E X H I B I T S

FOR THE PLAINTIFFS:	MARKED
Exhibit 1 Lappert Expert Report	12
Exhibit 2 ABPlasticSurgery.org	27
Exhibit 3 Brandt - Lappert Declaration	34
Exhibit 4 Brandt - Supplemental Order, 08/02/2021	37
Exhibit 5 Utah Legislature - Answers for Joint Interim Committee	55
Exhibit 6 "Alabama bill that would criminalize treatment for transgender minors headed to full Alabama Senate,"	62

1	rocketcitynow.com		
2	Exhibit 7	ASPS - "State Focus on	108
3		Gender Affirmation	
4		Intensifies"	
5	Exhibit 8	ASPS - 2021 State Policy	116
6		Priorities	
7	Exhibit 9	Lappert Resumé	127
8	Exhibit 10	Code of Ethics of the	171
9		American Society of Plastic	
10		Surgeons	
11	Exhibit 11	Federal Register, Vol, 59,	223
12		No. 22 - November 18, 1994	
13	Exhibit 12	FDA, Understanding	230
14		Unapproved Use of Approved	
15		Drugs "Off Label"	
16	Exhibit 13	FDA, "Off-Label" and	232
17		Investigational Use of	
18		Marketed Drugs, Biologics,	
19		and Medical Devices	
20	Exhibit 14	American Academy of	239
21		Pediatrics Policy Statement,	
22		Off-Label Use of Drugs in	
23		Children	

1	Exhibit 15	Yackey, Off-label Medication	256
2		Prescribing Patterns in	
3		Pediatrics: An Update	
4	Exhibit 16	FDA Botox Cosmetic	263
5		2017-10-02 Approval Letter	
6	Exhibit 17	Sugrue 2019, Levels of	299
7		Evidence in Plastic and	
8		Reconstructive Surgery	
9		Research: Have We Improved	
10		Over the Past 10 Years?	
11	Exhibit 18	Reversal Surgery in	326
12		Regretful Male-to-Female	
13		Transsexuals After Sex	
14		Reassignment Surgery	
15		(Djordjevic)	
16	Exhibit 19	(Exhibit number not used)	---
17	Exhibit 20	Wiepjes 2018, The Amsterdam	339
18		Cohort of Gender Dysphoria	
19		Study (1972-2015)	
20	Exhibit 21	Wilson 2017, Regret In	355
21		Surgical Decision Making: A	
22		Systematic Review of Patient	
23		and Physician Perspectives	

1	Exhibit 22	Exposito-Campos, A Typology	361
2		of Gender Detransition and	
3		Its Implications for	
4		Healthcare Providers	
5	Exhibit 23	BCBS NC - Corporate Medical	375
6		Policy, update July 2021	
7	Exhibit 24	Dhejne, Long-Term Follow-Up	388
8		of Transsexual Persons	
9		Undergoing Sex Reassignment	
10		Surgery: Cohort Study in	
11		Sweden	
12	Exhibit 25	Finnish Guidelines 2020	394
13		Minors, Unofficial	
14		Translation	
15	Exhibit 26	WPATH Standards of Care,	396
16		Version 7	
17	Exhibit 27	Carmichael, Short-term	411
18		outcomes of pubertal	
19		suppression in a selected	
20		cohort of 12 to 15 year old	
21		young people with persistent	
22		gender dysphoria in the UK	
23	Exhibit 28	2020 Cochrane Database of	414

## Systematic Reviews

Exhibit 29	Tradition 70/30 PPO Plan	419
	Benefits Booklet, 2017	
Exhibit 30	Aetna, Gender Affirming	427
	Surgery Policy	
Exhibit 31	Cigna Medical Coverage	430
	Policy, Treatment of Gender	
	Dysphoria	
Exhibit 32	United Healthcare Medical	434
	Policy, Gender Dysphoria	
	Treatment	
Exhibit 33	Lappert Denver Conference	451
	Presentation	
Exhibit 34	Plastic surgeon: Sex-change	463
	operation 'utterly	
	unacceptable' and a form of	
	'child abuse',	
	LifeSiteNews.com	

(Exhibits attached to transcript.)

1                   I, Lane C. Butler, a Court  
2           Reporter and Notary Public, State of  
3           Alabama at Large, acting as Notary,  
4           certify that on this date, pursuant to  
5           the Federal Rules of Civil Procedure,  
6           there came before me via remote  
7           videoconference from Decatur, Alabama,  
8           commencing at approximately 8:30 a.m.  
9           Central, on the 30th day of September,  
10          2021, PATRICK LAPPER, M.D., witness in  
11          the above cause, for oral examination,  
12          whereupon the following proceedings were  
13          had:

14  
15                   THE VIDEOGRAPHER:   Good morning.  
16          We are going on the record at 8:31 a.m.,  
17          Thursday, September 30th, 2021.   This is  
18          Media Unit 1 of the videorecorded  
19          deposition of Dr. Patrick Lappert as  
20          taken by counsel for plaintiff in the  
21          matter of Kadel, et al. v. Folwell, et  
22          al., filed in the United States District  
23          Court for the Middle District of North



1 Carolina, Civil Action No.

2 1:19-cv-272-LCB-LPA.

3 This deposition is being  
4 recorded remote via Zoom located in  
5 Decatur, Alabama. My name is Andrew  
6 Baker from the firm Veritext Legal  
7 Solutions. I am the videographer. The  
8 court reporter is Lane Butler, also from  
9 Veritext Legal Solutions.

10 Will counsel now state their  
11 appearance and affiliations for the  
12 record. The court reporter will swear in  
13 the witness. Thank you. We may proceed.

14 MR. TISHYEVICH: This is Dmitriy  
15 Tishyevich from McDermott, Will & Emery,  
16 LLP, for plaintiffs.

17 MR. KNEPPER: My name is John  
18 Knepper. I represent three of the  
19 defendants in this matter: the North  
20 Carolina State Health Plan for Teachers  
21 and State Employees; Dale Folwell, the  
22 treasurer for the State of North  
23 Carolina; and Dee Jones, the executive

1 administrator of the North Carolina State  
2 Health Plan. I'll be defending Dr.  
3 Lappert's deposition.  
4

5 PATRICK LAPPERT, M.D.,  
6 having first been duly sworn,  
7 was examined and testified as follows:  
8

9 EXAMINATION BY MR. TISHYEVICH:

10 Q. Good morning, Doctor.

11 A. Good morning, sir.

12 Q. State your full name for the  
13 record.

14 A. Patrick Walter Lappert.

15 Q. Any reason you're not able to  
16 give complete and truthful testimony  
17 today?

18 A. There is no reason.

19 Q. You've been retained as an  
20 expert by defendants in this case;  
21 correct?

22 A. I have.

23 Q. You've prepared an expert

1 report; right?

2 A. I have.

3 Q. So, I've premarked Exhibit 1.  
4 Open that, and let me know when you have  
5 it.

6 (Exhibit 1 was marked for identification  
7 and is attached.)

8 A. Okay. I have it.

9 Q. This report contains all the  
10 opinions that you intend to offer in this  
11 case; correct?

12 A. It does.

13 Q. All right. Without telling me  
14 any conversations that you had with  
15 counsel, what did you do to prepare for  
16 your deposition today?

17 A. Well, I reviewed the -- the  
18 documents. I guess it's called the  
19 complaint. I reviewed the patient  
20 records. And then, I reviewed the  
21 literature, pertinent journal articles,  
22 publications, and had conversations with  
23 -- with counsel, Mr. Kadel [sic], and his

1 staff at various times.

2 Q. When you say "patient records,"  
3 are you talking about the medical records  
4 for the individual plaintiffs?

5 A. Yes. The ones that were -- that  
6 were given to me to review.

7 Q. And when you say "the  
8 literature," are you referring to some of  
9 the studies that you cite in your report?

10 A. Yes.

11 Q. Have you reviewed any studies --  
12 strike that.

13 In preparing for your deposition  
14 today, have you reviewed additional  
15 studies that are not cited in your  
16 report?

17 A. No. The report contains all of  
18 the studies that I -- that I reviewed  
19 that I consider pertinent. I glossed  
20 some but didn't see them as germane. So  
21 all the ones that were -- that were  
22 germane to my opinion are -- are in the  
23 -- in the document.

1           Q.     Understood.   And you mentioned  
2           that you met with or spoke with Mr.  
3           Knepper in preparing for today?

4           A.     I have.

5           Q.     Okay.   Again, without disclosing  
6           any substance of the conversation, how  
7           many times did you speak or meet with  
8           him?

9           A.     Three or four times, I think.

10          Q.     And when did those conversations  
11          take place?

12          A.     Well, as recently as yesterday  
13          evening and I think a couple of meetings  
14          back in May, I think it was.   I'd have to  
15          look at my calendar, but.

16          Q.     Last evening, you spoke --  
17          strike that.

18                   You know that Dr. Hruz was  
19          deposed yesterday; right?

20          A.     I'd heard, yes.

21          Q.     And so before yesterday, when  
22          was the last time that you spoke with Mr.  
23          Knepper to prepare for your deposition?

1           A.     I want to say it's a couple of  
2 weeks ago.    I'm not exactly sure.

3           Q.     How long was the conversation  
4 with Mr. Knepper last night?

5           A.     A little less than an hour.

6           Q.     Did he provide you with copies  
7 of any of the exhibits that were used at  
8 Dr. Hruz's deposition?

9           A.     No, he did not.

10          Q.     Did he provide you with any --  
11 any portions of that deposition  
12 transcript?

13          A.     No.

14          Q.     And then going in reverse  
15 chronological order, you mentioned you  
16 may have spoken a couple of weeks ago?

17          A.     I think.   I don't know exactly  
18 -- I don't know exactly when that was,  
19 Mr. Tishyevich.   I want to say three  
20 weeks ago perhaps.   I'm not exactly sure.

21          Q.     Do you recall roughly how long  
22 that conversation was?

23          A.     About the same duration.   I

1 think it was perhaps an hour, perhaps an  
2 hour.

3 Q. Okay. All right. You -- in the  
4 course of -- strike that.

5 In the course of working on this  
6 case, have you ever communicated with Dr.  
7 Hruz?

8 A. Not directly. I've spoken with  
9 Dr. Hruz, but in the matter at hand, I  
10 have not spoken with him about it.

11 MR. TISHYEVICH: For the court  
12 reporter, that's H-R-U-Z. And I'll try  
13 and spell things as we go to make it a  
14 little easier.

15 Q. How about Dr. McHugh?  
16 M-C-H-U-G-H. Have you spoken with him in  
17 the course of working on this case?

18 A. I've never spoken directly to  
19 him, no.

20 Q. How about Dr. Levine?  
21 L-E-V-I-N-E.

22 A. I have not spoken with Dr.  
23 Levine.

1           Q.     But you have met Dr. Hruz before  
2     working on this case; right?

3           A.     Yes.

4           Q.     And is the same true for Dr.  
5     Levine?

6           A.     I've never met Dr. Levine.

7           Q.     All right. About how many hours  
8     do you estimate you've spent working on  
9     your expert report?

10          A.     Somewhere around maybe 60 hours.  
11     I could -- I could look for that number,  
12     but I'm going to estimate it at about 60  
13     hours, something like that.

14          Q.     You're aware that the individual  
15     plaintiffs in this case have been  
16     deposed; right?

17          A.     Yes, I've heard.

18          Q.     Were you provided with  
19     deposition transcripts or any portion of  
20     their testimony?

21          A.     I have -- I have not seen those,  
22     no.

23          Q.     Okay. You're aware that other



1 experts in this case have also already  
2 been deposed?

3 A. Yes.

4 Q. Have you been provided with  
5 deposition transcripts or any portion of  
6 their deposition testimony?

7 A. I -- I saw a transcript of Dr.  
8 McHugh's.

9 Q. Was that the only tran- --  
10 strike that.

11 Was Dr. McHugh's transcript the  
12 only expert deposition transcript you've  
13 seen?

14 A. It's the only one I've read. I  
15 -- I think that -- yeah, I think it's the  
16 only one I read. Yes, sir.

17 Q. Okay. All right. So throughout  
18 your report, you use this term --

19 A. Could I amend that last answer?

20 Q. Of course.

21 A. I -- I did read portions of Dr.  
22 Brown's transcript, actually, some days  
23 back. My -- my apologies.

1           Q.     No.   And I should say that.   If  
2           at any point in time in your deposition  
3           you want to go back and amend your  
4           answer, that is totally fine.

5           A.     Thank you.

6           Q.     Okay.   So in your report, you  
7           use this term "transgender treatment  
8           industry."   Right?

9           A.     Yes.

10          Q.     And you and Dr. Levine and Dr.  
11          McHugh all use this term in your reports.  
12          Were you aware of that?

13          A.     Oh, I was aware that the -- no,  
14          I wasn't aware that they were using it,  
15          actually.

16          Q.     Is it coincidental that the  
17          three of you are using this term?

18          A.     I -- I think it's sort of  
19          becoming a common term lately.   I don't  
20          know where it came from.   I was trying to  
21          think about that.   I don't know who  
22          originated it, but I've -- I don't know  
23          even if it was me that originated it,

1        actually, since I've been speaking about  
2        this subject for some time now. But it  
3        seemed like an apt term, so it doesn't  
4        surprise me that others are using it.

5            Q.     You don't know who came up with  
6        that term?

7            A.     I don't.

8            Q.     It's possible that it was you?

9            A.     It wouldn't surprise me.

10          Q.     And you mentioned that it's  
11        becoming more commonly used. Is that  
12        right?

13          A.     It seems to be. I don't know.  
14        I don't know how common it is, but it's  
15        kind of a small circle of people talking  
16        about these things.

17          Q.     Are you aware of a single  
18        peer-reviewed scientific article that has  
19        used the term "transgender treatment  
20        industry"?

21          A.     I am not.

22          Q.     Do you know what PubMed is?

23        P-U-B-M-E-D.

1           A.     Yes.

2           Q.     It's a search engine maintained  
3 by the National Institute of Health;  
4 right?

5           A.     Yes.   That's my understanding.

6           Q.     It's a search engine for  
7 scientific articles, basically; right?

8           A.     Yes.

9           Q.     So I'll represent to you that I  
10 ran a search in PubMed for the phrase  
11 transgender treatment industry, in  
12 quotation marks, and came back with zero  
13 results for that phrase.

14                 MR. KNEPPER:   Objection to form.

15           Q.     Do you find that surprising?

16           A.     No.

17           Q.     Okay.   What does that lack of  
18 results tell you about whether this term  
19 is a commonly used term in this field?

20                 MR. KNEPPER:   Objection to form.

21           A.     I wouldn't expect it to be a  
22 commonly used term, and it doesn't  
23 surprise me that you didn't find it.

1 Q. Yeah. "Transgender treatment  
2 industry" is not a commonly used term in  
3 the field of treatment and diagnosis of  
4 gender dysphoria; right?

5 MR. KNEPPER: Objection to form.

6 A. I would agree.

7 Q. Yeah. It's a term that, as far  
8 as I can tell, is fairly idiosyncratic to  
9 the opinions that you and the other  
10 defendant experts are using in this case.  
11 Does that sound right?

12 MR. KNEPPER: Objection to form.

13 A. That sounds right to me, yeah.

14 Q. Okay. Look at page 1 of your  
15 expert report, Exhibit 1.

16 A. All right.

17 Q. I see it says, "Declaration of  
18 Patrick Lappert, MD." You see that?

19 A. Yes.

20 Q. Under that, it says, "Board  
21 Certified in Surgery and Plastic  
22 Surgery." Do you see that?

23 A. I do.

1           Q.     Let's talk about your  
2           certifications. Let's start with plastic  
3           surgery. You originally received your  
4           board certification in plastic surgery in  
5           1997; correct?

6           A.     That's correct.

7           Q.     Then you got recertified in  
8           2008; correct?

9           A.     That's correct.

10          Q.     That board certificate was only  
11          valid for ten years; correct?

12          A.     Correct.

13          Q.     And your plastic board -- strike  
14          that.

15                 And your plastic surgery board  
16          certificate expired at the end of 2018;  
17          correct?

18          A.     Correct.

19          Q.     Well, why did you decide not to  
20          renew your board certificate past 2018?

21          A.     Well, I'm a -- I'm a solo  
22          practitioner, and the main reason for  
23          maintaining that expensive certificate

1        was that many hospitals required it in  
2        order to have privileges. Several years  
3        ago, a lot of hospitals started dropping  
4        that requirement, so it didn't make sense  
5        for a surgeon who is within three years  
6        of retirement to expend all that money  
7        and time to maintain a certification that  
8        was no longer necessary for me in terms  
9        of maintaining my practice.

10       Q.     Do you currently have admitting  
11       privileges at any hospital?

12       A.     No.

13       Q.     When was the last time you had  
14       admitting privileges in any hospital?

15       A.     A year ago.

16       Q.     What hospital was that?

17       A.     Crestwood Hospital, Huntsville,  
18       Alabama.

19       Q.     So within the last year at  
20       least, I take it you haven't performed  
21       any surgeries at a hospital. Right?

22       A.     That's correct. A -- a year  
23       ago, I retired from active surgical

1 practice.

2 Q. Were you doing surgeries in 2019  
3 after your plastic -- plastic surgery  
4 board certificate expired?

5 A. Yes.

6 Q. When -- just can we pin this  
7 down more? What -- what month do you  
8 think you stopped performing surgeries?

9 A. Let's see. This is November of  
10 2021, so it would have been August of  
11 2020.

12 Q. All right. You are not  
13 currently board-certified in plastic  
14 surgery; correct?

15 A. Correct.

16 Q. And you have not been  
17 board-certified in plastic surgery since  
18 2018; correct?

19 A. Correct.

20 Q. For over two and a half years at  
21 this point; right?

22 A. Correct.

23 Q. So this page 1 of your report



1       says that you're board-certified in  
2       plastic surgery. Do you think it's  
3       appropriate for you to make that  
4       representation even though you don't have  
5       an active certification?

6               MR. KNEPPER: Objection, form.

7       A. Well, appropriate in terms of --  
8       I don't understand the question.

9       Q. Let me be more specific.

10      A. Okay.

11      Q. Do you know what the Amer- --  
12      I'll go back.

13              You know what the American Board  
14      of Plastic Surgery is; right?

15      A. Certainly.

16      Q. Do you know what the American  
17      Board of Plastic Surgery has to say about  
18      doctors who represent that they're  
19      board-certified when they don't have an  
20      active certification?

21              MR. KNEPPER: Objection, form.

22      A. They discourage it. I -- I  
23      suspect that the -- the document -- well,

1 I didn't prepare that -- that particular  
2 part of the document, although I signed  
3 it, certainly. But I see your point,  
4 yes.

5 Q. Okay. I'm going to introduce  
6 another exhibit. You'll see it in a  
7 minute. Let me know when you have it,  
8 Doctor.

9 (Exhibit 2 was marked for identification  
10 and is attached.)

11 A. I have it.

12 Q. This is a printout from the -- a  
13 web page from the American Board of  
14 Plastic Surgery. Go to page 2.

15 A. All right. I'm there.

16 Q. Middle of the page, it says in  
17 bold letters, "Guidelines for Stating  
18 Certification Status." Do you see that?

19 A. I do.

20 Q. Look at the third paragraph.

21 A. All right.

22 Q. It says, "ABPS does not mandate  
23 the specifics of how diplomates state

1       their certification, except to assert  
2       that diplomates should not state or imply  
3       that they are certified if their  
4       certification has expired."

5               Do you see that?

6           A.     I do.

7           Q.     All right.  You understand that  
8       under this guidance from the ABPS, you  
9       are not supposed to be representing that  
10      you are board-certified in plastic  
11      surgery because you do not have a current  
12      certification; correct?

13               MR. KNEPPER:  Objection, form.

14          A.     Yes, I understand it.

15          Q.     Let's look at what else it says.  
16      Towards the bottom of page 2, it says,  
17      "We ask that you follow these guidelines  
18      throughout your career to accurately  
19      state your ABPS certification."  Do you  
20      see that?

21          A.     I do.

22          Q.     The first bullet says,  
23      "Diplomates of ABPS must accurately state

1       their certification status at all times."

2       Do you see that?

3           A.     I do.

4           Q.     And you understand what this  
5       means; right?

6           A.     I do.

7                   MR. KNEPPER:   Objection, form.

8           Q.     Page 3, next bullet says,  
9       "Diplomates with expired time-limited  
10      certification or those whose  
11      certification is revoked may not claim  
12      Board certification by ABPS and must  
13      revise all descriptions of their  
14      qualifications accordingly."   Right?

15                  MR. KNEPPER:   Objection to form.

16           A.     Yes.   Yes, I see that.

17           Q.     And you understand what that  
18      means; right?

19                  MR. KNEPPER:   Objection to form.

20           A.     I do.

21           Q.     Your expert report is not in  
22      compliance with this guidance from the  
23      ABPS; correct?

1 MR. KNEPPER: Objection, form.

2 A. The -- the one line there under  
3 my name is not in compliance. That's  
4 correct.

5 Q. And the same is true of your CV;  
6 right?

7 A. Well, the CV states that I have  
8 been board-certified by the American  
9 Board of Surgery and have been  
10 board-certified by the ABPS in 1997 and  
11 2008, yes. Have been.

12 Q. And look back at this page 3  
13 from the ABPS. It says, "When a  
14 physician misrepresents certification  
15 status, ABPS may notify local  
16 credentialing bodies, licensing bodies,  
17 law enforcement agencies and others." Do  
18 you see that?

19 A. I do.

20 Q. All right. And you understand  
21 what this means; right?

22 MR. KNEPPER: Objection to form.

23 A. Yes.

1           Q.     Okay.  Are you going to update  
2     your expert report so that it comports  
3     with this guidance from the ABPS?

4                     MR. KNEPPER:  Objection to form.

5           A.     Certainly.

6           Q.     Okay.  So that's plastic  
7     surgery.  Let's talk about your board  
8     certification in surgery next.  So, go  
9     back to your expert report, page 1.

10          A.     Okay.

11          Q.     You received your board  
12     certification in surgery in 1992;  
13     correct?

14          A.     Was it '92 or '91?  '92, yes,  
15     sir.

16          Q.     And that certification expired  
17     in 2002; right?

18          A.     Yes.

19          Q.     And you had not renewed that  
20     after 2002; right?

21          A.     Correct.

22          Q.     You're not currently  
23     board-certified in surgery; correct?

1           A.     Correct.

2           Q.     You have not been  
3 board-certified in surgery since 2002;  
4 correct?

5           A.     Since 2002, yes, sir.

6           Q.     That's over nineteen years;  
7 right?

8                   So, I showed you this guidance  
9 from the American Board of Plastic  
10 Surgery. How about the American Board of  
11 Surgery? What do you think they have to  
12 say about doctors who make these kind of  
13 representations?

14                   MR. KNEPPER: Objection, form.

15           A.     I'm sure it's probably the same.

16           Q.     Yeah. Would it surprise you  
17 that the American Board of Surgery does  
18 not allow doctors to represent that they  
19 are board-certified in surgery unless  
20 they have a current board certificate?

21                   MR. KNEPPER: Objection, form.

22           A.     It would not surprise me, no.

23           Q.     All right. You are currently

1       serving as an expert in another case,  
2       Brandt v. Rutledge.   B-R-A-N-D-T.  
3       Correct?

4           A.     Yes.

5           Q.     That's a case pending in federal  
6       court in Arkansas; right?

7           A.     Correct.

8           Q.     In that case, you were retained  
9       by the defendants, by the State of  
10      Arkansas; right?

11          A.     Yes.

12          Q.     Dr. Hruz, who is one of the  
13      defendants -- strike that. Dr. Hruz, who  
14      is one of the experts in this case, is  
15      also serving as an expert for defendants  
16      in that Brandt case; right?

17          A.     That's my understanding, yes.

18          Q.     And the same is true for Dr.  
19      Levine; right?

20          A.     I didn't know about Dr. Levine,  
21      but.

22          Q.     And you submitted an expert  
23      declaration in that Brandt case in July



1 of this year; correct?

2 A. I believe that was when I  
3 submitted it, yes.

4 Q. All right. Let's look at it.  
5 And let me know when you get the exhibit,  
6 Doctor.

7 (Exhibit 3 was marked for identification  
8 and is attached.)

9 A. Here it is. Let's see. All  
10 right.

11 Q. All right. Page 1 says,  
12 "Declaration of Dr. Patrick Lappert."  
13 That's you; right?

14 A. Yes.

15 Q. Fair to say that there is at  
16 least some overlap between the opinions  
17 that you're offering in this case and the  
18 opinions that you're offering in that  
19 Brandt case; right?

20 MR. KNEPPER: Form.

21 A. Well, given that the subject  
22 matter is the same, I would expect some  
23 overlap, yes, sir.

1           Q.     Go to page 5 of that  
2     declaration.

3           A.     All right. I'm there.

4           Q.     You say under Section II,  
5     "'Gender affirming' treatments are  
6     experimental." Right?

7           A.     Yes.

8           Q.     It's basically the same opinion  
9     that you offered in this case; right?

10          A.     Yes, sir.

11          Q.     Go to page 29 of your  
12     declaration. See there's a paragraph 63?

13          A.     Yes, sir.

14          Q.     And toward the end of that  
15     paragraph, you talk about the national  
16     reviews in England, Sweden, and Finland  
17     and other reviews like Cochrane, Griffin,  
18     and Carmichael. You see that?

19          A.     Yes, sir.

20          Q.     You relied -- you relied on all  
21     those studies for your opinions in this  
22     case as well; right?

23          A.     I did.

1           Q.     Okay. Go to page 38 of your  
2     declaration. Do you see that it's the  
3     section titled "Concluding Opinions" and  
4     it goes through the next --

5           A.     Yes, sir.

6           Q.     -- few pages?

7                     We don't need to go through  
8     these individually, but you agree there's  
9     a lot of overlap between the opinions  
10    you're offering in that Brandt case and  
11    the opinions you're offering in this  
12    case; right?

13                   MR. KNEPPER: Objection to form.

14          A.     Yes.

15          Q.     The Brandt case involves a  
16    challenge to an Arkansas law which bans  
17    doctors from providing various types of  
18    gender-affirming treatments to  
19    adolescents; correct?

20          A.     Yes.

21          Q.     Including puberty blockers and  
22    cross-sex hormones and gender-affirming  
23    surgery; correct?

1           A.     Yes.

2                   MR. KNEPPER:  Objection.

3           Q.     Have you kept up with what's  
4           going on in that case in Arkansas?

5                   MR. KNEPPER:  Objection, form.

6           A.     I haven't heard anything perhaps  
7           in the last several weeks.

8           Q.     Well, are you aware that in July  
9           of this year, the judge in that case held  
10          that the State is prohibited from  
11          enforcing the ban while the case is being  
12          decided?

13          A.     I've heard that.

14          Q.     All right.  And as part of that  
15          order, the judge made some factual  
16          findings.  Are you aware of that?

17          A.     I'm not -- haven't read the  
18          details.

19          Q.     All right.  Let me show you.

20          A.     Okay.

21          Q.     Let me introduce one more  
22          exhibit.

23          (Exhibit 4 was marked for identification

1 and is attached.)

2 A. I have it now.

3 Q. Okay. So, this is a  
4 supplemental order from Judge Moody in  
5 Arkansas dated August 2nd, 2021. Do you  
6 see that?

7 A. I see that, yes.

8 Q. This first paragraph says,  
9 "After further consideration, the Court  
10 supplements the ruling made at the  
11 conclusion of the July 21, 2021 hearing  
12 to include the following findings." Do  
13 you see that?

14 A. I do.

15 Q. By the way, did you testify live  
16 at that July 2021 hearing?

17 A. No.

18 Q. Do you know if any of the other  
19 experts testified live at that hearing?

20 A. I don't know.

21 Q. Go to page 7.

22 A. All right.

23 Q. All right. Look at the last

1 paragraph.

2 A. Okay.

3 Q. The second sentence in that last  
4 paragraph says, "Gender-affirming  
5 treatment is supported by medical  
6 evidence that has been subject to  
7 rigorous study." Right? Do you see  
8 that?

9 A. That's what it says, yes, sir.

10 Q. And that finding by the Court in  
11 Arkansas is contrary to the opinions that  
12 you offered in that case; right?

13 A. Apparently so, yes.

14 Q. And it's also contrary to the  
15 opinions that Dr. Hruz and Dr. Levine  
16 offered in that case; right?

17 A. Yes.

18 MR. KNEPPER: Objection to form.

19 A. It appears to be, yes.

20 Q. And it's also contrary to the  
21 opinions that you and Dr. Hruz and Dr.  
22 Levine are offering in this case; right?

23 A. Yes.

1           Q.     Look at the next sentence.  It  
2     says, "Every major expert medical  
3     association recognizes that  
4     gender-affirming care for transgender  
5     minors may be medically appropriate and  
6     necessary to improve the physical and  
7     mental health of transgender people."

8                     That's what it says; right?

9           A.     That's what it says, yes, sir.

10          Q.     That's also contrary to the  
11     opinions that you and Dr. Hruz and Dr.  
12     Levine are offering in both these cases;  
13     right?

14          A.     Yes, it certainly is.

15          Q.     In fact, according to this  
16     order, every major expert medical  
17     association disagrees with you because  
18     they've all taken a position that this  
19     treatment is in fact medically necessary;  
20     right?

21                   MR. KNEPPER:  Objection to form.

22          A.     Apparently so, yes.

23          Q.     All right.  Look at page 6.

1 Look at the last paragraph. You see it  
2 says that -- the third sentence says,  
3 "The consensus recommendation of medical  
4 organizations is that the only effective  
5 treatment for individuals at risk of or  
6 suffering from gender dysphoria is to  
7 provide gender-affirming care." Do you  
8 see that?

9 A. I do.

10 Q. You see there's a Footnote 3?

11 A. Let me get my glasses on here.  
12 Footnote 3. I don't see Footnote 3.  
13 Let's see.

14 Q. The bottom of page 6.

15 A. I see it now, yes.

16 Q. Footnote 3 has a long list of  
17 medical organizations that all have taken  
18 the position that gender-affirming care  
19 is medically appropriate for individuals  
20 with gender dysphoria; right?

21 MR. KNEPPER: Objection to form.

22 A. Yeah, the consensus  
23 recommendations. Those are consensus



1        recommendations. And yes, I was aware  
2        that those were the positions taken by  
3        those organizations even before the  
4        judge's opinion.

5            Q.        Yeah. By my count, Footnote 3  
6        lists 18 different professional medical  
7        organizations, and as I read this  
8        footnote, every single one of them takes  
9        the view that's contrary to the opinions  
10       that you and Dr. Hruz and Dr. Levine are  
11       offering; right?

12            MR. KNEPPER:    Objection to form.

13            A.        Yes. There's a consensus of  
14        consensus on this, exactly, yes, sir.

15            Q.        And you're not aware of a single  
16        professional medical organization that  
17        submitted anything in this Brandt case  
18        and said that they agree with the  
19        opinions that you and Dr. Hruz and  
20        Dr. Levine are offering; right?

21            A.        Well, I'm aware of at least one  
22        professional organization that -- that  
23        disagrees with that, yeah, the

1        pediatric -- American Pediatric --  
2        American Association of Pediatricians.

3            Q.     Do you know if they submitted  
4        anything to the Court in this Brandt case  
5        to that effect?

6            A.     I'm not aware. I don't know.

7            Q.     Okay. Look back to your report,  
8        Exhibit 1.

9            A.     Okay.

10          Q.     And go to page 5.

11          A.     Okay.

12          Q.     See there's paragraph 11?

13          A.     Yes.

14          Q.     And you say that "Affirmation  
15        Treatments are Currently Experimental."  
16        And then you say, "are not generally  
17        accepted by the relevant scientific  
18        community." Right?

19          A.     Yes, I say that, absolutely.

20          Q.     Well, apparently, there's at  
21        least eighteen different professional  
22        medical organizations that all say that  
23        you and Dr. Hruz and Dr. Levine are wrong

1       and that these gender-affirming  
2       treatments are, in fact, medically  
3       appropriate; right?

4           A.     Well, I --

5                   MR. KNEPPER:   Object.

6           A.     I would say that part of the  
7       difficulty here is a misunderstanding  
8       about how those consensus opinions are  
9       arrived at.  They're not arrived at  
10      scientifically.  So minus a scientific  
11      opinion, those are -- those are consensus  
12      opinions.

13                   For example, in plastic surgery,  
14      there was a controversy some years ago  
15      about the use of fat grafting in breast  
16      reconstruction, and there was a concern  
17      about whether it would promote malignant  
18      degeneration.  The American Society of  
19      Plastic and Reconstructive Surgeons came  
20      out with a consensus statement  
21      essentially recommending against, if not  
22      outright forbidding, the use of fat  
23      grafting in breast reconstruction or

1       cosmetic surgery. But I was never  
2       polled. I was a member of the American  
3       Society of Plastic Surgery, but I was  
4       never polled.

5               These consensus statements do  
6       not poll the scientific or professional  
7       community. They're the work product of  
8       a -- of small committees where they  
9       perhaps will review scientific literature  
10      and come to an opinion within that  
11      relatively small group.

12             So I think the misunderstanding  
13      is that because, for example, the  
14      American Medical Association or the  
15      American Pediatric Society has a  
16      statement making this claim, it's not, by  
17      definition, supported by the membership  
18      of that -- that society. It is the work  
19      product of a committee, and it's -- and  
20      it doesn't -- it doesn't lay out the  
21      scientific basis for those opinions for  
22      the membership to review, as was the case  
23      in -- and it turns out that seven, eight

1        years later, the American Society of  
2        Plastic and Reconstructive Surgery  
3        rescinded their prohibition when the  
4        membership basically chimed in and said  
5        this is incorrect and this is our  
6        evidence, here's the science. And the  
7        American Society rescinded that consensus  
8        statement that they had made ten years  
9        earlier.

10                So I imagine that similar things  
11        are going on here. Committees generates  
12        consensus statements. The consensus  
13        statements are published. And one gets  
14        the impression that the entire membership  
15        supports the statement when that in fact  
16        is not the case. And when these  
17        consensus statements are published, they  
18        don't publish the supporting scientific  
19        literature. They merely make the  
20        statement. So I think this is the case  
21        here as well.

22                Q.     You are not a member of the,  
23        let's say, American Medical Association;

1 right?

2 A. Not -- not any longer, no.

3 Q. And your -- I hear you  
4 speculating that there's a committee that  
5 came to this decision at the AMA; right?

6 MR. KNEPPER: Objection, form.

7 A. Well, if the AMA functions like  
8 the American Society of Plastic Surgery  
9 or other -- other professional bodies  
10 like that, professional organizations  
11 like that, I would expect that's how they  
12 make their consensus statements, yes.

13 Q. You personally do not know how  
14 the AMA came to issue this consensus  
15 statement, do you?

16 MR. KNEPPER: Objection.

17 A. I have no personal knowledge,  
18 no.

19 Q. You have no personal knowledge  
20 what scientific literature they reviewed  
21 in coming up with that consensus  
22 statement, do you?

23 A. That's the difficulty. Yes,

1       sir.

2           Q.     Yeah.

3           A.     Correct.

4           Q.     You have no idea, in short, how  
5       the AMA came to reach this consensus  
6       statement; right?

7                   MR. KNEPPER:   Objection to form.

8           A.     I have no personal knowledge of  
9       it, no.

10          Q.     How about the American Pediatric  
11       Society?   You're not a member of that;  
12       right?

13          A.     No.

14          Q.     You have no idea how the  
15       American Pediatric Society came to  
16       support this consensus statement; right?

17          A.     Well, in that case, I do have  
18       friends who are members of the American  
19       Pediatric Society, I think it is.   And  
20       they, in conversation, have told me that  
21       this is how the process works.   I don't  
22       have personal -- personal knowledge of  
23       it, no.

1           Q.     Are those friends on the  
2           committee at the APA that decided to  
3           adopt this consensus statement?

4           A.     Not to my knowledge.

5           Q.     So they also -- strike that.

6                     How about the American  
7           Psychiatric Association?  You're not a  
8           member of that --

9           A.     No.

10          Q.     -- right?

11          A.     No.

12          Q.     You have no idea on what basis  
13          they decided to support this consen- --  
14          what you call consensus -- consensus  
15          statement about the necessity of  
16          treatment for gender dysphoria, do you?

17          A.     No.

18          Q.     So, Doctor, I hear you  
19          criticizing these organizations, but you  
20          do not have firsthand knowledge of how  
21          any of those organizations came to reach  
22          these positions, do you?

23                     MR. KNEPPER:  Objection to form.



1           A.     No.

2           Q.     And you do not know what  
3     scientific literature they relied on, do  
4     you?

5           A.     No.

6                     MR. KNEPPER:  Objection to form.

7           A.     Other than to say that I'm  
8     familiar with the current literature, and  
9     I -- and whenever these -- these  
10    consensus statements are supported with  
11    references to the scientific literature,  
12    that literature I have reviewed.  That  
13    was part of the process of generating my  
14    expert testimony.

15          Q.     I thought I just heard you say  
16    that these position statements are not  
17    typically supported by "Here's the study  
18    we relied on."  Isn't that what you said?

19          A.     Well, no.  In the -- in the  
20    actual document that they publish, they  
21    make -- they make reference to things  
22    like that.

23                     What I meant to say, I suppose,

1 is that -- that I've reviewed the current  
2 literature, particularly in the last  
3 three to five years, that's germane to  
4 the subject of gender affirmation in  
5 pediatric patients and adolescents, and  
6 I -- and I find that the science is weak,  
7 so --

8 Q. But because you have no  
9 firsthand knowledge of how any of these  
10 associations came out with these position  
11 statements, you do not know to what  
12 extent it may have taken that literature  
13 into account before adopting these  
14 position statements; right?

15 MR. KNEPPER: Objection.

16 A. I can only say that if they gave  
17 full force to the scientific literature  
18 that is used to support their position, I  
19 find the scientific literature weak,  
20 yeah.

21 Q. This Brandt case involves a  
22 state law that prohibits doctors in  
23 Arkansas from providing gender-affirming

1 medical treatment to anyone under  
2 eighteen; correct?

3 A. Yes.

4 Q. You yourself support these kind  
5 of state law bans; right?

6 MR. KNEPPER: Objection, form,  
7 scope.

8 A. I do support a control over  
9 these kinds of therapies, yes, I do.

10 Q. Well, not -- not just control,  
11 because Arkansas says it will criminally  
12 prosecute doctors that do it; right?

13 A. Right.

14 MR. KNEPPER: Objection to form,  
15 scope.

16 Q. And you think that's a good  
17 idea; right?

18 A. I do.

19 MR. KNEPPER: Objection to form,  
20 scope.

21 Q. You think that other states  
22 outside of Arkansas should be passing  
23 similar bans; right?

1                   MR. KNEPPER:   Objection, form,  
2                   scope.

3           A.       Actually, what I would prefer to  
4           see is the -- is the professional  
5           societies recommend against these sorts  
6           of things, yes. That would be my  
7           preference. I would rather that the  
8           State did not step in and manage the care  
9           of people who are suffering. I'd rather  
10          the State stayed out of it. But short of  
11          that, I suppose that's the -- the  
12          fallback position is to recourse through  
13          the law.

14                   It would seem to me that  
15          professional organizations should be  
16          managing these issues, and practitioners  
17          ultimately should be responsible, as was  
18          found in the -- in the -- the case in  
19          Great Britain at the Tavistock Portman  
20          Institute when the Court came back and  
21          reviewed the find -- the ruling there and  
22          declared that primacy should be given to  
23          the decision-making of doctors rather

1       than the Courts stepping in as -- as  
2       managers of medical care.

3               And I feel the same way. I  
4       don't think that the State should have to  
5       do this. But -- given that -- given that  
6       things are moving at the pace they are.

7       Q.     Are you aware that state  
8       legislators in Utah have proposed a  
9       similar ban as Arkansas for  
10      gender-affirming medical treatment for  
11      minors?

12      A.     Yes.

13              MR. KNEPPER:  Objection to form,  
14      scope.

15      Q.     You had involvement with those  
16      legislative efforts in Utah, didn't you?

17      A.     I think I made some  
18      recommendations to them. Yes, I did.

19      Q.     Yeah. Because now I hear you  
20      saying you prefer the professional  
21      organizations handle it. But the fact is  
22      you have actively lobbied to get these  
23      kind of bans passed in other states,

1 haven't you?

2 A. Yes, I have.

3 MR. KNEPPER: Objection to form,  
4 scope.

5 A. Yes, I have.

6 Q. I'm going to introduce another  
7 exhibit. Let me know when you have it,  
8 Doctor.

9 (Exhibit 5 was marked for identification  
10 and is attached.)

11 A. I have it.

12 Q. Exhibit 5 is a document titled:  
13 "Transgender 'Transition' Procedures  
14 Performed on Minors. Answers to  
15 Questions and Information for Joint  
16 Interim Committee," dated June 10th,  
17 2021. Do you see that?

18 A. I do.

19 Q. It says, "Submitted by Rep Rex  
20 P. Shipp," S-H-I-P-P. Do you know who  
21 that is?

22 A. I don't know him personally, but  
23 I -- I see he's a representative from

1 Utah apparently.

2 Q. Have you ever communicated with  
3 Mr. Shipp and his staff?

4 A. I may have and don't recall.

5 Q. Why do you say you may have?

6 A. I have a lot of correspondence  
7 with people who ask a lot of questions  
8 who are involved in this -- in this  
9 issue, and I don't have a great memory  
10 for names sometimes. But I know I was in  
11 communication at some level with people  
12 in Utah, but I don't recall exactly the  
13 nature of that conversation, or that  
14 interchange.

15 Q. Go to page 16.

16 A. Sixteen?

17 Q. One six.

18 A. One six. Okay.

19 Q. Toward the bottom of the page,  
20 it says, "We express appreciation to  
21 these noted professionals who contributed  
22 to this report." Do you see that?

23 A. I do.

1 Q. Go to page 17.

2 A. Okay.

3 Q. The bottom of the page says,  
4 "Patrick Lappert, M.D."

5 A. Yes.

6 Q. That's you; right?

7 A. Yes.

8 Q. So at some point earlier this  
9 year, you were providing information to  
10 the Utah State Legislature to support the  
11 potential enactment of a ban on  
12 gender-affirming healthcare for minors;  
13 right?

14 MR. KNEPPER: Objection, form.

15 A. Yes.

16 Q. Look at the fourth name from the  
17 bottom on page 17.

18 A. Fourth name -- I'm sorry?

19 Q. Fourth name from the bottom.

20 A. Paul Hruz. Yes.

21 Q. That's the same Dr. Hruz who's  
22 an expert in this case; right?

23 A. Yes.



1           Q.     Go to page 18.   The second name  
2     from the top is Stephen B. Levine M.D.;  
3     right?

4           A.     Yes.

5           Q.     Same Dr. Levine who is an expert  
6     in this case; right?

7           A.     Yes.   I think so, yes.

8           Q.     And the next name is Paul  
9     McHugh, M.D.; right?

10          A.     Yes.

11          Q.     The same Dr. McHugh who is an  
12     expert in this case; right?

13          A.     Yes.

14          Q.     All four of you were providing  
15     information to the Utah State Legislature  
16     to support this potential ban; right?

17                 MR. KNEPPER:   Objection to form.

18          A.     Yes.

19          Q.     How did you get involved with  
20     providing this information to the Utah  
21     State Legislature?

22          A.     I don't recall.   My -- my  
23     suspicion is I may have been contacted by

1 e-mail or some other such thing. In  
2 fact, I'm fairly confident it was an  
3 e-mail request for assistance, probably.

4 Q. Do you remember who the e-mail  
5 was from?

6 A. I do not.

7 Q. Do you remember who at the Utah  
8 State Legislature or anyone affiliated  
9 with them you were communicating with in  
10 this respect?

11 A. I don't remember, no.

12 Q. All right. Let's see what you  
13 were telling the state legislature in  
14 this report. Go to page 5. See there's  
15 a section near the top titled "Sex  
16 reassignment surgeries"?

17 A. Yes.

18 Q. There's some language in quotes  
19 -- in quotes and italicized. Do you see  
20 that?

21 A. I do.

22 Q. And the first portion of the  
23 paragraph says: '"Sex reassignment

1 surgery' is a massive misrepresentation  
2 of what these operations actually do.  
3 You can't change a person's sex. All  
4 that is happening is that the patient is  
5 undergoing an intentional mutilation in  
6 order to create a counterfeit appearance  
7 of the other sex."

8 Do you see that?

9 A. I do.

10 Q. And underneath, it says,  
11 "Patrick Lappert, M.D." Right?

12 A. Yes.

13 Q. These are your words, Dr.  
14 Lappert; right?

15 A. Yes.

16 Q. You consider gender reassignment  
17 surgery to be an intentional mutilation;  
18 right?

19 A. I do. Absolutely.

20 MR. KNEPPER: Form.

21 Q. And calling gender reassignment  
22 surgery, quote, intentional mutilation,  
23 is that commonly accepted terminology in

1       this field, Doctor?

2           A.     I expect not.

3           Q.     And then you say that when a  
4       patient undergoes gender reassignment  
5       surgery, all that is happening is, quote,  
6       a counterfeit appearance of the other  
7       sex; right?

8           A.     Yes.

9           Q.     This phrase, "counterfeit  
10      appearance," do you think that's an  
11      appropriate term for a doctor to use?

12          A.     Absolutely.

13          Q.     And you stand by these words;  
14      right?

15          A.     I do.

16          Q.     All right. So, we've talked  
17      about Arkansas, we've talked about Utah.  
18      Now, I know there is currently a number  
19      of other states that are considering  
20      passing similar bans. Outside of Utah,  
21      have you done any work whatsoever in  
22      connection with these potential bans in  
23      other states?

1                   MR. KNEPPER:  Objection, form,  
2       scope.

3           A.     I have.

4           Q.     Which states?

5           A.     Alabama, Texas.

6           Q.     What else?

7           A.     Texas.  I don't know if there  
8       were any in the Northwest or not.  I  
9       think that's all of them.  I may be  
10      wrong, but I think that's all.  Alabama  
11      and Texas I would just add to your list.

12          Q.     Okay.

13          A.     There may been something in  
14      Arizona.  I'm not certain about Arizona  
15      as well, but --

16          Q.     Now let me introduce another  
17      exhibit.  Okay.  Let me know when you get  
18      this one.

19      (Exhibit 6 was marked for identification  
20      and is attached.)

21          A.     I've got it.

22          Q.     All right.  This article is  
23      titled, "Alabama bill that would

1 criminalize treatment for transgender  
2 minors headed to full Alabama Senate."  
3 You see that?

4 A. I do.

5 Q. Alabama, your home state, was  
6 considering a ban very similar to  
7 Arkansas just this year; correct?

8 A. Actually over the last couple of  
9 years.

10 Q. Okay. The first paragraph says,  
11 "The Alabama Senate Health Committee on  
12 Wednesday approved a bill that would  
13 outlaw puberty-blocking medications and  
14 gender-affirming care for minors,  
15 giving" -- "giving it a favorable report  
16 in an 11-2 vote." You see that?

17 A. I do.

18 Q. Then it says, "An Alabama House  
19 committee heard testimony in a public  
20 hearing on a companion bill, but the  
21 committee did not vote on the" -- "on the  
22 measure." You see that?

23 A. I do.

1           Q.     You testified in support of this  
2 bill; right?

3           A.     Yes, sir.

4           Q.     Go to page 2.

5           A.     Okay.

6           Q.     Look at the second paragraph  
7 from the bottom.

8           A.     Second from the bottom. Yes.

9           Q.     It says, "Dr. Patrick Lappert, a  
10 Decatur plastic surgeon, spoke in favor  
11 of the bill."

12                   That's you; right?

13          A.     That's right.

14          Q.     Go to page 3.

15          A.     Okay.

16          Q.     And look at the third paragraph.  
17 It says that you've "spoken against the  
18 use of medicine and surgery for  
19 transgender people as a Catholic deacon  
20 in his local diocese." See that?

21          A.     Yes.

22          Q.     You don't deny that you've  
23 spoken against the use of medical and

1 surgical treatment for transgender people  
2 in your position as a Catholic deacon;  
3 right?

4 A. That's correct, I do not.

5 Q. All right. Focus on the last  
6 sentence of this third paragraph. It  
7 says that when a committee member  
8 questioned your medical expertise on this  
9 issue, you said that you would not treat  
10 a person for gender dysphoria and would  
11 instead refer them to a qualified mental  
12 health professional. You see that?

13 A. Yes.

14 Q. At this hearing, someone on the  
15 committee was questioning your medical  
16 expertise to offer these opinions; right?

17 MR. KNEPPER: Objection, form.

18 A. I don't remember that detail,  
19 but I think so, yeah. I think the  
20 objection they raised was that I don't do  
21 these treatments, how could I know.

22 Q. You're not a psychiatrist;  
23 right?



1           A.     No.

2           Q.     You do not have specialized  
3           training or expertise in diagnosing  
4           mental health conditions; right?

5           A.     I have limited -- limited  
6           training.   Yes.

7           Q.     And when you say "limited  
8           training," what does that mean?

9           A.     Well, in the training of plastic  
10          surgeons, we are -- we are required --  
11          because we offer aesthetic surgery, we  
12          get some training in issues,  
13          psychological/psychiatric issues relating  
14          to people who will seek to modify their  
15          bodies in order to achieve a sense of  
16          peace or a sense of improvement in their  
17          lives.   And it's imperative that a  
18          plastic surgeon be able to recognize  
19          persons who are suffering from  
20          psychiatric problems because plastic  
21          surgery -- to offer them plastic surgery  
22          to modify their bodies is in the category  
23          of malpractice, not to mention that very

1       often, dissatisfied patients will -- will  
2       make life very difficult for the  
3       practitioner, if not threaten them with  
4       physical harm.

5               I would refer you to an article  
6       by -- although we haven't offered it up,  
7       -- a friend of mine, Dr. Mark Gorney, who  
8       was one of the -- one of the grand old  
9       men of plastic surgery, started the  
10      Physicians Company to manage physician  
11      liability and risk and had -- he  
12      discovered that there's an  
13      overrepresentation of -- of violence  
14      against physicians by aesthetic patients  
15      committing violence against plastic  
16      surgeons. That's just one of the  
17      motivators.

18             But nonetheless, the issue of  
19      body dysmorphic disorder is part of our  
20      training, persons who are seeking a  
21      remedy to their interior woundedness or  
22      their psychological disturbances by  
23      changing their outward opinion. And body

1       dysmorphic disorder is a  
2       well-characterized psychiatric diagnosis  
3       that impinges greatly upon plastic  
4       surgery precisely because aesthetic  
5       surgery -- even in its name, you can tell  
6       that aesthetic surgery is surgery aimed  
7       at the aesthetic, the feelings, esthesia,  
8       the feelings that a patient has about  
9       themselves, about their life. So it's  
10      incumbent upon plastic surgeons to know  
11      about these things, and so we get trained  
12      in those matters.

13               So again, I have very limited  
14      psychiatric/psychological knowledge, but  
15      I do know that that subset of patients  
16      should be referred for psychological help  
17      rather than offered surgery. Not to  
18      mention the fact that such patients can't  
19      even give informed consent because of  
20      their psychological disturbances.

21      Q.     All right. You're talking about  
22      patients who have body dysmorphic  
23      disorder; right?

1           A.     That's right.

2           Q.     When did you last receive  
3 training in how to diagnose someone with  
4 body dysmorphic disorder?

5           A.     I guess it's ongoing training  
6 when one's in the -- in the practice of  
7 plastic surgery. But I had originally in  
8 my residency and then on an ongoing basis  
9 I think at conferences through the years.

10                  Formal training in it, I -- I  
11 don't recall beyond my residency. All I  
12 do is try to keep abreast of the  
13 literature.

14           Q.     Yeah. So, let's take that in  
15 steps. Outside of -- when was your  
16 residency in plastic surgery, Doctor?

17           A.     '92 to '94.

18           Q.     Right. Past '94, you have not  
19 received formal training in how to  
20 diagnose someone with body dysmorphic  
21 disorder; right?

22           A.     There may have been some CME  
23 credits at a conference in there

1        somewhere or remote learning. I don't  
2        recall.

3            Q.     But sitting here, you can't  
4        recall any of those specifically; right?

5            A.     I cannot, no.

6            Q.     What are the diagnostic criteria  
7        for body dysmorphic disorder?

8            A.     Well --

9            Q.     Do you know that sitting here  
10       today?

11          A.     Yes. So, a person with body  
12       dysmorphic disorder, the diagnostic  
13       criteria is the -- is the patient who  
14       presents with evidence of a psychological  
15       disturbance. In review of their history  
16       and physical examination, you may see  
17       evidence of a history of substance abuse,  
18       maybe evidence of some self-harm,  
19       evidence of social isolation in their  
20       intake forms, that sort of thing. That  
21       would raise the concern.

22                  The second would be the person  
23       who attaches tremendous potential benefit

1 of, psychologically, the -- the quality  
2 of the -- sort of a transformative power  
3 of cosmetic surgery.

4 And then the third criteria  
5 would be that they -- they see something  
6 that you don't see. They see a defect  
7 that you don't see. And that's probably  
8 the key diagnostic criteria. For  
9 example, a man who presents seeking a  
10 modification to his nose who has evidence  
11 of living a life of social isolation who  
12 is adamant that by changing his -- the  
13 appearance of his nose, he will -- he  
14 will have a much better life. And  
15 hearing that, of course, the alarm bells  
16 go off and then examining the patient and  
17 seeing that there's no objectively  
18 definable deformity, only a normal  
19 variation that one would expect to see on  
20 a man's face.

21 Those are all red flags. And --  
22 and based upon that, it is -- it  
23 is definitely the -- has been

1 historically the recommendation of the  
2 likes of Dr. Mark Gorney and other  
3 leaders in the American Society of  
4 Plastic Surgery to not offer surgery, but  
5 rather to offer referral for  
6 psychiatric/psychological support and  
7 evaluation.

8 Q. These diag- -- these diagnostic  
9 criteria that you mentioned, where do  
10 they come from?

11 A. They -- I think you can find  
12 much of that in the DSM book, if -- if --  
13 if that's the route you want to go. You  
14 find it in the literature. There are --  
15 there are references in the scientific  
16 literature about it dating back to I  
17 think the 1920s. I included some of  
18 those, I think, in my discussion, if not  
19 on this one, in the Arkansas case.

20 But -- but there have been  
21 papers published through the years that  
22 describe the condition and make  
23 recommendations about care, and again,

1       going all the way back even to textbooks  
2       in plastic surgery and -- and of course,  
3       the residency training that speaks about  
4       that as well.

5           Q.     So for diagnosing someone with  
6       body dysmorphic disorder, you would rely  
7       on the DSM-5; right?

8           A.     I wouldn't rely on it, no.   No.  
9       I would rely on my -- my clinical  
10      experience more than anything else there.

11          Q.     Well, you just rattled off three  
12      or four guidelines that I think I heard  
13      you say come from the DSM-5; right?

14                 MR. KNEPPER:   Objection, form.

15          A.     Well, they're -- they don't come  
16      from the DSM-5 but are described in the  
17      DSM-5, yeah.

18          Q.     So when I asked you --

19          A.     And 4 -- actually, DSM-4 has a  
20      clearer description, I think, than DSM-5.

21          Q.     So when I asked you what  
22      criteria you would use to diagnose  
23      someone with body dysmorphic disorder,



1 the source you went to was the DSM;  
2 right?

3 A. No. The source I went to was my  
4 training and the -- and the papers that  
5 relate to it. I think it's just been  
6 subsequently characterized in the DSM.  
7 And it's a ready -- it's a volume that's  
8 readily accessible to people. The  
9 language is readily accessible, so people  
10 who are seeking information about that,  
11 they can go there for it or they can go  
12 to the articles, if they like. Yes.

13 Q. Outside of whatever training you  
14 had on diagnosing someone with body  
15 dysmorphic disorder, you do not have  
16 specialist training or expertise in  
17 diagnosing other mental health  
18 conditions; fair?

19 MR. KNEPPER: Objection, form.

20 A. Let's see. Well, there's -- I  
21 guess there are subcategories of -- of  
22 body dysmorphic disorder, like  
23 recognizing the anorexic patient, of

1 course, who presents for body  
2 modification. That -- that's a fairly  
3 readily and obvious one.

4 But no, I'm not a -- I'm not  
5 formally trained in psychiatry or  
6 psychology.

7 Q. You do not have -- you do not  
8 hold yourself out as an expert in  
9 diagnosing mental health conditions  
10 outside, potentially, of body dysmorphic  
11 disorder; right?

12 A. Correct.

13 Q. You do not have specialist  
14 training or expertise in treating mental  
15 health conditions; right?

16 A. No.

17 Q. You would refer that person to a  
18 qualified mental health professional;  
19 right?

20 A. I would. I would.

21 Q. Because you yourself are not a  
22 qualified mental health professional;  
23 correct?

1           A.     Correct.

2           Q.     All right.  You've also  
3 published an op-ed in May of this year  
4 supporting this Alabama ban; correct?

5           A.     Yes.

6           Q.     And you said that Alabama  
7 legislators should enact this ban because  
8 they have a duty to protect the  
9 vulnerable population of gender-confused  
10 children.  Does that sound familiar?

11          A.     Yes.

12          Q.     So again, earlier you said you  
13 had a preference for professional  
14 societies dealing with this, but you're  
15 out there publishing op-eds calling on  
16 state legislatures to pass these bans;  
17 right?

18                   MR. KNEPPER:  Objection, form.

19          A.     Right.  Yes, sir.

20          Q.     All right.  How about Texas?  
21 Tell me what work you've done supporting  
22 this kind of a ban in Texas?

23          A.     It's been similar.  I've been in

1 communication with -- I can't remember if  
2 they're on the legislative side or on the  
3 justice side. I don't remember exactly  
4 where they fit into the -- the government  
5 of Texas, but I've corresponded with them  
6 and offered them information and advice.

7 Q. Was it similar information to  
8 what we've seen in that Utah packet?

9 A. I'm sorry, sir?

10 Q. Was it information similar to  
11 what we've seen in that Utah legislation  
12 packet?

13 MR. KNEPPER: Objection, form.

14 A. Right. The substance -- the  
15 substance of the issue at hand is the  
16 same wherever you find it. It's this  
17 contest between those who -- who promote  
18 gender-affirming care versus those who  
19 promote, in the case of children, for  
20 example, watchful waiting and  
21 psychological support and cognitive  
22 behavioral therapy and those things, yes.  
23 It's the same battle wherever you find it

1       because it's the same problem, the same  
2       science, the same language. All of it's  
3       the same.

4           Q.     So earlier, we saw that in  
5       addition to you, Dr. Hruz and Dr. Levine  
6       and Dr. McHugh were also involved with  
7       those Utah legislative efforts; right?

8           MR. KNEPPER:   Objection, form.

9           A.     I -- I don't know their  
10      involvement in -- in Texas. I'm -- I'm  
11      not aware.

12          Q.     Yeah. Do you know whether any  
13      of them have been involved with any of  
14      these efforts in any other state?

15          A.     I don't. I don't know.

16          Q.     Okay. Fair to say that you have  
17      some strong personal opinions on whether  
18      doctors should be providing  
19      gender-affirming treatment to minors?

20          MR. KNEPPER:   Objection to form.

21          A.     Very fair to -- very fair to  
22      say, yes.

23          MR. TISHYEVICH:   Let's go off

1 the record.

2 THE VIDEOGRAPHER: This is the  
3 end of Media Unit 1. We are off the  
4 record at 9:33 a.m.

5 (Break taken.)

6 THE VIDEOGRAPHER: This is the  
7 beginning of Media Unit No. 4. We are on  
8 the record at 9:44 a.m.

9 Q. (By Mr. Tishyevich) Doctor,  
10 you're familiar with an organization  
11 called Alliance Defending Freedom, ADF;  
12 right?

13 A. Yes.

14 Q. How are you familiar with the  
15 ADF?

16 A. I was invited down there for a  
17 conference on the subject of transgender.  
18 I was an invited presenter, I should say.  
19 They asked me to come and speak from a  
20 plastic surgeon's perspective on how I  
21 view the current state of transgender  
22 medicine and surgery.

23 Q. Those were -- those were the

1 meetings in Arizona? Is that right?

2 MR. KNEPPER: Objection.

3 A. Yes.

4 Q. Who invited you?

5 A. I don't remember who the  
6 particular name was. I -- I don't recall  
7 who the -- the particular person, the one  
8 that sent me the invitation.

9 Q. Was it --

10 A. It may have been -- it may have  
11 been Gary McCaleb, I want to say. I'm  
12 not positive about that, though.

13 Q. You -- you anticipated my  
14 question.

15 A. Okay.

16 Q. To your knowledge, what's the  
17 view that the FDA takes on providing  
18 healthcare treatment to patients with  
19 gender dysphoria?

20 A. The position of the FDA?

21 Q. The ADF.

22 A. Oh, the ADF. They -- let's see.  
23 So, the sense I get is that the ADF takes

1       a -- the opinion that the present state  
2       of transgender medicine and surgery is  
3       not in the interest of the patients or  
4       the families.

5           Q.     The ADF has moral objections to  
6       doctors performing this kind of surgery  
7       and treatment; right?

8           MR. KNEPPER:   Objection, form,  
9       scope.

10          A.     I would -- I would characterize  
11       the ADF's position as more than just a  
12       moral objection.  It's both moral and  
13       objective scientific objections.

14                 So the -- the -- the sense I got  
15       from that conference was that most of the  
16       invited speakers came to speak about --  
17       for example, Dr. Hruz was there, and he  
18       spoke about endocrinology and the  
19       endocrinol- -- endocrinologic basis for  
20       sex/gender.  And he spoke about the  
21       effects of -- the endocrinological  
22       effects, the objective changes that are  
23       caused by, for example, puberty-blocking



1 cross-sex hormones.

2 I was -- there was also another  
3 speaker there, I think, on the subject  
4 of -- from the family medicine  
5 perspective, the overall effects on the  
6 health of the child, developmental  
7 issues. There was a presenter on the  
8 objective psychological issues.

9 And then, I presented on the  
10 realities of the surgery. They wanted me  
11 to speak about the technical details of  
12 transgender surgery, kind of the  
13 evolution of the process of transitioning  
14 surgery, and the -- and to give them a  
15 summary of the state of the science on  
16 it.

17 So I would characterize the ADF  
18 as interested in both the moral -- the  
19 moral issues and the objective, and they  
20 impinge upon one another. Clearly, to do  
21 something that is not in the -- in the  
22 objective benefit of the patient is a  
23 moral problem.

1 Did I answer your question?

2 Q. That's helpful, yeah.

3 The ADF is not a professional  
4 scientific organization; right?

5 A. Not to my knowledge, no.

6 MR. KNEPPER: Objection to form,  
7 scope.

8 Q. They're a legal organization;  
9 right?

10 A. Yes. That's my understanding.

11 Q. ADF is engaged with bringing  
12 lawsuits that do things like challenge  
13 schools' rights to -- to have transgender  
14 persons on their teams; right?

15 MR. KNEPPER: Objection, form,  
16 scope.

17 A. I don't know the scope, the full  
18 scope of their efforts, but yeah, they're  
19 one of I guess several legal  
20 organizations that are -- that are  
21 approaching these matters, as are you,  
22 for example.

23 Q. All right. Let's talk about

1       these meetings in more detail. So, how  
2       many -- strike that.

3               You've been to two meetings  
4       organized by ADF?

5       A.     That's my recoll- -- yeah, two  
6       meetings. I think that's right.

7       Q.     All right. Let's start with the  
8       first one. This was in 2017?

9       A.     That sounds about right, yeah.

10      Q.     What --

11      A.     I think it was 2017, yeah.

12      Q.     What month roughly?

13      A.     I don't remember now.

14      Q.     Do you know how they came to  
15      invite you to that first meeting?

16      A.     I do not.

17      Q.     Before that meeting, you had not  
18      published anything about gender  
19      dysphoria, had you?

20      A.     No.

21      Q.     Before that meeting, you had not  
22      published anything about the risks of use  
23      of hormone blockers in minors; right?

1           A.     No.    I've given -- I gave some  
2           -- some -- I think they may have heard of  
3           me not through publications, but through  
4           public speaking.

5           Q.     How long have you been doing  
6           public speaking on the issues related to  
7           gender dysphoria?

8           A.     Since 2014.

9           Q.     Let's start with the first  
10          meeting.   So, Dr. Hruz was also present  
11          at that meeting?

12          A.     Yes.

13          Q.     Was Dr. Levine present at that  
14          meeting?

15          A.     I don't think I've ever met Dr.  
16          Levine, so I don't -- he couldn't have  
17          been there because I would have  
18          remembered meeting him, and I don't  
19          remember ever having met him.

20          Q.     How about Dr. McHugh?

21          A.     No.    I would have remembered  
22          him.    He's a very famous person.

23          Q.     How many people were present at

1       this first meeting?

2           A.     Perhaps ten.   I'm not certain.

3           Q.     Outside of you and Dr. Hruz, who  
4       else do you remember being at that first  
5       meeting?

6           A.     I remember meeting a Dr. Andre  
7       Van Mol.   I believe he was at that  
8       meeting.   There was a pediatric  
9       endocrinologist there by the name of  
10      Quentin Van Meter.   I think he was there.

11                There was a -- there was an  
12      expert in scientific data and scientific  
13      data analysis, medical record data  
14      analysis from UC-San Francisco.   I don't  
15      believe he was a physician.   I think he  
16      was a -- had a doctorate in science.   And  
17      he was a -- he was actually a  
18      detransitioner.   So he was giving not  
19      only his knowledge of the medical  
20      literature, he was just an incredible  
21      resource and reference for medical  
22      literature.   You could just about ask him  
23      anything.   But he was also there, I

1 think, to speak from a personal  
2 perspective as well, being a  
3 detransitioner.

4 There was another detransitioner  
5 there who I don't remember their name,  
6 but they were there to speak. I think  
7 they were also an educator as well. I'm  
8 not positive about that.

9 So it's kind of vague for me,  
10 but I -- but definitely Paul Hruz stands  
11 out because we had a very good  
12 conversation there.

13 Q. What was the format? Were there  
14 presentations, a round table discussion?  
15 How did the conversations go?

16 A. There was some introductory  
17 remarks, and then -- and then each --  
18 each sort of specialist gave a  
19 presentation. I think I gave an  
20 hour-long presentation. And there were  
21 others like mine on those other subjects  
22 we talked about.

23 Q. Did you use slides as part of

1       that presentation?

2           A.     I usually do, yes, although I  
3       don't know what I've done with that slide  
4       deck.   I don't keep them very long.  They  
5       sort of morph all the time.

6           Q.     Do you think you might have an  
7       electronic copy of that slide deck  
8       somewhere?

9           A.     I don't.

10          Q.     At a very high level, what was  
11       the -- what were you trying to convey  
12       through your presentation to that group?  
13       Let me ask it a different way.  Were --  
14       was your presentation broadly similar to  
15       the opinions that you're offering in this  
16       case and in the Brandt case?

17               MR. KNEPPER:  Objection, form.

18          A.     Well, by the -- by "broadly  
19       similar," do you mean the subject matter  
20       or the nature of my opinion or the  
21       evidence used to support my opinion?

22          Q.     All right.  Give me a high-level  
23       summary of what your presentation was at

1       that first meeting.

2           A.     It was a --

3                   MR. KNEPPER:   Objection, form,  
4       scope.

5           A.     -- a summary, a summary of the  
6       present state of transgender medicine and  
7       surgery, a review of the scientific  
8       literature used to support the treatments  
9       that are being offered, a review of the  
10      long-term outcomes of treatment that are  
11      being offered, with particular attention  
12      to the European literature, which is more  
13      reliable. I sort of -- I compared the  
14      American literature to the European  
15      literature because that's one of the  
16      great problems we're having in this  
17      issue. And it was already evident in  
18      2017 that there was a great disparity  
19      between the American literature and the  
20      European literature in terms of the  
21      quality of the scientific evidence that's  
22      being used to support the interventions.

23                   So that was -- really at the



1 heart of the presentation was what's the  
2 state of the science and where is the  
3 reliable science coming from and what is  
4 it -- what is it showing us, so. But  
5 they also -- the audience wanted to have  
6 an understanding of what these plastic  
7 surgery interventions were. So there was  
8 an extensive discussion of the  
9 particulars of the surgeries, the details  
10 about the surgeries, the typical outcomes  
11 of the surgeries, so.

12 Q. I want to -- strike that.

13 One of the topics of discussion  
14 at that meeting was about the need to  
15 have expert witnesses for litigation;  
16 right?

17 MR. KNEPPER: Objection, form,  
18 scope.

19 A. I remember -- I remember a  
20 fairly long discussion about the poverty  
21 of people who are willing to testify  
22 because of the risk that they take in  
23 testifying. That was a -- that was a

1 fairly long discussion. And the  
2 difficulty that that -- that people have  
3 in finding expert witnesses because of  
4 the risks they place themselves in, in  
5 testifying.

6 Q. And people at that meeting were  
7 asked whether they would be willing to  
8 participate as expert witnesses; right?

9 A. Yes.

10 Q. Before that meeting, you had  
11 never testified as an expert witness?

12 A. Before this moment, I never  
13 testified as an expert witness.

14 Q. Who made the introductory  
15 remarks at the beginning of this meeting?

16 MR. KNEPPER: Objection, form,  
17 scope.

18 A. I'm trying to remember. It was  
19 a -- it was an attorney whose first name  
20 is Jeff, and I'm trying to remember what  
21 his last name was. But he seemed to be  
22 the -- the -- kind of the emcee, if you  
23 will. Yeah, Jeff. I'll see if, in the

1 course of our conversation today, the  
2 name will pop in. This is the difficulty  
3 I have with remembering names. They'll  
4 just pop in at a moment's notice.

5 But it was -- yeah, it was an  
6 attorney who gave the overall scope of  
7 why -- why we were there, to discuss this  
8 issue, to see what -- what the -- what  
9 the science is showing to see where --  
10 what the -- the moral aspects of good  
11 science versus bad science and issues  
12 like that, yeah.

13 Q. Aside from you and Dr. Hruz, do  
14 you recall anyone else expressing an  
15 interest at that conference about serving  
16 as an expert witness?

17 MR. KNEPPER: Objection, form,  
18 scope.

19 A. You mean someone expressing just  
20 generally about having expert witnesses?

21 Q. No. Other participants saying,  
22 "I might consider being an expert witness  
23 in one of these cases."

1           A.     I don't recall. I don't, no.

2           Q.     Okay. All right. So then there  
3 was a second meeting also in Arizona;  
4 right?

5           A.     Right.

6           Q.     And that was also in 2017?

7           A.     I don't remember the date of  
8 that as well -- either, no.

9           Q.     What was the purpose of that  
10 second meeting?

11          A.     I think it was similar, although  
12 it may have been a little bit more  
13 refined. There was not as much  
14 discussion of the really foundational  
15 science as more a review, I think, of --  
16 you know, I -- I guess it was similar in  
17 terms of format. I think there were more  
18 -- more people there who were speaking  
19 from personal experience.

20                 So I think the most important  
21 thing I recall from that meeting was that  
22 -- that there was a mother -- actually, a  
23 couple of family members of persons who

1 experienced cross-sex self-identification  
2 who have gone through various -- various  
3 phases of transitioning. And they were  
4 giving sort of a personal experience,  
5 trying to describe to us what they went  
6 through as a family, what they went  
7 through with their children. And that's  
8 what -- so that was the difference  
9 between the first and the second meeting.  
10 I think it was more of a personal thing.  
11 It had the science as well, but I think  
12 it had more of a personal side to it as  
13 well.

14 Q. How many people do you think  
15 attended -- attended that second meeting?

16 A. I'm trying to think how full the  
17 room was. I think it was probably  
18 comparable maybe, a dozen perhaps. I'm  
19 not sure.

20 Q. Who do you remember being there  
21 by name?

22 A. I think that may have been when  
23 I met Dr. Cretella. I can't remember if

1 I met her at the first meeting or the  
2 second meeting.

3 Oh, also at that second meeting,  
4 there was a plastic surgeon. I can't  
5 remember his last name. I was -- I  
6 remember being very encouraged to meet  
7 another plastic surgeon who saw this as  
8 an issue. And I do remember that he had  
9 been the chairman -- this speaks to the  
10 issue of fear about testifying. He had  
11 been the chairman of a major plastic  
12 surgery department in a large Midwest  
13 university, had built that program for  
14 many years, had run one of the most  
15 successful residency training programs.  
16 And he had been fired because he had  
17 objections to the transgender services  
18 that the hospital administration -- or  
19 the university administration wanted to  
20 introduce. And I thought it was a very  
21 heartbreaking story to see that a man had  
22 lost his entire career over his  
23 professional opinion. I don't remember

1 his last name, but I do know that I met  
2 him at that second meeting.

3 Q. Do you remember his first name?

4 A. I don't.

5 Q. Do you remember which center he  
6 was affiliated with?

7 A. I believe he was from the Ohio  
8 State University. But I haven't seen or  
9 heard from him since. He has just  
10 disappeared. I tried to reach out to  
11 him, I recall, because, again, there's  
12 not a lot of plastic surgeons who are  
13 willing to speak on this matter. And --  
14 but I haven't heard from him since.

15 Q. Did participants at the second  
16 meeting make presenta- -- make  
17 presentations as well?

18 MR. KNEPPER: Objection, form,  
19 scope.

20 A. I -- I don't -- yeah, I think it  
21 was more limited presentations, briefer,  
22 sort of reviews sort of thing. But it  
23 wasn't -- it didn't have the formality of

1 the first meeting, as I recall. Again,  
2 it's -- it's a little bit murky four  
3 years on.

4 Q. Yeah. I'm just asking for your  
5 best recollection. That's fine.

6 A. Sure. Okay.

7 Q. Do you remember giving a  
8 presentation at that second meeting?

9 A. I believe I did.

10 Q. How long do you think that  
11 meeting lasted, roughly?

12 MR. KNEPPER: Objection, form,  
13 scope.

14 A. Well, I remember it -- we went  
15 through a full morning, a light lunch,  
16 and perhaps into the very early  
17 afternoon.

18 Q. And you mentioned that there was  
19 some personal testimony from parents,  
20 families. What portion of the meeting  
21 was that, roughly?

22 A. What -- what portion?

23 MR. KNEPPER: Objection, form,



1 scope.

2 Q. What portion, yes.

3 A. I would be guessing that perhaps  
4 a third of the meeting was -- was that.

5 Q. Okay. After these meetings in  
6 2017, have you continued to stay in touch  
7 with the ADF?

8 MR. KNEPPER: Objection, form,  
9 scope.

10 A. I think perhaps, you know, one  
11 or two e-mail exchanges, but nothing --  
12 nothing substantive. I haven't really  
13 heard anything from them. I think I got  
14 a -- no. Well, I can't -- I can't recall  
15 anything other than maybe a thank-you  
16 e-mail or hope you're doing well kind of  
17 thing, but nothing substantive, no.

18 Q. How did you come to get involved  
19 with being an expert in this case?

20 A. I was contacted by Mr. Knepper.

21 Q. Okay.

22 A. Actually, I was contacted by his  
23 staff. He didn't call me himself, but

1 his -- someone on his staff called me and  
2 asked --

3 Q. I understand.

4 A. -- if I would be available.  
5 Yeah.

6 Q. How did you come to get involved  
7 with the Brandt case in Arkansas?

8 MR. KNEPPER: Objection, form,  
9 scope.

10 A. I think it may have been  
11 similar. I don't recall the particulars,  
12 but I -- someone on -- on the legal  
13 counsel side contacted me. I don't  
14 remember who it was.

15 Q. Okay. Let me shift gears a bit.  
16 You know what the American Society of  
17 Plastic Surgeons is; right?

18 A. Of course.

19 Q. Are you a current member?

20 A. No. I -- I let my membership  
21 lapse years ago, yeah.

22 Q. When --

23 A. About two years ago, I would

1 say. Maybe two years ago, yeah.

2 Q. Why did you decide to let your  
3 membership lapse?

4 A. Well, in order to be a member of  
5 the American Society of Plastic Surgeons,  
6 you have to be board-certified. And so  
7 since I declined continuing board  
8 certification for the reasons I explained  
9 to you, then my membership -- you know,  
10 over time, when my subscriptions and  
11 membership fees lapsed, so did my  
12 membership. And I think that would have  
13 been in 2019.

14 Q. I understand.

15 A. Yeah.

16 Q. Is it -- is an active board  
17 certification in plastic surgery a  
18 prerequisite to being in the American  
19 Society of Plastic Surgeons?

20 A. I seem to remember that when I  
21 -- back in the '90s after my residency,  
22 there's a -- there's a membership for --  
23 for board-eligible. It's not the full

1 membership, but then when you get  
2 board-certified, then you get full  
3 membership and the rights to use the logo  
4 and all that sort of stuff, so. Yeah, as  
5 I recall. It's been a long time since I  
6 read the bylaws. That would have been  
7 back in '95, I think, that I read those  
8 things.

9 Q. Yeah. When did you first join  
10 the ASPS?

11 A. I think I joined as a student  
12 member when I was in my residency. I  
13 want to say it was probably like '92 or  
14 '93, somewhere in there.

15 Q. So you were in the ASPS roughly  
16 '92 --

17 A. I think, yeah.

18 Q. -- to 2017?

19 A. I think, yeah. As I recall --  
20 again, it's a little bit murky, but as I  
21 recall, there's sort of a provisional  
22 membership for residents in training.  
23 You sort of get a discounted rate on all

1 of the expensive things, and the -- and  
2 access to the White Journal, as it's  
3 called. And then -- and then I -- as I  
4 recall, you don't get the full membership  
5 until you've been board-certified, which  
6 happened for me, as you know, in '97.

7 Q. Okay. But you were part of the  
8 ASPS for a long time; right?

9 A. Yes. Going to meetings.

10 Q. You consider the ASPS to be a  
11 reputable organization; right?

12 MR. KNEPPER: Objection, form.

13 A. Yeah. Well, for the most part,  
14 yeah. Certainly, the members, virtually  
15 most of the members I've ever known are  
16 reputable. And there are some things  
17 that the ASPS has done through the years  
18 that -- that I've had difficulty with  
19 and -- but they're certainly the  
20 organization in American plastic surgery.

21 Q. Yeah. I think one statistic I  
22 heard is 93 or so percent of all plastic  
23 surgeons are part of the ASPS.

1           A.     Yeah.

2           Q.     Right?

3           A.     That -- that number wouldn't  
4     surprise -- I would have thought even  
5     higher, actually, but yeah.

6           Q.     Do you think the ASPS would  
7     encourage its members to perform  
8     surgeries that are not medically  
9     necessary?

10           MR. KNEPPER:   Objection, form.

11           A.     Well, the -- as a -- as an  
12     organization, they don't encourage  
13     particular surgeries, but they may  
14     support them with their scientific  
15     presentations, their conferences, and  
16     that sort of thing.

17                     For example, three or four years  
18     ago, I went to a meeting of the  
19     California Society of Plastic Surgery,  
20     which is -- I think it has sort of a  
21     subsidiary relationship with the ASPS.  
22     And at that conference, among other  
23     things -- I went there because that's one

1 of the -- the areas of the country where  
2 I trained and I had hoped to see some  
3 friends there. But -- but for example,  
4 in that conference I went to a lot of  
5 great presentations, but the last day was  
6 devoted almost entirely to transgender  
7 surgery.

8 And so if you're asking me do I  
9 -- how do I feel about that, well, I have  
10 great difficulty with a professional  
11 organization that would support or  
12 promote those sorts of interventions  
13 knowing what I know about the scientific  
14 underpinnings of those medical and  
15 surgical procedures. And I had many  
16 conversations at that conference on the  
17 subject with persons who were providing  
18 the services, and I didn't find their  
19 answers particularly satisfactory. So  
20 that would be an example.

21 I can't give you carte blanche  
22 that everything that the Society says and  
23 does is to my liking. I would say

1       probably most of what they say and do is  
2       very much to my liking. But on this  
3       matter, I have -- I have a great  
4       difficulty. And it's one of the reasons  
5       that I -- I -- yeah.

6           Q.     It's one of -- one of the  
7       reasons that you what?

8           A.     That I -- that I don't have a  
9       lot of heartache about stepping away from  
10      the ASPS.

11          Q.     Do you think the AS- -- ASPS  
12      advocates in favor of surgical procedures  
13      that are not medically necessary?

14          A.     I think that would be probably  
15      an overreaching statement. I wouldn't  
16      say that. I would say that perhaps  
17      they're mute on some of the -- some of  
18      the procedures that their members  
19      perform, and they certainly have their  
20      eyes and ears open for new things. And  
21      so when members come forward to make  
22      presentations about particular new  
23      therapies and new approaches, as they



1       should, the ASPS is open to those things.  
2       So for many years, transgender surgery  
3       has been in that category.

4               I remember when I was a -- even  
5       when I was a general surgeon and I was  
6       looking for residency programs to train  
7       in, I was considering UVA. And I saw  
8       that -- that Milton Edgerton, one of the  
9       great names in plastic surgery was at UVA  
10      doing transgender surgery, both at UVA  
11      and at Johns Hopkins. And I remember  
12      thinking, well, I'm -- I really need --  
13      it struck me as an unusual operation, and  
14      I -- I started doing some research into  
15      it.

16             And I remember starting to think  
17      about the issue of transgender surgery  
18      back in the -- what would have been 1991,  
19      1990, 1991. And -- and through the  
20      years, the ASPS has made room for that  
21      intervention, those therapies, in their  
22      conferences, in their dialogues, in their  
23      publications. And I've reviewed all that

1       stuff as it has come along. And I think  
2       now being twenty, nearly thirty years on  
3       since I first started looking at it and  
4       they're still just sort of at that stage  
5       of -- of putting it out there, although  
6       now they're offering more extensive  
7       training conferences on how to do those  
8       procedures, and they're now encouraging  
9       that it be included in residency  
10      programs, and so -- yeah.

11       Q.     Do you know what position the  
12      ASPS takes on whether gender-affirming  
13      surgery is medically necessary?

14       A.     I think that position has  
15      changed, and now they're -- they're  
16      speaking positively about it.

17       Q.     Yeah. Your own professional  
18      organization, or at least your former  
19      organization, takes the position that  
20      gender-affirming surgery is medically  
21      necessary; right?

22              MR. KNEPPER: Objection, form.

23       A.     Yeah. As I -- as I said before,

1       this is one of the reasons why I don't  
2       have a lot of heartache about having  
3       withdrawn my membership. Yeah.

4           Q.     Now let me introduce another  
5       exhibit. Let me know when you have it,  
6       Doctor.

7       (Exhibit 7 was marked for identification  
8       and is attached.)

9           A.     Okay. Okay. I've got it.

10          Q.     The top of the page says,  
11       "American Society of Plastic Surgeons."  
12       Right?

13          A.     Yes.

14          Q.     You see this document is dated  
15       February 25, 2021; right?

16          A.     Yes.

17          Q.     This is after all the studies  
18       that you cite in your report; right?

19          A.     Where does that say that? I'm  
20       sorry, you're at a particular paragraph?

21          Q.     No. The date of this --

22          A.     Oh, I see. Oh, the date is  
23       after this --

1 Q. Yeah.

2 A. Yes. Well, February 25th, yes,  
3 2021.

4 Q. Yeah. This is -- this is dated  
5 after all of the studies that you cite in  
6 your report; correct?

7 A. I don't -- yeah, I don't  
8 remember off the top of my head any  
9 studies that were dated after. There may  
10 have been an April study in there, but  
11 okay.

12 Q. The first sentence says, "Policy  
13 around transgender care has recently  
14 gained considerable attention amid a  
15 growing trend of legislation carrying  
16 serious professional, financial or  
17 criminal penalties for the provision of  
18 gender affirmation care." You see that?

19 A. I do.

20 Q. Now, this reference to a growing  
21 trend of legislation, that's talking  
22 about legislation like the Arkansas ban  
23 and the Utah ban and the Alabama ban that

1 we talked about earlier; right?

2 A. Right.

3 MR. KNEPPER: Objection, form.

4 Q. Go to page 2. Look at the  
5 second paragraph. It says that "Less  
6 than three months into 2021, 11 pieces of  
7 legislation attempting to criminalize  
8 gender affirmation therapies have been  
9 introduced in 10 states." See that?

10 A. I do.

11 Q. And then there's a list of  
12 states; right?

13 A. Yes.

14 Q. So we talked about Utah and  
15 Alabama and Texas before. Looking at  
16 this list, does that refresh your  
17 recollection whether you've worked on  
18 these kind of legislative efforts in any  
19 other states?

20 A. I think -- I think, yeah, my  
21 answer has not changed. I think I've  
22 only been involved in Alabama, Texas, and  
23 Utah. I don't remember anything from

1 Oklahoma, New Hampshire, Montana, or  
2 Missouri or Mississippi. I don't recall  
3 any other states in that list, no.

4 Q. Okay. All right. Now let's  
5 look at what position the ASPS takes on  
6 whether gender-affirming treatment is  
7 medically necessary. Go to page 3. The  
8 first sentence says, "ASPS firmly  
9 believes that plastic surgery services  
10 can help gender dysphoria patients align  
11 their bodies with whom they know  
12 themselves to be and improve their  
13 overall mental health and well-being."  
14 Do you see that?

15 A. I do.

16 Q. The ASPS, your own professional  
17 organization, does not agree with your  
18 opinions that gender-affirming surgery is  
19 medically inappropriate; right?

20 MR. KNEPPER: Objection, form.

21 A. Let me just read that. Give me  
22 just a moment to look at that. Okay.

23 Yeah. This is a very --

1 language used by the other professional  
2 organizations, and essentially, the  
3 language takes the position that surgical  
4 intervention for a subjective problem is  
5 medically indicated. And that's the  
6 difficulty that I'm having here, is that  
7 in this document the ASPS does not --  
8 does not provide medical scientific  
9 support. They essentially admit that the  
10 surgery is for help with a psychological  
11 problem of perception on the part of the  
12 patient. So essentially what -- what the  
13 ASPS firmly believes in is the use of  
14 surgery to manage a psychological  
15 problem. And -- and this is -- this is  
16 consonant with the -- with the -- the  
17 consensus opinions that were offered by  
18 the other professional organizations that  
19 you listed earlier.

20 Q. The AS- -- ASPS does not agree  
21 with your opinions that gender-affirming  
22 surgery is experimental; correct?

23 MR. KNEPPER: Objection, form.

1           A.     They don't -- let's see, do they  
2     say anything about experimental in here?  
3     No, they don't.   So yeah, I would agree.

4           Q.     Do you agree?   Yeah.

5           A.     I would agree, yeah, sure.

6           Q.     Look at the last sentence.   It  
7     says, "ASPS will continue its efforts to  
8     advocate across state legislatures for  
9     full access to medically necessary  
10    transition care."   Do you see that?

11          A.     Yeah.   I don't find that  
12    statement at all surprising.   No.

13          Q.     Yeah.

14          A.     I do see that, yeah.   Not  
15    surprising.   This is legislative --

16          Q.     The ASPS --

17          A.     -- legislative advocacy by the  
18    ASPS.

19          Q.     The ASPS considers transition  
20    care to be medically necessary; right?

21                 MR. KNEPPER:   Objection, form.

22          A.     Again, that returns -- returns  
23    to that -- that inherent and



1 contradictory statement of medical  
2 necessity for a subjective condition.  
3 And the statement is consistent with what  
4 -- yeah. Exactly, yeah.

5 Q. It's fair to say that the  
6 opinions that you and Dr. Hruz and Dr.  
7 Levine are offering in this case are very  
8 different than the position that the ASPS  
9 has adopted on whether gender-affirming  
10 surgery is medically necessary; right?

11 MR. KNEPPER: Objection, form.

12 A. Absolutely correct.

13 Q. In fact, let me show you how  
14 strongly the ASPS feels about this issue.  
15 Let me introduce another exhibit. Okay.  
16 Let me know when you -- when you receive  
17 it.

18 MR. KNEPPER: Dmitriy, I -- I  
19 will tell you, it seems to be moving more  
20 slowly than normal. I don't know if  
21 you're seeing the same thing on your end.

22 MR. TISHYEVICH: I am.

23 A. So yeah, I have this document.

1 Again from the ASPS? Is that the one?  
2 February 25th?

3 Q. No. It should be -- it's a  
4 one-page document. I think it just says  
5 ASPS in your folder.

6 A. Exhibit 7?

7 MR. TISHYEVICH: Let me -- let's  
8 go off the record for a minute.

9 MR. KNEPPER: Sure.

10 THE VIDEOGRAPHER: We are off  
11 the record at 10:19 a.m.

12 (Break taken.)

13 THE VIDEOGRAPHER: We are back  
14 on the record at 10:21 a.m.

15 Q. (By Mr. Tishyevich) All right.  
16 Doctor, before the break, we were talking  
17 about the ASPS and the position they take  
18 on the medical necessity of  
19 gender-affirming surgery. You recall  
20 that?

21 A. Yes.

22 Q. All right. This is a document  
23 from the ASPS titled "2021 State Policy

1 Priorities." Do you see that?

2 (Exhibit 8 was marked for identification  
3 and is attached.)

4 A. Yes.

5 Q. Last sentence of the first  
6 paragraph says, "To ensure that our  
7 health care system is effective and  
8 efficient, ASPS will focus its state  
9 advocacy efforts on," and then there's a  
10 list. Do you see that?

11 A. Yes.

12 Q. And there's three sections:  
13 "Core Priorities," "High Priorities," and  
14 "Other Priorities." You see that?

15 A. Yes.

16 Q. Go to the "High Priorities"  
17 section.

18 A. Okay.

19 Q. The last bullet says, "Opposing  
20 attempts to criminalize gender  
21 confirmation." Do you see that?

22 A. I do.

23 Q. And you understand what this

1 bullet means; right?

2 A. I do.

3 MR. KNEPPER: Objection to form.

4 Q. One of the ASPS's high  
5 priorities for this year is to oppose  
6 legislation like the Arkansas ban and the  
7 Utah ban and the Alabama ban that you are  
8 supporting; right?

9 A. Apparently so, yes.

10 MR. KNEPPER: Objection, form,  
11 scope.

12 Q. The sense that I got from  
13 reading your report, Doctor, is that it's  
14 supposedly generally accepted that  
15 gender-affirming surgical treatment is  
16 experimental and should not be performed  
17 on anyone; right? That's what you think?

18 MR. KNEPPER: Objection, scope,  
19 form.

20 A. Right. My opinion -- my opinion  
21 in that matter is based on the -- on the  
22 world literature rather than advocacy  
23 statements by a professional

1 organization. That's right.

2 Q. You are suggesting, in fact,  
3 that doctors who do these surgeries  
4 should be investigated for unethical  
5 behavior and potential misconduct; right?

6 MR. KNEPPER: Objection, form.

7 A. I -- yes, I do.

8 Q. And you do not think it's  
9 relevant to mention that your own  
10 professional society takes a view that is  
11 contrary to the opinions that you're  
12 offering in this case; right?

13 A. I'm not sure I understood your  
14 question, sir.

15 Q. Yeah. When you talk about how  
16 these doctors should be investigated for  
17 misconduct, you don't think it's relevant  
18 that your own professional society takes  
19 a completely contrary view?

20 MR. KNEPPER: Objection, form.

21 A. Well, I think I would -- I would  
22 characterize my concern and -- and  
23 possibly recommendation of investigation,

1 I was discussing, I think, consent  
2 procedures and getting informed consent.  
3 I don't think -- yeah, so -- so I think  
4 the object- -- the concerns I raised had  
5 to do with the off-label use of drugs in  
6 irreversible treatments, the -- the  
7 problem of obtaining consent from  
8 emotionally compromised people who are  
9 threatening suicide. Those were the  
10 issues that I raised in terms of, you  
11 know, investigation kind of things, or  
12 examination would be a better term,  
13 examination of -- of how a  
14 physician/surgeon conducts their  
15 practice, so.

16 Q. Go -- go back to your report.

17 A. Okay.

18 Q. Go to page 15. You with me?

19 A. Yes, sir.

20 Q. Look at the second sentence in  
21 the bottom paragraph. You say, "Basing  
22 life changing surgeries that damage and  
23 destroy the natural functions of

1 perfectly healthy organs on nothing more  
2 than the unverified self-reports  
3 (conversations) of often disturbed  
4 patients as part of untested, unproven,  
5 experimental 'treatments' that are  
6 'supported' by a methodo-" --  
7 "methodologically defective research base  
8 when competent reviews have called such  
9 research 'low quality' evidence and noted  
10 the 'lack of any randomized clinical  
11 trials' -- should be properly  
12 investigated as unethical, misconduct and  
13 an abuse of a vulnerable patient  
14 population."

15 Right? That's your opinion?

16 A. Yes, sir. And I stand by that.

17 Q. You know that today there's  
18 thousands of plastic surgeons that are  
19 performing these surgeries; right?

20 MR. KNEPPER: Objection, form,  
21 scope.

22 A. I don't know the number of  
23 plastic surgeons who do these surgeries.

1           Q.     Hundreds?

2           A.     I'm -- I'm sure the number is  
3     large.    I don't know what the number is.  
4     Yes.

5           Q.     And you think all of those  
6     doctors are out there committing  
7     misconduct?  Is that really what you  
8     think?

9           A.     Well, I think that -- that their  
10    knowledge might affect their  
11    decision-making.  So if somebody is going  
12    through a residency training program that  
13    -- that is teaching these things and they  
14    grow up in that world -- let me give you  
15    an example.

16                   When I was a surgeon in training  
17    in general surgery, the -- the most  
18    coveted surgical experience would be, as  
19    a chief resident, to do ulcer surgery.  
20    At the time, we thought that ulcers were  
21    caused by neurologic problems affecting  
22    the stomach.  And so some of the most  
23    complex abdominal surgeries were ulcer



1       surgeries, and some of the greatest names  
2       in general surgery were given to those  
3       operations. Subsequent to my residency  
4       training, perhaps five years later, it  
5       was found to be a medical condition  
6       treatable with antibiotics and antacids.  
7       Nobody does ulcer surgery any longer.

8               I would put -- I would put  
9       transgender surgery in the same category.  
10      Well-meaning persons who are interested  
11      in the care of people who are suffering,  
12      in this case, transgender persons who are  
13      suffering, well-meaning physicians and  
14      surgeons are offering them the best care  
15      that they've learned in their training.  
16      But I -- I would expect that when the  
17      science shows that to be not the case,  
18      that those same doctors will abandon it.  
19      And I think we're at the same stage now.  
20      We're at an inflection point in plastic  
21      surgery where in the last three years  
22      things have changed radically.

23              If you had asked that question

1 five, seven years ago, it would have been  
2 up for grabs. But things have changed  
3 radically with the flood of credible  
4 scientific evidence pouring in from  
5 Europe to now -- if -- if five years from  
6 now, having seen that information,  
7 surgeons persist in doing transgender  
8 surgery, then I would -- then I would  
9 have real issues with that, as I would  
10 with a -- with a general surgeon offering  
11 a Billroth II ulcer operation today when  
12 you could give the patient erythromycin  
13 and some -- and some Zantac. You see  
14 where I'm going.

15 So we're at a -- we're at a  
16 tipping point in the world of plastic  
17 surgery right now, and the last three  
18 years have changed everything, because  
19 the very, very well-supported -- see, the  
20 problem is quality of evidence. Plastic  
21 surgeons in America are operating with  
22 scientific evidence that even the  
23 American Society of Plastic Surgery

1 characterizes as level 5 evidence,  
2 basically, the -- the professional  
3 opinions based on personal experience.  
4 This is entry-level science for a  
5 particular therapy or a particular  
6 intervention.

7 To raise to level 4, you would  
8 have to have the same collected cases  
9 with -- with before and after tests of  
10 the patient. We haven't gotten to that  
11 level yet. There are no long-term  
12 longitudinal studies in the American  
13 literature. It's all in the European  
14 literature, and the bulk of it in the  
15 last three years.

16 So the question is a difficult  
17 one to answer. As simply as saying that  
18 all of these people are immoral, I'm not  
19 saying that at all. I'm saying that  
20 they're doing the best that they know how  
21 according to the training that they've  
22 received for people that they very much  
23 care for and are hoping to do good by.

1 But the -- but the world is changing  
2 rapidly now, and we've reached a stage  
3 now where it's such a controversy that  
4 this is -- this is -- this is why I've  
5 become so publicly vocal about it,  
6 because the controversy is now raging.  
7 It's no longer: "Maybe so. Milton  
8 Edgerton, interesting guy. You know, the  
9 surgery at UVA, the surgery at Johns  
10 Hopkins, let's get a look at that kind of  
11 thing." We've gone beyond that now, and  
12 just in the last three years.

13 So I -- the people who do these  
14 surgeries are not right out of residency  
15 training. These are people who have --  
16 you know, who have been in the -- in the  
17 business for a number of years now, and  
18 they're relying on what they learned and  
19 doing the best that they can. But as I  
20 say, the science is changing everything,  
21 so.

22 MR. TISHYEVICH: With respect,  
23 I'm going to strike that answer as not

1 responsive.

2 Q. Here's the -- here's --

3 MR. KNEPPER: No.

4 Q. -- the question that I'd like  
5 you to answer.

6 MR. KNEPPER: Go ahead.

7 Q. Here's the question that I'd  
8 like you to answer. Is it your expert  
9 opinion that the surgeons that are today  
10 performing gender-affirming surgical  
11 procedures are committing or potentially  
12 committing misconduct, yes or no?

13 MR. KNEPPER: Objection, form,  
14 scope, asked and answered. Dmitriy, you  
15 asked him. He gave you a --

16 MR. TISHYEVICH: I don't need  
17 the speaking objections. I do not need  
18 the speaking objections.

19 Q. Answer my question, Doctor.

20 MR. KNEPPER: He gave you a  
21 thoughtful answer.

22 A. Okay. If you could ask me the  
23 question again, I want to be sure that

1 I -- I answer it as succinctly as I can.

2 Q. Is it your expert opinion that  
3 the surgeons that are performing  
4 gender-affirming surgical procedures  
5 today are potentially committing  
6 professional misconduct, yes or no?

7 MR. KNEPPER: Objection, form.

8 A. I would -- I would say, only to  
9 the extent that they're familiar with the  
10 more recent literature would make them  
11 sort of culpable, if you will. Not --  
12 not being aware of that literature, I  
13 would not accuse them of such a thing.

14 Q. All right. Let me introduce  
15 another exhibit. Let me know when you  
16 get this one, Doctor, Exhibit 9.  
17 (Exhibit 9 was marked for identification  
18 and is attached.)

19 A. All right. The first page of  
20 my -- well, that's the CV, I guess. My  
21 CV, yes.

22 Q. This is a copy of your CV;  
23 right?

1           A.     Yeah.    Yes.

2           Q.     You prepared this?

3           A.     Well, it was prepared for me by  
4     -- I gave -- I gave the factual input for  
5     it, but I didn't prepare it myself, let's  
6     say.

7           Q.     Top of the page says, "Board  
8     Certified in Surgery and Plastic Surgery"  
9     again; right?

10          A.     Right.   Same mistake, yeah.

11          Q.     We agree that's not consistent  
12     with guidance from the American Board of  
13     Surgery, American Plastic Board of  
14     Surgery; correct?

15                 MR. KNEPPER:   Objection, form.

16          A.     Yes.

17          Q.     Go to page 3, the bottom of the  
18     page.   It says, "Publications - Peer  
19     Reviewed Medical Journals."   You see  
20     that?

21          A.     I do.

22          Q.     And then through page 4, it  
23     lists six publications; right?

1           A.     Right.

2           Q.     In your professional career,  
3     you've published six articles in  
4     peer-reviewed medical journals; right?

5           A.     Right.

6           Q.     First one was in 1997; right?

7           A.     '87.    Yes.

8           Q.     Most recent one was in 1998;  
9     correct?

10          A.     Correct.

11          Q.     That's 23 years ago; right?

12          A.     Right.

13          Q.     You have not published any  
14     original research in peer-reviewed  
15     literature within the last 23 years;  
16     correct?

17          A.     Correct.

18          Q.     All right.  Let's go through  
19     these in reverse order.  All right.  Most  
20     recent one from '98 is titled "Treatment  
21     of an isolated outer table frontal sinus  
22     fracture using endoscopic reduction and  
23     fixation."  Right?



1           A.     Yes.

2           Q.     That publication doesn't relate  
3           to gender-affirming surgery or to gender  
4           dysphoria; correct?

5           A.     Tangentially, it would relate to  
6           it. And I would say this about it. It  
7           was one of the first, if not the first,  
8           paper demonstrating the use of endoscopic  
9           technique to operate on facial bones of  
10          the forehead and the use of internal  
11          fixation devices for modification or  
12          repair of the forehead. Those are the  
13          same techniques that are now used by  
14          transgender surgeons who are offering top  
15          surgery. For example, for feminization  
16          of a masculine brow ridge, they use  
17          endoscopic technique, which is described  
18          in this paper that came out 23 years ago  
19          and was written by myself and another  
20          Navy surgeon.

21          Q.     Understood.

22          A.     Yeah.

23          Q.     The -- the patient in this

1 publication was not treated for face --  
2 for gender dysphoria obviously; right?

3 A. No. She was a sweet pizza maker  
4 who had slipped in the kitchen and struck  
5 her head on a stainless steel table and  
6 had a -- had a displaced fracture of her  
7 forehead. But no, she was -- not to my  
8 knowledge. I don't know if she was or  
9 not, but to my knowledge, she was not.

10 Q. Next one going backwards is from  
11 1996, and it's titled, "Scarless Fetal  
12 Skin Repair: 'Unborn Patients' and 'Fetal  
13 Material.'" Do you see that?

14 A. I do.

15 Q. All right. That doesn't relate  
16 to gender-affirming surgery or to gender  
17 dysphoria, I take it?

18 A. It -- it actually refers to all  
19 forms of surgery and particularly,  
20 ethical decision-making. So I would say  
21 that it's -- it's a -- it's a fairly  
22 broad paper that talks about how we treat  
23 other human persons. So transgender

1 surgery is all about how we treat other  
2 human persons. That's what that paper is  
3 about and how -- how some surgeons are  
4 likely -- or possibly physicians and  
5 surgeons could characterize someone as  
6 less than human, which is a -- which is a  
7 danger that transgender persons  
8 experience when they're seeking care.  
9 And so I would say that in a very  
10 tangential way, it does. It does impinge  
11 upon the field of transgender medicine  
12 precisely for the reason that transgender  
13 persons suffer oftentimes from being  
14 treated as -- as someone who is less than  
15 human.

16 Q. Aside from that very tangential  
17 angle, this paper does not specifically  
18 relate to gender-affirming surgery or  
19 gender dysphoria; correct?

20 A. No, it does not.

21 Q. And the next one before that is  
22 in 1995. Do you see that?

23 A. I do.

1           Q.     You're listed as the third  
2 author in this one; right?

3           A.     Yes, sir.

4           Q.     Because you're not the lead  
5 author; right?

6           A.     No. The attending surgeon is  
7 always the lead author, and I was a  
8 resident. I was a resident at that time,  
9 yeah.

10          Q.     Understood. This one's titled  
11 "Delayed development of an ectopic  
12 frontal sinus mucocoele after pediatric  
13 cranial trauma."

14          A.     Mucocoele, yes. Mucocoele.

15          Q.     Thank you. This publication  
16 doesn't relate to gender-affirming  
17 surgery or gender dysphoria; correct?

18          A.     Not directly, no.

19          Q.     Okay. Next one before that is  
20 titled "Patch Esophagoplasty"?

21          A.     Very good.

22          Q.     And that's repair or  
23 reconstruction of the esophagus; right?

1           A.     Yes.

2           Q.     Does this relate to  
3 gender-affirming surgery or gender  
4 dysphoria?

5           A.     No.

6           Q.     Next one before that is titled  
7 "Modified Skin Incisions for Mastectomy:  
8 The Need for Plastic Surgical Input in  
9 Preoperative Planning." Do you see that?

10          A.     I do.

11          Q.     And finally, your oldest  
12 publication is from 1987, titled  
13 "Peritoneal Fluid in Human Acute  
14 Pancreatitis." Do you see that?

15          A.     Yes.

16          Q.     Does that relate to  
17 gender-affirming surgery or gender  
18 dysphoria?

19          A.     It does not. By the way,  
20 that -- that second to the last article,  
21 your pattern of questions, I wondered if  
22 you overlooked asking the same question  
23 on that paper.

1           Q.     No. I want to ask you more  
2 specific questions about that one, so  
3 we'll spend --

4           A.     Oh, okay.

5           Q.     -- more time on that one.

6           A.     Good. Good. Very good. All  
7 right.

8           Q.     Don't worry.

9           A.     Yeah. "Peritoneal Fluid in  
10 Acute Pancreatitis" was a research paper,  
11 animal model, and review of the  
12 literature. Yeah.

13          Q.     Okay. You agree there's a  
14 difference between a scientific article  
15 that reports original research versus a  
16 letter to the editor that's published in  
17 a scientific journal?

18                 MR. KNEPPER: Objection, form.

19          A.     Yes.

20          Q.     Some of your publications listed  
21 here are just letters to editors; right?

22          A.     Yes.

23          Q.     Why is it that your CV doesn't

1 identify those as letters as opposed to  
2 original research?

3 A. I didn't -- that didn't occur to  
4 me to do that. Do we generally list them  
5 separately? I don't know. I just put  
6 all my publications there.

7 Q. So we can look at them, but for  
8 example, the scarless fetal skin repair,  
9 that's a letter to the editor; right?

10 A. Right.

11 Q. And so is the 1993 publication  
12 on patch esophagoplasty; right?

13 A. Right.

14 Q. So out of the six publications  
15 that you list in your CV, at least two of  
16 them are letters to editors rather than  
17 original research; fair?

18 MR. KNEPPER: Objection, form.

19 A. Right. Yes.

20 Q. Okay. Let's talk about your  
21 experience treating transgender patients.  
22 You retired from the military in 2002;  
23 correct?

1           A.     Correct.

2           Q.     In 2002, the U.S. military  
3 certainly was not providing any  
4 gender-affirming treatment to anyone in  
5 the military; right?

6           A.     That's correct.

7           Q.     Or to veterans; right?

8           A.     Correct.

9           Q.     In fact, at that time, there was  
10 a policy not to provide gender-affirming  
11 treatment to active military or to  
12 veterans; correct?

13                   MR. KNEPPER:   Objection, form,  
14 scope.

15           A.     Correct.

16           Q.     So during your career in the  
17 military, you did not provide any  
18 gender-affirming treatment to any  
19 patients; correct?

20           A.     Correct.

21           Q.     All right.   Let's focus on your  
22 practice after you left the military in  
23 2002.   You currently run the Lappert Skin



1 Care clinic; right?

2 A. That's correct.

3 Q. How long have you operated that  
4 clinic?

5 A. One year.

6 Q. Did you operate any clinics  
7 before opening this one?

8 A. Yes.

9 Q. What was that one?

10 A. That was my plastic surgery  
11 office called Lappert Plastic Surgery in  
12 Madison, Alabama. And before that, it  
13 was under the same name but located in  
14 Decatur, Alabama. And before that, it  
15 was in Scottsbluff, Nebraska, same name.

16 Q. How long did you run the Lappert  
17 Plastic Surgery clinic?

18 A. The Madison office was for 15  
19 years. I'm sorry. The Madison office  
20 was for ten years. My -- my mistake.  
21 Ten years at the Madison office, five  
22 years at the Decatur office, and three  
23 years at the Scottsbluff office.

1           Q.     So, let me just make sure I have  
2 my timing here. So you've had the  
3 Lappert Skin Care clinic for a year,  
4 since 2020?

5           A.     Right.

6           Q.     And then the Lappert Plastic  
7 Surgery ten years in Madison, so roughly  
8 2010 to 2020?

9           A.     That's right.

10          Q.     And then five years before that  
11 in Decatur, 2005 --

12          A.     Right.

13          Q.     -- to 2010, roughly?

14          A.     Right.

15          Q.     And then --

16          A.     Scottsbluff was from 2002  
17 through two -- through 2005. That was  
18 where I went when I retired out of the  
19 Navy.

20          Q.     Your -- your skin clinic  
21 currently does treatments like Botox,  
22 light therapy, laser hair removal; right?

23          A.     Right. Laser tattoo removal,

1 injectables, just skin consultations for  
2 skin problems like rosacea, acne, that  
3 sort of thing. That's right.

4 Q. Were you performing similar  
5 treatments at the Lappert Plastic Surgery  
6 clinic?

7 A. Yes. All I've done is I've just  
8 suspend -- I just retired from active  
9 surgical practice. I had an operatory in  
10 my office in Madison as well as in  
11 Decatur previously, so I would do both  
12 hospital-based surgeries as well as  
13 clinic-based, office-based procedures.

14 Q. So for example, light therapy  
15 services, you've offered that for  
16 ten-plus years, I take it?

17 A. I believe we got that instrument  
18 in 2006.

19 Q. How about Botox? Have you been  
20 offering that for more than ten years?

21 A. Yes.

22 Q. Have you done forehead  
23 injections for more than ten years?

1 A. With Botox?

2 Q. Yes.

3 A. Yes.

4 Q. How about crow's feet? Is that  
5 the right term?

6 A. Yes.

7 Q. More than -- more than ten  
8 years?

9 A. Yes.

10 Q. When was the last time you've  
11 performed a surgical procedure?

12 A. Well, as I said, I retired from  
13 surgery in August of 2020, so it was -- I  
14 think I was doing some last procedures in  
15 that same month, perhaps July, somewhere  
16 in there.

17 Q. And in 2020, roughly how many  
18 surgical procedures do you think you've  
19 performed?

20 A. From January to July?

21 Q. Yes.

22 A. Let's see. Seven months.

23 Perhaps -- I don't know. Maybe eighty,

1 something 80 to 100, I'm guessing. I  
2 don't know.

3 Q. And give me examples of common  
4 surgeries you would have performed in  
5 2020.

6 A. Well, among the most common ones  
7 that we did in the -- in the office were  
8 autologous fat grafting for recon- -- for  
9 rejuvenation of the face, autologous fat  
10 grafting for breast augmentation,  
11 ultrasound -- I'm sorry -- laser  
12 lipoplasty for body contouring, and then  
13 many in-office surgical procedures for  
14 skin cancer and skin cancer  
15 reconstruction, particularly of the face  
16 and the extremities.

17 And then on the hospital side, I  
18 would be guessing how many, but it was  
19 common for me to do breast reductions and  
20 abdominoplasties, little local flap  
21 reconstructions in the hospital for  
22 younger patients who needed anesthesia,  
23 reconstruction -- little reconstructive

1 flaps for trauma or for cancer.

2 I had a working relationship  
3 with a dermatologist who did a lot of  
4 what's called Mohs surgery for removal of  
5 cancers. He would send me his patients  
6 if they -- if they were cancers that  
7 involved the face. I would do those  
8 reconstructive surgeries.

9 Yeah, that was probably -- I was  
10 definitely throttling back in my last  
11 year. I didn't take on a lot of complex  
12 cases, so.

13 Q. Okay.

14 A. Because I needed -- you need  
15 follow-up, and so limited.

16 Q. I understand. Let's go back to  
17 your report. Go to page 4.

18 A. Okay.

19 Q. Okay. Five lines down, you see  
20 the sentence starting with, "In my  
21 private practice"?

22 A. Yes.

23 Q. Okay. Let's break this down.

1       So you reference treated skin  
2       pathologies. What skin pathologies are  
3       you referring to here?

4       A. Skin can- -- well, surgically or  
5       medically, we're talking two different  
6       categories, but. So I'm consulted on --  
7       on a lot of nonsurgical skin pathologies.  
8       But as far as surgical skin pathologies,  
9       that would include various forms of  
10      malignancy and then benign growths and  
11      things that are either aesthetically or  
12      -- aesthetically problematic or  
13      suspicious in appearance, so both proven  
14      cancers and things that are suspicious of  
15      cancers. So those would be the skin  
16      conditions. The medical --

17      Q. Yeah. Well --

18      A. -- skin conditions -- I'm sorry?

19      Q. Yeah. That's all right. I'm  
20      asking more specifically.

21      A. Okay.

22      Q. Because here, you write, "I've  
23      had occasion to treat many

1 self-identified transgender patients for  
2 skin pathologies related to their use of  
3 high dose sex steroids."

4 A. Yeah.

5 Q. So focusing specifically on that  
6 patient population.

7 A. Okay.

8 Q. So, what skin pathologies are  
9 you referring to here with respect to  
10 transgender patients?

11 A. Well, I've had a few patients  
12 who've come in evidencing, you know,  
13 acneiform conditions of the facial skin.  
14 And so helping people manage acne is a  
15 common thing that I do, and a variety of  
16 interventions including, you know, the  
17 light therapy, but more -- more properly,  
18 the use of medications and -- and  
19 sometimes laser therapy to manage  
20 scarring. But in those particular cases  
21 of the trans-identified people, it's  
22 mostly just ordinary management of acne.  
23 And it's usually the same patients who



1       come to see me about facial hair removal  
2       with laser. I have a couple of patients  
3       in that category, people who are  
4       transitioning and who are seeking laser  
5       removal of hair from their faces.

6           Q.     And you said this is a few  
7       patients. How many transgender patients  
8       would you estimate you've treated for  
9       skin pathologies related to steroids?

10          A.     Related to -- to sex steroids?

11          Q.     Yes.

12          A.     Oh, I don't know. Probably less  
13       than half a dozen.

14          Q.     Okay. The acne you're referring  
15       to, it's essentially a side effect from  
16       the steroids; right?

17          A.     It's a common side effect of --  
18       of -- yeah. Particularly androgen is the  
19       most common.

20          Q.     So this -- and so you're  
21       treating patients with gender dysphoria  
22       after they have already decided to follow  
23       a certain course of treatment and started

1 taking sex steroids; right?

2 A. Right. Yeah.

3 Q. Okay. And then you say you've  
4 done laser therapies for management of  
5 facial hair of also the transgender  
6 population?

7 A. That's right.

8 Q. Right?

9 A. That's right.

10 Q. And is that also in about half a  
11 dozen patients? Or what's you're  
12 estimate?

13 A. Yeah. It's not a huge number.

14 Q. Okay. And finally, you say  
15 you've done breast reversal surgeries for  
16 detransitioning patients. On how many  
17 patients have you performed -- strike  
18 that.

19 On how many detransitioning  
20 patients have you performed the surgery?

21 A. Two.

22 Q. Two. All right. It's not a  
23 commonly performed procedure for you;

1 fair?

2 MR. KNEPPER: Objection, form.

3 A. Yeah, no. They -- they started  
4 coming to me in that last year of  
5 practice, so. Yeah, that -- it's not  
6 a -- yeah, it's not a -- it was never a  
7 common procedure for me. I did a lot of,  
8 you know, implant removals and stuff  
9 through my years. It's the same  
10 operation. And I've done a lot of  
11 gynecomastectomy surgeries. That's also  
12 the same operation. But in terms of as  
13 it's applied to a trans- -- a  
14 transitioned person who wants to revert  
15 back to male presentation, very limited  
16 experience. But even though it's the  
17 same operation, I have only done it for  
18 two people.

19 Q. And you said both of those  
20 patients were in 2020?

21 A. I believe so, yeah. One of them  
22 may have been in 2019. I'm not positive  
23 about that.

1           Q.     Before 2019 or 2020, you had  
2     never had a detransitioning patient come  
3     to you to obtain breast reversal surgery;  
4     fair?

5           A.     I think that's correct, yeah.  
6     I'm just trying to think if there was  
7     any, but I can't -- I can't recall any  
8     other.

9           Q.     Okay. Are you aware that modern  
10    gender affirmation programs typically  
11    have a multidisciplinary team of  
12    healthcare providers?

13          A.     Yes.

14               MR. KNEPPER: Objection, form.

15          Q.     And they usually involve mental  
16    health specialists; right?

17          A.     Yes.

18               MR. KNEPPER: Objection, form.

19          Q.     Endocrinologists?

20          A.     Yes, that's my understanding.

21          Q.     And oftentimes plastic surgeons  
22    if the patient wants to go that route;  
23    right?

1           A.     Right.  That's -- that's my  
2     understanding, yes.

3           Q.     You personally have never been  
4     part of this kind of a multidisciplinary  
5     team for any patient with gender  
6     dysphoria; correct?

7           A.     No.  I have always -- I have  
8     always turned away personal -- for per-  
9     -- well, my understanding of those  
10    procedures has caused me to reject  
11    offering them to my patients because I  
12    don't see them as beneficial.  So  
13    clearly, I wouldn't want to participate  
14    in a multidisciplinary team that's  
15    offering therapies that I consider to be  
16    incorrect treatments for a condition that  
17    deserves our care, so.

18          Q.     All right.

19          A.     If you want, I can give you a  
20    shorter answer.  No.

21          Q.     Yeah, let's -- you personally  
22    have never treated a single patient for  
23    gender dysphoria; correct?

1           A.     I have never treated a patient  
2     with gender dysphoria surgically.

3           Q.     Okay.

4           A.     Other than the detransitioner.  
5     I -- I suspect they were still suffering  
6     from dysphoria even though they were  
7     detransitioning, but I didn't treat them  
8     with surgery to -- per se for that  
9     condition the way the transgender teams  
10    do.   Yeah.

11          Q.     When you were providing laser  
12    hair removal to trans women, is that  
13    providing gender-affirming care?

14               MR. KNEPPER:   Objection, form.

15          A.     I don't get into the affirmation  
16    side of the treatment.   I'm simply  
17    providing a service to -- to people who  
18    -- who I want to have as friends.  
19    Believe it or not, it's true.   I -- I  
20    don't turn anyone away whose -- whose  
21    request is -- is within the scope of what  
22    I consider moral practice of medicine and  
23    surgery, so.

1           Q.     So earlier, I asked you, you  
2 personally have never treated a single  
3 patient for gender dysphoria, and I think  
4 you said not surgically. Let me ask more  
5 broadly. Not limited to surgery, you  
6 have never treated a single patient for  
7 their gender dysphoria symptoms; correct?

8           A.     Well, I guess if -- if you were  
9 to look at laser facial hair removal and  
10 consider that in the -- in the spectrum  
11 of care, certainly that's -- that's --  
12 that's clinic care that's probably  
13 improving the emotional life of the  
14 patient because they're seeking to  
15 present as women. So in that sense, I  
16 have, yeah.

17          Q.     Nothing outside of laser hair  
18 removal?

19          A.     No.

20          Q.     You personally have never --

21          A.     Well, and -- and acne. Because  
22 clearly, that's a problem. But in terms  
23 of their -- the trajectory of their

1 transition, acne doesn't enter into it.

2 But certainly laser hair removal, yeah.

3 Q. You personally have never sat in  
4 any meetings between a provider and a  
5 patient where the doctor was trying to  
6 diagnose whether the patient has gender  
7 dysphoria; correct?

8 A. Correct.

9 Q. You have never sat in any  
10 meetings between a provider and a patient  
11 discussing their potential treatment  
12 options for gender dysphoria; correct?

13 A. No.

14 Q. All right. You're not an  
15 endocrinologist; right?

16 A. Correct.

17 Q. You're not a psychiatrist;  
18 right?

19 A. Correct.

20 Q. You're not a licensed mental  
21 healthcare provider of any kind; right?

22 A. Correct.

23 Q. In your professional day-to-day



1 practice, you do not diagnose mental  
2 health conditions of any kind; right?

3 MR. KNEPPER: Objection, form.

4 A. With the exception of what we  
5 discussed earlier about body dysmorphic  
6 disorder and gender -- gender identity as  
7 a subcategory of body dysmorphic  
8 disorder, no, I would say I don't.

9 Q. Okay. If some patient thinks  
10 that they may have depression or anxiety,  
11 you would expect that patient to go to a  
12 mental health professional, not to you;  
13 right?

14 A. That's my expectation. But  
15 again, many depressed people come to  
16 plastic surgeons seeking a remedy for  
17 their depression thinking that their  
18 appearance is the cause of their  
19 depression. And it's my duty as a  
20 plastic surgeon to recognize those  
21 patients and -- and send them to the  
22 psychologist, psychiatrist, rather than  
23 offering them surgical care, yeah, so.

1           Q.     Yeah. I'm asking a slightly  
2 different question.

3           A.     Okay.

4           Q.     If a -- if a patient, for some  
5 reason, came to you and asked you to  
6 diagnose them with depression or anxiety,  
7 I assume you would refer them to a train  
8 -- trained mental health professional;  
9 right?

10          A.     Yes.

11          Q.     Because doctors should not be  
12 diagnosing patients with mental health  
13 conditions if they do not have training  
14 in how to diagnose mental health  
15 conditions; right?

16                 MR. KNEPPER: Objection, form.

17          A.     Well, I wouldn't say that,  
18 because for example, as a -- as a -- as a  
19 surgeon, as a plastic surgeon, we do have  
20 to make diagnoses outside of our  
21 specialty in order to get people to the  
22 right specialist. So to an extent, you  
23 have to make that diagnosis.

1           So for example, as a resident in  
2           training, I diagnosed an endocrinological  
3           disease and probably saved a woman's life  
4           because she was in a psych ward, and --  
5           and -- and the doctors had a question  
6           about her -- a lump in her neck. She had  
7           been on the psych ward for weeks, and I  
8           diagnosed a hyperfunctioning thyroid  
9           nodule. I didn't confirm that diagnosis.  
10          I sent her to an endocrinologist. But I  
11          made the initial diagnosis of  
12          hyperfunctioning thyroid nodule, and --  
13          and ultimately, I did her thyroidectomy.  
14          But that's an example.

15                You have to understand pathology  
16                outside your specialty because you don't  
17                know why the patient is going to present  
18                to you, and you have to be ready to start  
19                the process that gets them to the  
20                specialist, so you have to have a working  
21                knowledge of the problems.

22                Q.     Yeah, that's exactly the point.  
23                Even for that one example, you still send

1       this patient to a trained endocrinologist  
2       to confirm the diagnosis; right?

3           A.     Right.   And then they sent them  
4       back to me to give them definitive care.

5           Q.     Yeah.   And that's what you would  
6       do for any patient that presents to you  
7       with a mental health condition; right?  
8       You would train -- you would send them to  
9       someone who is -- who is trained in how  
10      to diagnose mental health conditions;  
11      right?

12                   MR. KNEPPER:   Objection, form.

13           A.     Yes.

14           Q.     You're not trained in providing  
15      psychotherapy counseling; right?

16           A.     Right.

17           Q.     You've never provided  
18      counseling, psychotherapy counseling to  
19      children or adolescents with gender  
20      dysphoria; right?

21           A.     Right.

22           Q.     You've never provided  
23      psychotherapy counseling to adults who

1       have gender dysphoria; right?

2           A.     Right.

3           Q.     You do not have the professional  
4       training to provide psychotherapy  
5       counseling to adults who have gender  
6       dysphoria; right?

7                   MR. KNEPPER:  Objection, form.

8           A.     Correct.

9           Q.     Or to children or adolescents  
10      with gender dysphoria; right?

11                   MR. KNEPPER:  Objection, form.

12          A.     Correct.

13          Q.     Go to page -- back to your --  
14      strike that.

15                   Back to your report on page 4,  
16      in this paragraph 9, about six lines  
17      down, you say, "I have consulted with  
18      families with children who are  
19      experiencing gender discordance."  Do you  
20      see that?

21          A.     Yes.

22          Q.     Describe these consultations for  
23      me at a high level.

1           A.     Basically, it was families that  
2     wanted to understand what -- the nature  
3     of plastic surgery sort of in the future  
4     for their children. These were -- these  
5     were personal encounters rather than in  
6     the office, but fairly lengthy at times,  
7     talking to families about -- they wanted  
8     to understand what was being offered to  
9     their children. They wanted to  
10    understand the nature of -- or what the  
11    future would look like for their  
12    children. They wanted to get some idea  
13    of -- basically, they wanted to hear sort  
14    of a fuller explanation of the -- of the  
15    medical and surgical side of things. So  
16    I wasn't giving them psychiatric  
17    counseling, but basically offering them  
18    my experience as a plastic surgeon,  
19    wanting to know what the surgery's about,  
20    what the -- the hormone therapy that  
21    precedes the surgery's about, that sort  
22    of thing.

23           Q.     How many of these consultations

1 have you done, would you estimate?

2 A. Perhaps five or six, maybe more.  
3 Maybe -- yeah, five or six would be a  
4 fair number, I think.

5 Q. Over what years?

6 A. Perhaps the last three.

7 Q. Do you know how these parents  
8 know to reach out to you for these  
9 consultations?

10 A. It's -- I think maybe some of  
11 them were -- having heard about my public  
12 presentations at various venues. People  
13 hear about this plastic surgeon in  
14 Decatur who's raising objections, I  
15 guess. I don't know the particular  
16 details about how a particular patient  
17 might have come to me. I just -- I just  
18 always make myself available when people  
19 are anxious for their children and  
20 they're looking for an understanding of  
21 what transgender is about.

22 Q. What's the typical advice that  
23 you give to parents of children or

1 adolescents who are considering starting  
2 puberty blockers?

3 A. Well, my advice on that score is  
4 based on the -- on the world literature,  
5 that the desistance rate for their child,  
6 if they don't give them puberty blockers,  
7 the likelihood is that by the time they  
8 reach mid-adolescence, they have an 80  
9 percent likelihood of desisting in their  
10 cross-sex self-identification. And if  
11 you follow them into young adulthood,  
12 that percentage will be in the 90s.

13 But essentially, I recommend  
14 that they slow everything down, and I  
15 recommend against the use of puberty  
16 blockade because it's experimental and  
17 because the likelihood is very high -- in  
18 fact, if I had any medical procedure that  
19 gave me 90-plus percent success rate, I  
20 would consider that a great victory.  
21 So -- so that's -- that's what I speak to  
22 them about.

23 That -- that desistance data is



1 a very important thing for parents to  
2 understand. And very often, the patient  
3 -- the parents are experiencing  
4 tremendous pressure from the people  
5 they've seen in consultation, a  
6 tremendous pressure. And usually, the  
7 parents are very distressed about what  
8 they're hearing, particularly the -- the  
9 fear of suicide and self-harm.

10 Q. Yeah.

11 A. So --

12 Q. You encourage -- yeah, no, I got  
13 it. You encourage patients of children  
14 who -- or adolescents who experience  
15 gender dysphoria not to start them on  
16 puberty-blocking drugs; fair?

17 MR. KNEPPER: Objection, form.

18 A. Yeah, I discourage the use of  
19 puberty blockade for anything other than  
20 precocious puberty or other  
21 endocrinopathies.

22 Q. And you also discourage them  
23 from pursuing surgical procedures for

1 gender dysphoria; correct?

2 MR. KNEPPER: Objection, form.

3 A. Correct.

4 Q. When you do these consultations,  
5 do you talk just to the parents or to the  
6 children as well?

7 A. Both, yeah. I like to meet the  
8 children and -- and -- and get to know  
9 them, yeah.

10 Q. And do you convey the same  
11 message to the children? Don't start  
12 puberty blockers; don't start -- don't do  
13 any surgical procedures?

14 MR. KNEPPER: Objection.

15 A. I -- I generally don't -- I'm  
16 sorry. I generally don't speak about the  
17 details of therapy to children. I speak  
18 to their parents.

19 Q. How many children do you think  
20 you have consulted with specifically?

21 A. On this -- on this issue?

22 Q. Yes.

23 A. As I say, maybe six. I often --

1 well, yeah, I would say six is a good  
2 number.

3 Q. Do you know how many of them  
4 went on to start hormone-blocking  
5 therapy, if any?

6 A. I don't. I don't know the  
7 answer to that question. Yeah, I don't.

8 Q. Do you know how many of them, if  
9 any, went on to start cross-sex hormone  
10 therapy?

11 A. I don't know the answer to that  
12 question, no.

13 Q. You don't know how many of them  
14 went on to do any kind of surgical  
15 gender-affirming procedures?

16 A. No.

17 Q. You haven't done any follow-up  
18 with any of these families that you've  
19 consulted?

20 A. As I say, this was an informal  
21 thing, so. Yeah. So no, I -- I haven't  
22 followed up long-term. This has -- as I  
23 say, this has happened over the last

1 perhaps three years. And so the general  
2 course of events there is -- is typically  
3 longer than that, so. But I have not  
4 seen -- well, I have seen one -- one  
5 child twice, actually, with the parents.  
6 And actually -- okay. So -- so perhaps  
7 she would be an exception.

8 She was sort of headed in the  
9 direction of seeking puberty blockade.  
10 And then in our meetings, she has sort of  
11 given that up. She was under a lot of  
12 pressure at school, you know, being  
13 pressured by boys because she was  
14 starting to develop secondary sex  
15 characteristics, and she developed a  
16 tremendous anxiety about it. And someone  
17 had told her that -- that if she went  
18 through transition care, that that would  
19 be avoided. And I had a conversation  
20 with her parents, I had a conversation  
21 with her, and essentially just encouraged  
22 her to slow down and sort of examine her  
23 other options. And I think within about

1       seven months, she came back to me, and  
2       she's not even thinking along those lines  
3       any longer. In fact, now she's talking  
4       about what high school she wants to go  
5       to, so.

6           Q.     Okay. So this is one child who  
7       was considering, or whose parents were  
8       considering starting puberty-blocking,  
9       but after consultation with you, decided  
10      not to; right?

11          A.     I think that she -- yeah.

12                 MR. KNEPPER:   Objection to form.

13                 MR. TISHYEVICH:   Okay. All  
14      right off the record.

15                 THE VIDEOGRAPHER:   This is the  
16      end of Media Unit No. 2. We are off the  
17      record at 11:06 a.m.

18                         (Break taken.)

19                 THE VIDEOGRAPHER:   This is the  
20      beginning of Media Unit No. 3. We are on  
21      the record at 11:16 a.m.

22           Q.     (By Mr. Tishyevich) Doctor, you  
23      know what facial feminization surgery is;

1 right?

2 A. Yes, I do.

3 Q. You have never performed facial  
4 feminization surgery for any transgender  
5 patient; correct?

6 A. Correct.

7 Q. You know what facial  
8 masculinization surgery is?

9 A. Yes.

10 Q. You have never performed that  
11 for any transgender patient; correct?

12 A. Correct.

13 Q. Do you know what transfeminine  
14 top surgery is?

15 A. Yes.

16 Q. You have never performed that on  
17 a transgender patient?

18 A. No.

19 Q. How about a chest reconstruction  
20 surgery? Have you performed that on a  
21 transgender patient?

22 A. No.

23 Q. You have never performed a

1       vaginoplasty for a transgender patient?

2           A.     No.

3           Q.     You have never performed a  
4       metoidioplasty for any transgender  
5       patient?

6           A.     No.

7           Q.     You've never performed what's  
8       colloquially known as bottom surgery for  
9       any transgender patient; correct?

10          A.     Correct.

11          Q.     Fair to say you've never  
12       performed any kind of gender-affirming  
13       surgery in transgender patients; right?

14          A.     Correct.

15          Q.     And fair to say you don't have  
16       recent and substantive experience in  
17       performing gender-affirming -- -affirming  
18       surgery for transgender patients;  
19       correct?

20               MR. KNEPPER:    Form.

21          A.     I have -- I have substantive  
22       experience with all the actual -- the  
23       nature of the particular operations but

1       never performed for transgender patients  
2       to transition them, no. But the  
3       operations themselves as used in  
4       reconstruction, I have considerable  
5       experience with.

6           Q.     We talked earlier about the  
7       American Society of Plastic Surgeons.  
8       You recall that?

9           A.     I do.

10          Q.     You know that the ASPS has a  
11       code of ethics?

12          A.     Yes.

13          Q.     And you know that members are  
14       required to comply with the code of  
15       ethics; right?

16          A.     Yes.

17          Q.     And I know you're not a member  
18       now, but you were a member of the ASPS  
19       for a considerable amount of time; right?

20          A.     Yes.

21          Q.     And I assume during that time,  
22       you followed the ASPS code of ethics;  
23       right?



1           A.     To my knowledge, I never  
2     violated it.   Yes.

3           Q.     When was the last time you  
4     reviewed it?

5           A.     I'm sorry, did I lose the sound  
6     here?

7           Q.     When was the last time you  
8     reviewed the ASPS code of ethics?

9           A.     Oh, gosh.   Years ago.   Years  
10    ago.

11          Q.     Let me introduce an exhibit.  
12                 Let me ask you this first.   Are  
13    you aware that the ASPS code of ethics  
14    had some specific rules for members who  
15    provide expert testimony?

16          A.     Yes.

17          Q.     Okay.   You didn't review those  
18    provisions before you formed your expert  
19    opinions in this case?

20          A.     No.

21          Q.     Sitting here today, do you know  
22    if your opinions in this case are in  
23    compliance with what the ASPS code of

1 ethics says about members who provide  
2 expert testimony?

3 A. I'm not aware that I've violated  
4 them in any way, yeah.

5 Q. Let me introduce an exhibit.  
6 Okay. Let me know when you have it.  
7 (Exhibit 10 was marked for identification  
8 and is attached.)

9 A. Okay.

10 Q. It's still opening on my end.  
11 Okay. So, Exhibit 10 is the  
12 Code of Ethics of the American Society of  
13 Plastic Surgeons. You see that?

14 A. I do.

15 Q. The bottom left corner says,  
16 "Updated September 25, 2017." See that?

17 A. I do.

18 Q. That's when you were still an  
19 active member of the ASPS; right?

20 A. Yeah, that's right.

21 Q. Go to page 4.

22 A. I think I'm on page 4 here.  
23 They're not numbered. Oh, here we are,

1       yes.

2           Q.     Or I'm sorry, page 6.

3           A.     Page 6.

4           Q.     Section IV.

5           A.     Section IV, yes.

6           Q.     Section IV is "Expert  
7     Testimony"; right?

8           A.     Yes.

9           Q.     I want to focus you on the last  
10    two sentences of this first paragraph.  
11    It says, "Members whose testimony,  
12    including testimony as to credentials or  
13    qualifications, is false, deceptive, or  
14    misleading may be subject to disciplinary  
15    action, including expulsion." You see  
16    that?

17          A.     Yes.

18          Q.     The next sentence says, "Further  
19    to help limit false, deceptive and/or  
20    mislead" -- "misleading testimony,  
21    Members serving as expert witnesses  
22    must," and then there's a list of  
23    requirements. You see that?

1           A.     I do.

2           Q.     Okay.   So "must" means this is a  
3           mandatory rule, not an optional  
4           suggestion; right?

5                   MR. KNEPPER:   Objection, form.

6           A.     I expect that's what it means,  
7           yes.

8           Q.     All right.   Let's look at these  
9           rules.   Number 1 says that members  
10          serving as expert witnesses must "Have  
11          recent and substantive experience (as  
12          defined in the Glossary of the Code) in  
13          the area in which they testify,  
14          including, without limitation, experience  
15          in the relevant subspecialty or the  
16          particular procedure performed on the  
17          plaintiff."

18                   Do you see that?

19          A.     I do.

20          Q.     All right.   Without looking at  
21          the glossary, do you know, sitting here  
22          today, how the glossary defines "recent  
23          and substantive experience"?

1           A.     I don't.

2           Q.     Okay.   Why don't we look at that  
3 definition together.   Go to page 8.

4           A.     Okay.

5           Q.     See there's subsection F?

6           A.     Yes.

7           Q.     All right.   Read that definition  
8 to yourself, and tell me when you're  
9 done.

10          A.     Okay.

11                   (Witness reviews document.)

12          A.     Okay.

13          Q.     To be able to provide expert  
14 testimony -- well, strike that.

15                   Let me focus you on the very  
16 last part of this definition.   Okay.   To  
17 be able to provide expert testimony about  
18 a particular surgical procedure, the ASPS  
19 Code of Ethics requires a surgeon to have  
20 performed a specific procedure in  
21 question within three years of being  
22 retained as an expert witness; correct?

23          A.     That's what it says, yes, sir.

1 MR. KNEPPER: Objection, form.

2 Q. All right. Now, as we've just  
3 discussed, you personally have not  
4 performed any kind of facial  
5 masculinization surgery in the last three  
6 years; correct?

7 MR. KNEPPER: Objection, form.

8 A. Correct.

9 Q. Any kind of facial feminization  
10 surgery; right?

11 A. Correct.

12 MR. KNEPPER: Objection, form.

13 Q. Vaginoplasty; right?

14 MR. KNEPPER: Objection, form.

15 A. Correct.

16 Q. Metoidioplasty; right?

17 MR. KNEPPER: Objection to form.

18 A. Correct.

19 Q. You personally have not  
20 performed any kind of gender-affirming  
21 surgical procedure on a transgender  
22 patient in the last three years; correct?

23 MR. KNEPPER: Objection, form.

1           A.     I have never performed such  
2     procedures.

3           Q.     All right. Well, given that you  
4     have not ever personally performed any  
5     kind of surgical procedures in the last  
6     three years, I take it you're not  
7     offering expert opinions on any of these  
8     surgeries because doing so would be  
9     inconsistent with the ASPS code of  
10    ethics; right?

11               MR. KNEPPER: Objection, form.

12           A.     Well, so the ethics that informs  
13    my opinion here is I don't derive from  
14    the ASPS, nor am I subject to their --  
15    their -- what's the word I'm looking  
16    for -- their sanctions, I guess, would be  
17    the correct word. The expert opinion I  
18    offer here is not on -- on complications  
19    of an operation that might enter into a  
20    litigation. In terms of the -- you know,  
21    I guess the -- the question at hand here  
22    is transition surgery, the bigger  
23    picture. I certainly make record of --

1 of the known complications as available  
2 in the literature. And in my testimony,  
3 I did a literature review on the  
4 complications of particular surgeries.

5 But I don't do these operations  
6 for a reason, and the reason I don't do  
7 these operations is ethical based on my  
8 knowledge of the science. I don't derive  
9 my ethical decision-making from the ASPS,  
10 and this is one of the reasons why,  
11 again, I have no heartburn about having  
12 withdrawn my membership. I have great  
13 issue with -- with the idea that a  
14 professional organization would encourage  
15 or sanction these operations given the  
16 world literature.

17 Q. Your opinion -- your -- strike  
18 that.

19 Your expert report does offer  
20 some opinion, or purports to offer some  
21 opinions about surgical risks of some of  
22 these gender-affirming surgical  
23 procedures, does it not?



1           A.     Yes.   Based on my -- my  
2           experience in microvascular surgery, on  
3           flap reconstruction of the perineum, for  
4           example, flap reconstruction of the chest  
5           or the -- or the genital area in  
6           treatment for traumatic injuries and  
7           things.   So the operations themselves,  
8           I'm quite familiar with.   I'm quite  
9           familiar with the complications that are  
10          peculiar to free flap or local flap  
11          reconstructions.

12                 But as far as doing those  
13          operations for gender transitioning, I --  
14          I don't do those operations.   But the  
15          complications are the same: flap loss,  
16          flap necrosis, urinary fistulas.   All of  
17          those things I have -- I have experience  
18          with in managing trauma, in managing  
19          cancer, in managing infectious  
20          destruction of the genital area.   But  
21          I've never done the operation for  
22          transgender per se, correct.

23          Q.     And because you've never done

1 any of those procedures on transgender  
2 patients, can we agree that offering  
3 those opinions is inconsistent with the  
4 ASPS Code of Ethics?

5 MR. KNEPPER: Objection, form.

6 A. I would not agree with that.

7 Q. Does it bother you that you  
8 might be in violation of the Code of  
9 Ethics by offering these opinions?

10 MR. KNEPPER: Objection.

11 A. No. Not in the least.

12 Q. Do you think that a judge might  
13 be troubled by the fact that your  
14 professional organization, former  
15 professional organization, says you  
16 shouldn't be allowed -- you shouldn't be  
17 offering these kind of opinions?

18 MR. KNEPPER: Objection, form.

19 A. Yeah, I find -- I find the --  
20 the whole situation troubling, and I  
21 would hope that the judge would be  
22 troubled by it, yes.

23 Q. Okay. Yeah, no, I mean, I'm

1 asking a much more specific question.  
2 The judge is going to be asked to find  
3 whether your testimony is reliable. Do  
4 you think the judge might have some  
5 concerns if she -- if they were to  
6 conclude that the testimony you're  
7 offering in this case is not allowed  
8 under the code of ethics of the ASPS?

9 MR. KNEPPER: Objection, form.

10 A. I -- I -- I haven't thought  
11 about it.

12 Q. And you haven't thought about it  
13 because before today, you didn't know  
14 whether or not your testimony complies  
15 with the ASPS Code of Ethics; right?

16 MR. KNEPPER: Objection, form.

17 A. I was not -- I was not concerned  
18 with the ASPS Code of Ethics, for reasons  
19 we've discussed earlier.

20 Q. Did you know that -- did you  
21 know that the ASPS Code of Ethics  
22 prohibits members from offering expert  
23 testimony on topics in which they do not

1 have recent and substantive experience?

2 MR. KNEPPER: Objection, form.

3 A. Could you -- can you -- I want  
4 to make sure I answer your question and  
5 not something else. Could you offer me  
6 that question again, please?

7 Q. Before I showed you this code of  
8 ethics at your deposition today, were you  
9 aware that the ASPS Code of Ethics  
10 prohibits members from offering expert  
11 opinions on topics on which they do not  
12 have recent and substantive experience?

13 MR. KNEPPER: Objection, form.

14 A. Actually, I dreaded that such a  
15 -- such a fact would come to light. I  
16 have not read the -- the ethics code in  
17 recent years, as I said earlier. But  
18 I -- I have dreaded this evolution in the  
19 ethics of my former professional society,  
20 that they would consider transgender  
21 surgery the way they do.

22 I -- other -- aside from that, I  
23 was not concerned that I might be

1       violating the ethics of the society  
2       because in all my previous life, I have  
3       never violated the ethics of the society.  
4       And I don't -- at present, I don't  
5       consider my testimony to be a violation  
6       of this policy that we've read together.

7           Q.     I understand. All right. Let's  
8       switch gears. You know what the WPATH  
9       is? The World Professional Association  
10      for Transgender Health?

11          A.     Yes.

12               MR. TISHYEVICH: And for the  
13      court reporter, it's W-P-A-T-H, all  
14      capital.

15          Q.     All right. You know that the  
16      WPATH publishes standards of care for the  
17      health of transgender people; right?

18          A.     They have a publication that  
19      they call the standards of care, yes.

20          Q.     And are you aware that they've  
21      been publishing those standards since  
22      1979?

23          A.     Yes.

1           Q.     The latest publicly available  
2     standard of care is Version 7; correct?

3           A.     Correct.

4           Q.     And that was published in 2012;  
5     right?

6           A.     That's right.

7           Q.     All right. Before you wrote  
8     your report, did you sit down and review  
9     the Standards of Care, Version 7 that  
10    you're criticizing?

11          A.     Yes, I did.

12          Q.     All right. You yourself are not  
13    part of the WPATH; correct?

14          A.     No, I am not.

15          Q.     You've never been part of the  
16    WPATH; right?

17          A.     I would never be part of the  
18    WPATH.

19          Q.     You've never advised the WPATH  
20    in any capacity; right?

21          A.     They've never asked my opinion.  
22    No.

23          Q.     You've never advised the WPATH

1 in any capacity; correct?

2 A. I have not.

3 Q. You personally have not been  
4 involved with the development of WPATH's  
5 Standards of Care, Version 7; correct?

6 A. Correct.

7 Q. You don't know what year the  
8 WPATH started working on Version 7;  
9 right?

10 A. My understanding was it was in  
11 2007, but I could be wrong. I think it  
12 was 2007. I think it was a five-year  
13 process, but I could be wrong on that.

14 Q. You don't know for sure?

15 A. I don't know for sure.

16 Q. You don't know how many  
17 different work groups at the WPATH were  
18 involved with working on Version 7;  
19 correct?

20 MR. KNEPPER: Objection, form.

21 A. In reading the -- the  
22 introduction to the document, the number  
23 nine pops into my mind, but I can't swear

1 to that.

2 Q. Okay. You don't know what kind  
3 of scientific literature the WPATH  
4 conducted as part of drafting Version 7;  
5 right?

6 A. As far as naming the particular  
7 papers that they may have reviewed, I  
8 can't do that for you because those  
9 are -- that happens in closed committee.  
10 I -- all I can say to you is my -- based  
11 upon my reading of the product and the  
12 verbiage that it's used, my suspicion is  
13 that it's pretty heavily weighted towards  
14 the American literature and -- and does  
15 not bring in particular document -- well,  
16 being that it was published in 2012, the  
17 big inflection point in 2011 probably  
18 wasn't available to the committee when  
19 they were writing that document.

20 So given that the document is  
21 already out of date and it's -- and the  
22 subsequent WPATH 8, no one knows when  
23 it's going to come out, yeah, it's --



1       it's almost -- it's almost irrelevant  
2       because of the change in the literature  
3       that happened since it was published, so.  
4       In particular, the 2011 article by  
5       Dhejne, Cecilia Dhejne, and -- and others  
6       that kind of changed the view of the  
7       scientific evidence.

8               So yeah, it's an out-of-date  
9       document by the standards of what are  
10      called standards of care. It's not a  
11      standards of care document. It's a --  
12      it's a treatment guideline document is  
13      really what it is, and it's a poorly  
14      supported treatment guideline at that,  
15      so -- gosh, I wandered off.

16             Did I -- did I answer your  
17      question?

18             Q.     Yeah, you anticipated my  
19      objection.

20             MR. TISHYEVICH:   Which, again,  
21      I'll move to strike most of that as  
22      nonresponsive.

23             Q.     Because here's my question.   You

1 don't personally know what kind of  
2 scientific literature the WPATH conducted  
3 as part of drafting Version 7; correct?

4 MR. KNEPPER: Objection, form.

5 A. No. Again, a closed session, so  
6 I don't know what documents they used.

7 Q. You don't know what kind of  
8 outside experts the WPATH may have  
9 consulted in drafting Version 7; right?

10 A. No.

11 Q. You don't know what kind of peer  
12 review the WPATH may have conducted as  
13 part of developing Version 7; right?

14 MR. KNEPPER: Objection, form.

15 A. No.

16 Q. You don't know what kind of  
17 public comments the WPATH may have  
18 solicited as part of developing Version  
19 7.

20 MR. KNEPPER: Objection, form.

21 Q. Right?

22 A. No.

23 Q. You don't know how many

1 different drafts the Version 7 went  
2 through before it was finalized; right?

3 A. No.

4 Q. You don't know how many  
5 different meetings or conferences the  
6 WPATH had to discuss the development of  
7 Version 7; right?

8 A. Correct.

9 Q. You have no idea what may have  
10 gone on during those meetings or  
11 conferences; correct?

12 MR. KNEPPER: Objection, form.

13 A. No. I was not a part of the  
14 conferences that produced the product.

15 Q. Yeah, you are not an expert in  
16 how Version 7 of the WPATH was developed;  
17 right?

18 A. Correct.

19 Q. And we can go through all these  
20 questions again individually for Version  
21 8, but maybe we can shortcut this.

22 A. Well, no one knows what's in  
23 Version 8 except the people who are in

1 the committee. It's a -- it's a  
2 privileged document. There's no one in  
3 plastic surgery who knows it apart from  
4 the people who serve as members of the  
5 WPATH, so that would be the case.

6 Q. Okay.

7 A. It's a -- it -- yeah.

8 Q. So just so we have it on the  
9 record, you don't hold yourself out as an  
10 expert on how Version 8 of the WPATH  
11 Standards of Care are currently being  
12 developed; fair?

13 A. Fair.

14 Q. Okay. We talked earlier about  
15 the DSM; right?

16 A. Yes.

17 Q. In your day-to-day practice, you  
18 don't use the DSM-5; correct?

19 A. No.

20 Q. But you do know the DSM-5 is  
21 widely used by psychiatrists; correct?

22 A. Yes.

23 Q. The DSM-5 was published in 2013;

1 correct?

2 A. I don't know the publication  
3 date, but it sounds about right.

4 Q. Do you know that it was  
5 developed by the American Psychiatric  
6 Association?

7 A. Yes.

8 Q. You're not a member of the APA;  
9 right?

10 A. Correct.

11 Q. You personally have not been  
12 involved with the development of DSM-5;  
13 right?

14 A. No.

15 Q. You don't know how many  
16 different working groups were involved  
17 with developing the DSM-5; right?

18 MR. KNEPPER: Objection, form.

19 A. Correct.

20 Q. You don't know how many  
21 different members those working groups  
22 had; right?

23 MR. KNEPPER: Objection, form.

1           A.     No.

2           Q.     Or how they were selected;  
3     right?

4                     MR. KNEPPER:   Objection, form.

5           A.     Correct.

6           Q.     You don't know how many  
7     different authors contributed to the  
8     development of DSM-5; correct?

9           A.     Correct.

10                    MR. KNEPPER:   Objection, form.

11           Q.     You don't know what kind of  
12     scientific literature review was done by  
13     different work groups as part of  
14     developing the DSM-5; correct?

15                    MR. KNEPPER:   Objection, form.

16           A.     Correct.

17           Q.     You don't know what kind of  
18     public comments the APA may have  
19     solicited in developing the DSM-5;  
20     correct?

21                    MR. KNEPPER:   Objection, form.

22           A.     Correct.

23           Q.     You don't know how many

1 different drafts the DSM-5 went through  
2 before it was finalized; correct?

3 MR. KNEPPER: Objection, form.

4 A. Correct.

5 Q. You don't know how many  
6 different meetings or conferences or  
7 telephonic conferences the working groups  
8 had to discuss the development of the  
9 DSM-5; right?

10 MR. KNEPPER: Objection, form.

11 A. Right.

12 Q. You have no idea what was  
13 discussed during any of those meetings;  
14 right?

15 A. Right.

16 Q. Let me ask you specifically  
17 about the Sexual and Gender Identity  
18 Disorders Work Group. First of all,  
19 before today, did you know that the APA  
20 had a Sexual and Gender Identity  
21 Disorders Work Group as part of the  
22 development of the DSM-5?

23 MR. KNEPPER: Objection, form.

1           A.     Yes.

2           Q.     Do you know how many members  
3 were in that work group?

4           A.     No.

5           Q.     You don't know --

6                   MR. KNEPPER:  Objection.

7           Q.     -- how those members were  
8 selected; right?

9                   MR. KNEPPER:  Objection to form.

10          A.     Correct.

11          Q.     You don't know their expertise;  
12 right?

13          A.     Correct.

14          Q.     You do not have expert firsthand  
15 knowledge of how the DSM-5 was developed;  
16 fair?

17                   MR. KNEPPER:  Objection, form.

18          A.     Fair.

19          Q.     Are you aware that the DSM-4  
20 used the term "gender identity disorder"  
21 instead of "gender dysphoria"?

22          A.     Yes.

23          Q.     Do you know the reason for that



1 change?

2 A. From DSM-4 to DSM-5?

3 Q. Yes.

4 A. Yes.

5 Q. What's the reason?

6 A. In reading the literature and  
7 reading the reports of perhaps people who  
8 served on the committee, because I don't  
9 know how else you would be privy to this  
10 information, there was a desire on the  
11 part of the APA to de-pathologize the  
12 condition, and they wanted to use  
13 terminology that didn't sound like  
14 medical diagnoses. It was the opinion of  
15 the members of that committee that --  
16 that transgenderism is only a diagnostic  
17 issue from the standpoint of the  
18 discomfort or the sorrow that the patient  
19 feels rather than any underlying  
20 pathology. So the -- the desire was to  
21 move those -- the diagnosis to change the  
22 language of diagnosis to de-pathologize  
23 it. But the problem that the committee

1 faces is that having done that, there's  
2 no mechanism for providing the services  
3 that they felt that the patients needed,  
4 so there had to be a diagnose -- a  
5 diagnostic code in order to get  
6 thirty-part -- third-party payers to pay.  
7 So it's a de-pathologize but maintain a  
8 diagnostic -- diagnostic code. That's my  
9 understanding of it.

10 Again, I wasn't there. But  
11 again, reading the writings of people who  
12 could only have gleaned it from having  
13 been present because it's closed session,  
14 that's my understanding.

15 Q. Understood. All right. Do you  
16 know what the Endo- -- Endocrine Society  
17 guidelines for treatment of  
18 gender-dysphoric or gender-incongruent  
19 persons are?

20 A. Do I know what they are?

21 Q. Yeah.

22 A. Yes.

23 Q. Do you know when they were

1 initially published?

2 A. No.

3 Q. Do you know when they were last  
4 revised?

5 A. I think it was just a couple of  
6 years ago, but I don't know the exact  
7 date.

8 Q. If I tell you it's 2017, does  
9 that sound right?

10 A. That wouldn't -- it wouldn't  
11 surprise me if that were true. I -- just  
12 within the last couple of years. I think  
13 theirs are current, and the expectation  
14 is that these standards of care or  
15 treatment guidelines will have a  
16 five-year revision. So given that  
17 they're current, they couldn't be any  
18 older than, say, 2017. So I suspect that  
19 -- yeah.

20 Q. All right. Did you review the  
21 latest available version of those  
22 Endocrine Society guidelines before  
23 forming your opinions in this case?

1           A.     Yes.    I have read them, yes.

2           Q.     Okay.   You yourself are not part  
3 of the Endocrine Society; right?

4           A.     Correct.

5           Q.     Have never been part of that  
6 society; right?

7           A.     Correct.

8           Q.     You've never advised the  
9 Endocrine Society in any capacity;  
10 correct?

11          A.     Correct.

12          Q.     You personally were not involved  
13 with the development of these original  
14 guidelines; correct?

15          A.     That's correct.

16          Q.     Not personally involved with the  
17 development of the updated guidelines in  
18 2017; right?

19          A.     Correct.

20          Q.     Do you know how many people at  
21 the Endocrine Society were involved with  
22 those 2017 updates?

23          A.     I do not know that number.

1           Q.     And you don't know how they were  
2     selected to work on the 2017 updates;  
3     correct?

4           A.     Correct.

5           Q.     You personally don't know what  
6     kind of scientific literature review the  
7     Endocrine Society conducted in developing  
8     those updates; correct?

9           MR. KNEPPER:   Objection to form.

10          A.     Correct.

11          Q.     You don't know what kind of  
12     outside experts they may have used;  
13     right?

14          A.     What kind of outside experts?   I  
15     would imagine they were all  
16     endocrinologists.   Or are you asking did  
17     they have plastic surgeon input or --

18          Q.     Do you know specifically whether  
19     the Endocrine Society used any outside  
20     experts in updating the -- in  
21     implementing the 2017 updates?

22          A.     Well --

23          MR. KNEPPER:   Objection, form.

1           A.     I can only infer that they  
2           would, because such -- such statements,  
3           in order to be valid, demand review by  
4           outside parties to -- to obviate  
5           conflicts of interest, whether financial  
6           or professional. Those are all issues  
7           when generating standards of care, so of  
8           necessity, they would have had to have  
9           had outside experts to come in, yes.

10          Q.     Okay. Do you know what kind of  
11          public comments the Endocrine Society may  
12          have solicited as part of developing the  
13          2017 updates?

14          A.     I don't.

15                 MR. KNEPPER: Objection to form.

16          Q.     You don't know how many  
17          different drafts there were of those 2017  
18          updates before they were finalized;  
19          right?

20          A.     No.

21                 MR. KNEPPER: Objection to form.

22          A.     No, I don't.

23          Q.     Again, you haven't been to any

1 meetings or conferences or telephonic  
2 conferences where those 2017 updates were  
3 discussed, where the development of those  
4 2017 updates was discussed; correct?

5 MR. KNEPPER: Objection to form.

6 A. Correct.

7 Q. You don't know what went on  
8 during those meetings or conferences;  
9 right?

10 MR. KNEPPER: Objection, form.

11 A. I do not.

12 Q. You -- you're not an expert in  
13 how the Endocrine Society developed the  
14 original 2009 guidelines for treating  
15 gender dysphoria; correct?

16 MR. KNEPPER: Objection to form.

17 A. That's not -- that's not my area  
18 of expertise. That's correct.

19 Q. Right. And you're also not an  
20 expert in how the Endocrine Society then  
21 developed the 2017 updates back to those  
22 guidelines; correct?

23 A. Correct.

1 Q. Okay. All right. Now let's  
2 talk about puberty-blocking agents. What  
3 puberty blocker drugs are you aware of by  
4 name?

5 A. Well, Lupron is probably the  
6 most widely used one. They're -- they're  
7 all gonadotropin-releasing hormone  
8 agonists. They come by a variety of  
9 trade names. But gonadotropin-releasing  
10 hormone is the generic -- I'm sorry, the  
11 generic name for the drug that may appear  
12 under a variety of, you know, proprietary  
13 names, Lupron being the most commonly  
14 used.

15 Q. You've never prescribed Lupron;  
16 right?

17 A. No, I have never. No.

18 Q. You have never prescribed any  
19 puberty-blocking drugs of any kind;  
20 right?

21 A. No. That's not my area of  
22 expertise.

23 Q. Right. Have you ever looked at



1 the package -- strike that.

2 You know what a package insert  
3 is; right?

4 A. Yes.

5 Q. Have you ever looked at a  
6 package insert for Lupron?

7 A. Some time ago, but yes, I have.

8 Q. Okay. How recently do you  
9 think?

10 A. Gosh, it's probably more than  
11 four or five years ago. I think probably  
12 when I first started go -- you know,  
13 looking into this more carefully back in  
14 2014. It was probably that long ago.

15 Q. Do you know what Vantas is?  
16 V-A-N-T-A-S.

17 A. Oh, I've read that somewhere  
18 before. Let's see. Is it -- it's the  
19 adverse events reporting -- is that what  
20 I -- I don't --

21 Q. It's a type of drug.

22 A. Oh.

23 Q. So no, that doesn't sound

1 familiar?

2 A. It does not sound familiar, no.

3 Q. How about Triptodur?

4 T-R-I-P-T-O-D-U-R.

5 A. That sounds like a trade name

6 I'm not familiar with.

7 Q. Okay. Fensolvil?

8 F-E-N-S-O-L-V-I-L.

9 A. That sounds like a trade name

10 I'm not familiar with.

11 Q. Trelstar? T-R-E-L-S-T-A-R.

12 A. Same.

13 Q. All right. You're not an expert  
14 in the different types of prescription  
15 drugs that are used as puberty-blocking  
16 agents; fair?

17 A. I do not consider myself an  
18 expert in that area, no. I rely on  
19 experts.

20 Q. All right. You know that  
21 puberty blockers are typically prescribed  
22 by endocrinologists; right?

23 A. Yes. Pediatricians and

1       endocrinologists, yes.

2           Q.     Right.  You have no specialized  
3     training or expertise in endocrinology;  
4     correct?

5           A.     Correct.

6           Q.     You don't hold yourself out as  
7     an expert in endocrinology; correct?

8           A.     No, I do not.

9           Q.     You're not planning on offering  
10    any expert opinions in endocrinology in  
11    this case because that's outside your  
12    scope of expertise; right?

13          A.     Yes.

14                 MR. KNEPPER:  Objection to form.

15          Q.     All right.  Earlier, you said  
16    you have never prescribed  
17    puberty-blocking agents to anyone, so I  
18    take it you have no experience, no  
19    firsthand experience with advising your  
20    patients about potential risks and  
21    benefits of puberty blockers; right?

22                 MR. KNEPPER:  Objection, form.

23          A.     Well, I have talked to patients

1 -- well, families, really, about the  
2 risks of puberty blockers in -- in early  
3 puberty and into adolescence. I have  
4 because I've reviewed the literature and  
5 I've spoken with experts in the area.  
6 And so, is that the question --

7 Q. Yeah.

8 A. -- you're asking, have I spoken  
9 to anybody? Yeah, I have. I -- I have,  
10 again, knowing that -- for example, that  
11 the drug Lupron, as an example, is -- is  
12 -- is not cleared by the FDA for  
13 application. It's an off-label use when  
14 using it in the diagnosed condition of  
15 gender dysphoria. So I know that it's an  
16 off-label application of the drug, and I  
17 know what the effects of the drug are.  
18 But nobody knows what the effects of the  
19 drug are on otherwise normal children,  
20 and that's pretty much all I'd relate to  
21 the families on the -- on that subject.

22 I don't offer myself as an  
23 endocrinologist, but I offer myself as a

1       concerned physician who has spoken with  
2       the specialists and read the package  
3       insert.   Yes.

4           Q.     You think off-label use is  
5       improper; right?   That's the sense I got  
6       from reading your report.

7                   MR. KNEPPER:   Objection, form.

8           A.     Off-label use in certain  
9       situations.   So I use -- I use -- I have  
10      applied drugs' off-label use many times.  
11      But what the -- what the practitioner has  
12      to do is weigh the risk/benefit equation  
13      there and what is the expected goal and  
14      what are the likely risks.

15                   For example, I used Botox long  
16      ago in the treatment of -- of  
17      hyperhidrosis before the company that  
18      produces it got FDA clearance to use it  
19      that way.   The risk, very, very low risk;  
20      the potential benefit, very, very high.  
21      But in this case, we're talking about  
22      very significant risks for an unproven  
23      benefit.   So that's an example of how you

1       have to weigh off-label use.

2               And the FDA understands that,  
3       and they don't go after off-label use  
4       unless there's significant risk. And  
5       even then, they might not yet spring into  
6       action. It's a pretty slow-moving  
7       organization.

8       Q.     All right. We'll come back to  
9       that.

10      A.     Okay.

11      Q.     You never sat in on any  
12      appointment where an endocrinologist  
13      prescribed a puberty-blocking drug to a  
14      patient; correct?

15      A.     I have never.

16               MR. KNEPPER: Objection, form.

17      Q.     You personally don't know what  
18      endocrinologists typically tell their  
19      patients about risks and benefits of  
20      puberty blockers; right?

21               MR. KNEPPER: Objection, form.

22      A.     Only what I have read in the  
23      record. For example, the plaintiffs'

1 records, I -- I -- I believe I have read  
2 that -- that kind of consultation, yeah.  
3 But I -- but I wasn't present in the  
4 room, if that's what your question is.

5 Q. Yeah. You don't know what was  
6 actually communicated to the patient;  
7 correct?

8 A. Only what was entered in the  
9 record, yeah, the medical record.

10 Q. And just as a more -- outside of  
11 these plaintiffs, as a more general  
12 matter, you don't personally know what  
13 endocrinologists tell their patients  
14 about potential risks and benefits of  
15 puberty blockers because you're not  
16 present on those prescribing decisions;  
17 right?

18 MR. KNEPPER: Objection, form.

19 A. Well, if -- I assume that they  
20 follow the same sort of process that  
21 every other medical professional does  
22 when getting consent for -- for therapies  
23 of various kinds. And so to offer

1 informed consent to a -- in this case,  
2 perhaps a family, parents, that informed  
3 consent would have to include -- in order  
4 to be valid, it would have to include the  
5 potential risks that are enumerated in  
6 the package insert. And then they would  
7 also, in certain cases, have to enumerate  
8 risks that may not be in the package  
9 insert but may be expected given the --  
10 the particular case of their child or the  
11 particular patient.

12 So we all have to follow that  
13 same general standard, and so to that  
14 extent, I have some knowledge of what  
15 they would be saying. But the particular  
16 words or the particular things they may  
17 have emphasized, I have no -- no personal  
18 knowledge of.

19 Q. Your general expectation is that  
20 before a doctor prescribes the drugs,  
21 they will at least inform the patients of  
22 the risks as specifically enumerated in  
23 the drug labeling; right?



1           A.     Among other things, yes.

2           Q.     And the doctor may also go  
3     beyond the labeling and advise them of  
4     potential risks even though they're not  
5     specifically disclosed in the drug  
6     labeling; right?

7           A.     Yes.    Because there -- there are  
8     circumstances wherein the underlying  
9     conditions of the patient may -- may  
10    cause particular risks in particular  
11    areas, so that's right.

12                    So there's the general  
13    precautions that are included in the  
14    package insert, but they usually tend to  
15    be exhaustive.    They -- they list in the  
16    package inserts even remote  
17    possibilities, so.    But most physicians  
18    can't drill down into those details with  
19    a patient.    You don't want to overwhelm  
20    the patient and their family with those  
21    minute details.    You want to talk about  
22    the major risks and then the risks that  
23    are peculiar to the patient because of

1       their underlying condition. And that's  
2       generally what everybody does.

3           Q.     Yeah.

4           A.     Although, again, I'm not present  
5       in every office on every occasion, but  
6       that's generally how we're trained to  
7       conduct a consent.

8           Q.     Do you know -- are you aware  
9       that patients who are prescribed  
10      puberty-blocking agents are typically  
11      monitored through blood tests and lab  
12      work?

13                  MR. KNEPPER:  Objection, form.

14          A.     It -- I don't -- I'm not  
15      familiar in all cases to what extent  
16      they're monitored. My hope is that  
17      they're being monitored. I would expect  
18      that they're being monitored.

19          Q.     Yeah. And you don't have  
20      experience with monitoring patients who  
21      undergoing treatment with puberty  
22      blockers; right?

23          A.     No.

1           Q.     And you don't have experience  
2     with reviewing blood work, labs, what's  
3     normal, what's not, anything in that  
4     field; right?

5                     MR. KNEPPER:   Objection to form.

6           A.     Oh, no, I am familiar with  
7     reviewing labs and interpreting  
8     laboratory data --

9           Q.     Sorry.

10          A.     -- as it pertains -- yeah.

11          Q.     Sorry. Let me make -- make my  
12     question more specific. I'm still  
13     talking about patients who are treated  
14     with puberty-blocking agents.

15          A.     Okay.

16          Q.     For those patients in  
17     particular, you don't have experience  
18     with reviewing their blood work, labs to  
19     see -- to check their hormone levels and  
20     see if any adjustments are needed; right?

21                     MR. KNEPPER:   Objection, form.

22          A.     No. I have some familiarity  
23     with the interpretation of hormone levels

1 in endocrinology. As a -- as a general  
2 surgeon and a critical care doctor, these  
3 issues were very important to me for a  
4 number of years. So I'm familiar with  
5 that, although I haven't monitored  
6 patients receiving puberty blockers or  
7 cross-sex hormones per se. So generally,  
8 I am familiar with -- with that and the  
9 ramifications of endocrinopathies, again,  
10 because I had considerable experience  
11 with management of critical care patients  
12 and -- yeah.

13 Q. Yeah. My question is more  
14 specific.

15 A. Okay.

16 Q. You personally have not  
17 monitored blood work from patients who  
18 are undergoing puberty-blocking agents;  
19 right?

20 A. Correct.

21 Q. Okay. And you mentioned  
22 cross-sex hormones. You know what those  
23 are; right?

1           A.     Yes.

2           Q.     For transgender women, estrogen  
3           is a hormone that's typically prescribed;  
4           right?

5           A.     Yes.

6           Q.     For transgender men,  
7           testosterone is the hormone that's  
8           typically prescribed; right?

9           A.     Right.

10          Q.     You've never prescribed  
11          cross-sex hormones for treatment of  
12          gender dysphoria to anyone; correct?

13          A.     Correct.

14          Q.     You have no firsthand experience  
15          with advising your patients about  
16          potential risks and benefits of cross-sex  
17          hormones when used for treatment of  
18          gender dysphoria; correct?

19          A.     Correct.

20          Q.     You personally don't know what  
21          doctors who do prescribe estrogen or  
22          testosterone to their patients for gender  
23          dysphoria tell those patients about the

1 risks and benefits of that treatment;  
2 correct?

3 MR. KNEPPER: Objection, form.

4 A. I would answer that question as  
5 we did earlier, that my expectation would  
6 be that they would cover the -- the risks  
7 and benefits of that -- of that  
8 particular therapy and that the  
9 exploration of potential risks would  
10 include the major points that are  
11 contained in the package insert and  
12 whatever particular risks that the  
13 patient may have because of their  
14 underlying conditions, medical conditions  
15 that may impinge upon them. That would  
16 be my expectation.

17 Q. Okay. So for testosterone and  
18 estrogen when used to treat gender  
19 dysphoria, you would generally expect  
20 doctors to at least give the warning  
21 about -- that's in the labeling and  
22 potentially give additional warnings  
23 outside of that as well; fair?

1 MR. KNEPPER: Objection to form.

2 A. That would be my -- that would  
3 be my expectation.

4 Q. All right. We started talking  
5 about off-label use, so let's circle back  
6 to that. So in your report, you  
7 criticize Dr. Brown and Dr. Schechter for  
8 not disclosing that the FDA has not  
9 approved these hormones for treatment of  
10 gender dysphoria. Do you recall that?

11 A. Yes. My testimony, yes, I do  
12 recall that.

13 Q. All right. Off-label use is  
14 when a doctor prescribes a drug outside  
15 of its FDA-approved indication; correct?

16 A. Correct.

17 Q. And we touched earlier on  
18 whether it's proper or improper to  
19 prescribe drugs on an off-label basis.  
20 There are circumstances where it is  
21 appropriate to prescribe a drug on an  
22 off-label basis; correct?

23 A. Yes.

1           Q.     It's a case-by-case decision;  
2     right?

3                     MR. KNEPPER:   Objection, form.

4           A.     Yes.

5           Q.     It's a case-by-case decision  
6     that's made between the doctor and their  
7     patient; right?

8                     MR. KNEPPER:   Objection, form.

9           A.     Right.

10          Q.     You're not expressing the  
11     opinion that doctors should not be  
12     prescribing drugs on an off-label basis  
13     ever; right?

14          A.     I'm expressing the opinion that  
15     -- that drugs that have massive potential  
16     side effects should not be off-label  
17     prescribed unless those risks warrant --  
18     I mean, those risks are warranted given  
19     the underlying condition of the patient  
20     and that the patient is being treated as  
21     a -- as a -- as a trial or an  
22     experimental patient with ethics  
23     monitoring and all the rest of it that



1 attends.

2 The reason why off-label use is  
3 problematic is because it doesn't have a  
4 body of proven scientific evidence that  
5 the FDA has made use of in order to -- to  
6 warrant the use of the drug. So if  
7 you're going to go off label, again, the  
8 risks have to be low. If the condition  
9 you're treating makes -- makes the risks  
10 high, then that's where you have to get  
11 into ethics panels and experimental  
12 trials and things like that. I think  
13 that's at the heart of this issue.

14 We're dealing with a condition  
15 where the application of these drugs is  
16 not proven and the risks are very high,  
17 and that's where my concern lay.

18 Q. Do you think that off-label use  
19 of prescription drugs is, by definition,  
20 investigational?

21 A. To the extent that very often  
22 the -- the use of -- the off-label use of  
23 drugs begins on the basis of anecdotal

1 reports. So anecdotal reports, again,  
2 are categorized as level 5 evidence. And  
3 -- and so when those reports are  
4 published and -- and the risks are seen  
5 as low, then other physicians may begin  
6 the off-label use of those drugs.

7 But generally, one wants to  
8 progress to a more definitive scientific  
9 evidence, like level 4 evidence where  
10 there's a pre-application test, the use  
11 of the drug, and a post-application test,  
12 or level 3 where you're looking at  
13 longitudinal data to confirm not only the  
14 safety but the efficacy of the  
15 application of the drug.

16 In the case of the use of  
17 puberty blockade and cross-sex hormones,  
18 it doesn't exist beyond level 5 evidence  
19 even though the treatment has now been  
20 going on off-label for more than a  
21 decade, if not approaching twenty years.

22 Q. All right. You mentioned  
23 doctors are prescribing on an off-label

1 basis after there's case reports. It  
2 does happen that doctors prescribe drugs  
3 on an off-label basis based on nothing  
4 more than case reports; right?

5 A. That's how it always begins,  
6 yeah.

7 Q. Yeah. The FDA doesn't say  
8 that's not permissible, do they?

9 A. No, they don't.

10 Q. Okay.

11 A. I don't know. I don't know what  
12 the FDA -- if there's a published policy  
13 about that. I would suspect not, given  
14 the history in my lifetime of people  
15 off-label using, for example, asthma  
16 medications for the treatment of breast  
17 implant encapsulation, that kind of  
18 stuff. That's an example of a very  
19 benign drug being used off-label to treat  
20 a surgical condition of breast implant  
21 encapsulation. So that's my personal  
22 experience. I suspect there isn't an FDA  
23 policy that utterly prohibits it. I

1 would agree, yeah.

2 Q. Okay. The FDA is the federal  
3 agency that regulates prescription drugs;  
4 correct?

5 A. Food and drugs, yes.

6 Q. And they decide whether a  
7 particular drug can be marketed for a  
8 particular indication; correct?

9 A. Right.

10 MR. KNEPPER: Form.

11 Q. And one of the areas of  
12 oversight the FDA has is the safety of  
13 prescription drugs; right?

14 A. Right.

15 Q. Before forming your opinions in  
16 this case, did you investigate what  
17 position the FDA takes on off-label use  
18 of drugs?

19 A. No, I did not.

20 Q. Sitting here today, do you know  
21 what that position is?

22 A. I do not, no.

23 Q. Do you know whether the expert

1       opinions you're expressing about  
2       off-label use of drugs are consistent or  
3       inconsistent with what the -- what the  
4       FDA has said about off-label use?

5               MR. KNEPPER:  Objection, form.

6               A.     I remember when the controversy  
7       about the use of Singulair in breast  
8       implant capsules came up.  That was  
9       discussed at an ASPS meeting and then  
10      some articles that came out.  And I think  
11      I recall from those -- either the  
12      conference or the article that the FDA  
13      takes a permissive attitude where risk is  
14      low.

15              Q.     You think the FDA only allows  
16      off-label use of prescription drugs when  
17      the risk is low?

18              A.     I don't know that for a fact.

19              Q.     All right.

20              A.     I would -- I would hope.  I  
21      would hope low risk/high benefit.  So --  
22      so again, it's an equation, it's not just  
23      a one-sided thing.  So it isn't just the

1 risk but also the potential benefits.  
2 And the potential benefits have to be  
3 very high. The higher the risk is, the  
4 higher the benefit has to be. And that's  
5 kind of a general principle of the  
6 medical care. You know, before all else,  
7 do no harm. That's what informs all  
8 medical care, and I would hope that's  
9 what informs the FDA policy, whatever  
10 that may be.

11 Q. Okay. Well, let's look at the  
12 policy.

13 A. Okay.

14 Q. I'm going to introduce another  
15 exhibit. Okay. This is going to be  
16 Exhibit 11. Let me know when you have  
17 it.

18 (Exhibit 11 was marked for identification  
19 and is attached.)

20 A. Okay.

21 Q. Have you ever seen this document  
22 before?

23 A. I have not.

1           Q.     Do you know what the Federal  
2 Register is?

3           A.     It's a -- it's a federal list of  
4 regulations pertaining to things like  
5 this.

6           Q.     Yeah. It's the  
7 official publication --

8           A.     Federal code.

9           Q.     -- of federal rules, proposed  
10 rules, and notices for federal agencies;  
11 right?

12          A.     Yeah. Right.

13          Q.     I see this is dated at the top  
14 November 18, 1994. See that?

15          A.     Yes.

16          Q.     Page 1, middle column, see it  
17 says, "Agency: Food and Drug  
18 Administration, HHS"?

19          A.     Let's see. "Agency: Food and  
20 Drug Administration, HHS." Yes.

21          Q.     It says, "Action." It says,  
22 "Notice; request for comments." Do you  
23 see that?

1 A. Yes.

2 Q. All right. Go to page 2.

3 A. Okay.

4 Q. In the column all the way to the  
5 right, you see there's a section II, and  
6 it's titled, "FDA Policy on Promotion of  
7 Unapproved Uses." Do you see that?

8 A. I do.

9 Q. All right. The first paragraph  
10 says, "Over a decade ago, the FDA Drug  
11 Bulletin informed the medical community  
12 that 'once a [drug] product had been  
13 approved for marketing, a physician may  
14 prescribe it for uses or in treatment  
15 regimens of patient populations that are  
16 not included in approved labeling.'" Do  
17 you see that?

18 A. I do.

19 Q. What do you understand that to  
20 mean?

21 A. That --

22 MR. KNEPPER: Objection.

23 A. I apply that to mean that --



1       that the -- that the FDA does not -- does  
2       not intend to weigh in on off-label use,  
3       you know, without restriction, I guess.  
4       The sense I get of it is that they're --  
5       they're declining to prohibit the  
6       off-label use in -- in other patients at  
7       this time, I would -- I would guess. I  
8       suppose that if they started to see  
9       complications, they might weigh in. This  
10      has been the history, for example, with  
11      nausea medicines and things like that  
12      that created problems after use.

13       Q.     At that time at least, the FDA  
14      was telling the medical community that  
15      doctors may prescribe drugs for uses  
16      outside of FDA-approved indications;  
17      correct?

18       A.     Yes. I would say that --

19              MR. KNEPPER: Objection, form.

20       A.     -- in 1994, the FDA declined to  
21      -- to -- I don't know what they've done  
22      subsequently. I -- but -- but in 1994,  
23      they -- they -- off-label use was not

1 prohibited.

2 Q. Well, actually --

3 A. They finally --

4 Q. Sorry, finish.

5 A. No, go ahead.

6 Q. Well, you see this actually  
7 says, "The publication further stated,"  
8 and then there's a quote. And after the  
9 quote, there's a Footnote 4.

10 Before we get to that, do you  
11 see it says -- it cites to the FDA Drug  
12 Bulletin from 1982.

13 A. Right.

14 Q. Right?

15 A. Right.

16 Q. So that original guidance came  
17 from a 1982 FDA position; right?

18 A. Right.

19 MR. KNEPPER: Objection, form.

20 Q. And you say that you read this  
21 and you don't think that the FDA has  
22 taken a position, but let's see what else  
23 that quote says. You see the quoted

1 language starting with "The publication  
2 further stated"? Do you see that?

3 A. That starts with the word  
4 "unapproved"?

5 Q. Yeah. It says, "'unapproved'  
6 or, more precisely, 'unlabeled' uses may  
7 be appropriate and rational in certain  
8 circumstances, and may, in fact reflect  
9 approaches to drug therapy that have been  
10 extensively reported in medical  
11 literature." Do you see that?

12 A. I do.

13 Q. You understand what that means;  
14 right?

15 MR. KNEPPER: Objection to form.

16 A. Yes. Yes.

17 Q. Off-label use -- strike that.

18 The FDA has recognized as early  
19 as 1982 that off-label use may be based  
20 on medical literature, not published  
21 indications; right?

22 A. Right.

23 Q. And then it says, "Valid new

1       uses for drugs already on the market are  
2       often first discovered through  
3       serendipitous observations and  
4       therapeutic innovations, subsequently  
5       confirmed by well-planned and executed  
6       clinical investigations." Right?

7           A.     Yeah. That's -- that's kind of  
8       a -- just a restating of what I related  
9       to you about, for example, the use of  
10      Botox and hyperhidrosis, as I have done.  
11      Yeah, I would totally agree with that.

12          Q.     And then it says, "The agency  
13      and its representatives have restated  
14      this policy on numerous occasions." Do  
15      you see that?

16          A.     I do.

17          Q.     Do you understand that for  
18      decades, for three decades at least, the  
19      FDA has taken the position that  
20      physicians are allowed to prescribe drugs  
21      on an off-label basis?

22                  MR. KNEPPER: Objection, form.

23          A.     Yes.

1           Q.     Your report doesn't acknowledge  
2           this longstanding position from the FDA,  
3           does it?

4           A.     My report does not -- no, it  
5           does not.

6           Q.     And I mean, I know I just heard  
7           you say, well, maybe this is from the  
8           '80s. Let me show you what the FDA says  
9           today.

10          A.     Okay.

11          Q.     I'm going to introduce another  
12          exhibit. This is Exhibit 12. Let me  
13          know when you get it.  
14          (Exhibit 12 was marked for identification  
15          and is attached.)

16          A.     Okay. All right. I've got it.

17          Q.     All right. You see that this is  
18          a printout from fda.gov, the official  
19          website of the FDA; right?

20          A.     Right.

21          Q.     The title is "Understanding  
22          Unapproved Use of Approved Drugs 'Off  
23          Label.'" Right?

1           A.     Right.

2           Q.     Go to page 2.

3           A.     Okay.

4           Q.     Toward the bottom, it says in  
5     bold, "Why might an approved drug be used  
6     for an unapproved use?" Do you see that?

7           A.     I do.

8           Q.     Then it says, "From the FDA  
9     perspective, once the FDA approves a  
10    drug, healthcare providers generally may  
11    prescribe the drug for an unapproved use  
12    when they judge that it is medically  
13    appropriate for their patient." Do you  
14    see that?

15          A.     I do.

16          Q.     And then skipping one sentence,  
17    it says, "One reason is that there"  
18    may -- "might not be an approved drug to  
19    treat your disease or medical condition."  
20    Right?

21          A.     Right.

22          Q.     So the FDA -- the position that  
23    the FDA takes is off-label use may be

1 medically appropriate for patients;  
2 right?

3 A. Right.

4 Q. That's a position they've taken  
5 for thirty years plus; right?

6 A. Right.

7 MR. KNEPPER: Objection, form.

8 Q. All right. And we talked  
9 earlier about, you know, is off-label use  
10 experimental or investigational. Before  
11 forming those opinions, did you look to  
12 see what the FDA says on that point?

13 A. How the FDA classifies  
14 experimental or investigational?

15 Q. Do you know what position the  
16 FDA takes on whether off-label use is  
17 considered investigational?

18 A. I don't know what their official  
19 position is, no.

20 Q. All right. Let's look at that.  
21 All right. This is going to be Exhibit  
22 13. Let me know when you have it.

23 (Exhibit 13 was marked for identification

1 and is attached.)

2 A. I have it.

3 Q. This is a guidance document from  
4 the FDA from 1998. Generally, are you  
5 aware that the FDA issues guidance  
6 documents?

7 A. Generally, yes, I am aware.

8 Q. Have you ever seen an FDA  
9 guidance document before today?

10 A. I've heard them referred to, but  
11 I've never read one, no.

12 Q. Okay. All right. Well, this  
13 one's titled "'Off-Label' and  
14 Investigational Use of Marketed Drugs,  
15 Biologics, and Medical Devices." You see  
16 that?

17 A. I do.

18 Q. Okay. All right. The first  
19 paragraph, second sentence says, "If  
20 physicians use a product for an  
21 indication not in the approved labeling,  
22 they have the responsibility to be well  
23 informed about the product, to base its



1 use on firm scientific rationale and on  
2 sound medical evidence, and to maintain  
3 records of the product's use and  
4 effects." You see that?

5 A. I do.

6 Q. All right. The next sentence  
7 says, "Use of a marketed product in this  
8 manner when the intent is the 'practice  
9 of medicine' does not require the  
10 submission of an Investigational New Drug  
11 Application, Investigational Device  
12 Exemption or review by an Institutional  
13 Review Board." Do you see that?

14 A. I do.

15 Q. I understand that what this is  
16 saying, according to the FDA, when a  
17 doctor prescribes a drug on an off-label  
18 basis, that is not necessarily an  
19 investigational use of that drug; right?

20 MR. KNEPPER: Objection, form.

21 A. I would disagree, because as it  
22 says there, when they're -- when they're  
23 prescribing in that manner, they have a

1       responsibility not only to be informed  
2       about the product but to do the  
3       recordkeeping of its effects, which is  
4       really the initial phase of  
5       investigation. So in a sense, they are  
6       -- they are part of the investigative  
7       process now because a new application of  
8       the medication has been proposed, and  
9       safety and efficacy have -- have to be  
10      documented in some measure.

11               So the FDA is giving you room to  
12      broaden the application of the drug, but  
13      they're also placing upon you the burden  
14      of documenting so that its effects and  
15      benefits can be characterized because  
16      that's being -- obviously, it's being  
17      investigated. That's the point of their  
18      wanting the recordkeeping, so --

19           Q.     Do you know what the  
20      Institutional Review Board is?

21           A.     Yes.

22           Q.     Clinical trials have to be  
23      cleared by IR- -- IRBs; right?

1           A.     Right.

2           Q.     And this says you don't actually  
3     have to apply for approval by an IRB when  
4     you're prescribing a drug on an off-label  
5     basis; right?

6                     MR. KNEPPER:   Objection, form.

7           A.     It says that it's not of  
8     necessity, so they're not making a  
9     blanket requirement.   I would imagine  
10    that that might be modified in particular  
11    cases.

12          Q.     Yeah.   Because this is saying  
13    that when you're prescribing a drug on an  
14    off-label basis, that doesn't mean you're  
15    starting up a clinical trial; right?

16          A.     It doesn't necessarily mean  
17    you're starting a clinical trial, that's  
18    right.   It doesn't exclude the necessity  
19    for a clinical trial.   It just says  
20    you're not necessarily starting a  
21    clinical trial.

22          Q.     Yeah.   And when this says --  
23    when it says doctors should maintain

1 records of the product's use and effects,  
2 it's not telling them that they're  
3 enrolling their patients in a clinical  
4 trial by starting -- by prescribing a  
5 drug on an off-label basis; right?

6 MR. KNEPPER: Objection, form.

7 A. Right. But what it -- what it  
8 probably is inferring is that if they  
9 start seeing complications, then the  
10 further application of the drug in that  
11 circumstance might be required -- might  
12 require an IRB. So yeah. So it's --  
13 what they're saying is it doesn't require  
14 an IRB of necessity. It does require  
15 recordkeeping. And I would expect that  
16 if they were to see complications,  
17 problems, lack of efficacy, that -- and  
18 the desire for its continued use might  
19 require an IRB. In fact, I would -- I  
20 would hope it would require an IRB.  
21 Yeah.

22 Q. Yeah. A clinical trial down the  
23 line is a "this might be nice to have,"

1 but it's not a requirement for a doctor  
2 to prescribe a drug on an off-label use  
3 basis. That's what this says; right?

4 MR. KNEPPER: Objection, form.

5 A. That's what that says, yeah.

6 Q. Yeah. You don't cite this  
7 guidance in your report obviously; right?

8 A. I don't think it's --

9 MR. KNEPPER: Objection, form.

10 A. I don't think it's germane to my  
11 report. No.

12 Q. All right. You've also offered  
13 opinions on whether it's proper to  
14 prescribe drugs on an off-label basis to  
15 children and adolescents; right?

16 A. I've only offered it in the case  
17 of this particular therapy. I haven't  
18 offered it generally, only in the case of  
19 puberty blockade and cross-sex hormones  
20 for the purposes of transitioning a child  
21 to the appearance of the other sex.  
22 That's all I've offered it as an opinion.

23 Q. All right. Do you know what the

1 American Pediatrics Association is?

2 A. Yes.

3 Q. Before forming your opinions,  
4 did you look to see what the APA says  
5 about off-label use of drugs in children  
6 and adolescents?

7 A. No.

8 Q. Sitting here today, you don't  
9 know the APA's position on this -- on  
10 this topic; correct?

11 MR. KNEPPER: Objection, form.

12 A. Correct.

13 Q. Let's look at that next. Okay.  
14 This is going to be Exhibit 14, and let  
15 me know when you have it.  
16 (Exhibit 14 was marked for identification  
17 and is attached.)

18 A. Okay. I have it.

19 Q. You understand this is a policy  
20 statement from the APA?

21 A. I'm reading it now. I see that  
22 it is a policy statement from the  
23 American Academy of Pediatrics.

1           Q.     It's a policy statement  
2     entitled, "Off-Label Use of Drugs in  
3     Children."    Right?

4           A.     Yes.    Yes.

5           Q.     Look at the introduction section  
6     toward the bottom of the page.

7           A.     Okay.

8           Q.     It says that, "The purpose of  
9     this statement is to further define and  
10    discuss the status of off-label use of  
11    medic- -- medications in children."   And  
12    then it talks about a publication of a  
13    2002 statement.   You see that?

14          A.     Yes.

15          Q.     All right.   So the FDA -- APA  
16    has taken a position on off-label use of  
17    drugs in children since at least 2002;  
18    right?

19                 MR. KNEPPER:   Objection, form.

20          A.     I'm reading it now.   It appears  
21    to be that, yeah.

22          Q.     All right.   Look at the abstract  
23    towards the top.

1           A.     Okay.

2           Q.     Second sentence says, "However,  
3     off-label drug use remains an important  
4     public health issue for infants,"  
5     childrens, and" -- "children, and  
6     adolescents, because an overwhelming  
7     number of drugs still have no information  
8     in the labeling for use in pediatrics."  
9     Do you see that?

10          A.     I do.

11          Q.     Okay. And then it says, "The  
12     purpose of off-label use is to benefit  
13     the individual patient." Right?

14          A.     Yes.

15          Q.     And then it says, "Practitioners  
16     use their professional judgment to  
17     determine these uses." Correct?

18          A.     Yes.

19          Q.     And then it says, "As such, the  
20     term 'off-label' does not imply an  
21     improper, illegal, contraindicated, or  
22     investigational use." Right?

23          A.     That's what it says there, yes.



1           Q.     Yeah.   The APA also takes the  
2           position that off-label use does not  
3           imply investigational use; correct?

4                   MR. KNEPPER:   Objection to form.

5           A.     It does not de facto imply  
6           off-label use, that's right, yeah.   It  
7           does not imply, right.

8           Q.     And it does not imply that  
9           off-label use is de facto improper or  
10          illegal or contraindicated; right?

11          A.     Right.

12                  MR. KNEPPER:   Objection, form.

13          Q.     All right.   Go to page 2.

14          A.     Okay.

15          Q.     Look at the left column, the  
16          very bottom paragraph.

17          A.     Okay.

18          Q.     It says:   "The absence of  
19          labeling for a specific age group or for  
20          a specific disorder does not necessarily  
21          mean that the drug's use is improper for  
22          that age or disorder.   Rather, it only  
23          means that the evidence required by law

1 to allow inclusion in the label has not  
2 been approved by the FDA. Additionally,  
3 in no way does a lack of labeling signify  
4 that therapy is unsupported by clinical  
5 experience or data in children."

6 Do you see that?

7 A. I do.

8 Q. This is the APA recognizing that  
9 even in the absence of FDA approval for a  
10 particular indication, that use may still  
11 be supported by clinical experience and  
12 data; right?

13 MR. KNEPPER: Objection, form.

14 A. Yeah. I would -- I would say  
15 also that the APA recognizes that -- that  
16 there's a poverty of evidence. The  
17 poverty of evidence is one of the  
18 characteristics of off-label use. And  
19 that's -- that's what the nature of my  
20 expert opinion was about, that the  
21 poverty of evidence is what makes the  
22 off-label use an issue, and in this case,  
23 poverty of evidence for off-label use in

1 a situation where the harms -- potential  
2 harms are great. That's what the concern  
3 was, not -- obviously, I use -- I've  
4 off-label used drugs in my own practice,  
5 as I said before.

6 I don't have an objection  
7 without qualification that -- that the  
8 off-label use of drugs is somehow a  
9 crime. I'm saying that in this  
10 particular instance of this particular  
11 application, that the off-label use tells  
12 us that there's a poverty of scientific  
13 evidence to support its application that  
14 way. Clearly, there's anecdotal reports;  
15 otherwise, doctors wouldn't be using it.  
16 But there's a poverty of evidence, and  
17 what we're dealing with here is not a  
18 potential trivial complication but  
19 potentially permanently life-altering  
20 complications.

21 That was the issue that I was  
22 addressing in my concern about the  
23 off-label use, that there's a standard

1 of -- of caution that's required when you  
2 go off-label. And that caution isn't  
3 being demonstrated by the -- for the  
4 persons who are prescribing or applying  
5 these drugs in this way. That was my  
6 concern.

7 Q. All right. You think that  
8 before these drugs are to be prescribed,  
9 they should first be supported by results  
10 from clinical trials; right?

11 MR. KNEPPER: Objection, form.

12 A. That's the beginning.

13 Q. That's the beginning.

14 A. Yeah.

15 Q. The absolute minimum to  
16 prescribe these drugs; right?

17 MR. KNEPPER: Objection, form.

18 A. Well, no. No, I -- I didn't say  
19 that. As I said, it begins with  
20 anecdotal evidence, not clinical trials.  
21 So somebody somewhere sees an effect. As  
22 it said in that FDA document, it's  
23 oftentimes serendipitous. A clinician

1 will see an effect, and then -- and then  
2 they'll, based on that, they'll hopefully  
3 check out the potential risks to the  
4 patient and then begin that off-label  
5 use.

6 So it begins actually with  
7 anecdotal reports, maybe case  
8 collections, maybe a number of providers'  
9 case collections, maybe it's a -- it's  
10 a -- it's an institutional experience.  
11 But that leads to clinical trials and the  
12 IRB and all the rest of it. So that's  
13 just the beginning of it.

14 Q. It may be appropriate for a  
15 doctor to prescribe a drug on an  
16 off-label basis without having the  
17 results from a clinical trial; correct?

18 A. Yeah, I would -- I would hope  
19 that after thirty years of doing this,  
20 that we would beyond -- be beyond  
21 institutional or personal experience,  
22 that those trials would have already been  
23 done. This isn't -- we're not just at

1 the beginning of puberty blockade and  
2 cross-sex hormones. We're well into this  
3 now, to the point where the European  
4 literature is now vehemently rejecting  
5 that.

6 That's -- these things have  
7 changed. In the last three years, it's  
8 all changed. With respect to this  
9 off-label application of puberty blockade  
10 and cross-sex hormones, it's changed  
11 utterly. So these general statements  
12 about off-label use are important to  
13 understand, certainly, when you see a  
14 serendipitous result and you consider  
15 applying the drug. But we are so far  
16 beyond that at this point in the history  
17 of transgender therapy, this is where  
18 we're concerned. We're concerned with  
19 the continued off-label use, the  
20 continued absence of clinical trials. We  
21 should have been beyond that years ago.  
22 And this is what the European literature  
23 is now showing us, that the application

1 of those drugs by -- which is approved by  
2 the APA, is now being rejected by the  
3 medical services in Great Britain, in  
4 Sweden, in Finland, in Holland. And this  
5 is where we as American providers have to  
6 get.

7 Q. All right. We'll -- we'll  
8 definitely come back to those --

9 A. Okay.

10 Q. -- studies. I promise.

11 A. Okay.

12 Q. Let's finish this document  
13 first, though. All right. Go to page 3.  
14 All right.

15 A. Okay.

16 Q. Look at the left column.

17 A. Okay.

18 Q. It says: "Therapeutic  
19 decision-making should always be guided  
20 by the best available evidence and the  
21 importance of the benefit for the  
22 individual patient. Practitioners are in  
23 agreement regarding the importance of

1 practicing evidence-based medicine.  
2 However, for the pediatric population,  
3 gold standard clinical trials are often  
4 not available, so practitioners must rely  
5 on either less definitive information,  
6 such as expert opinion for the age group  
7 that they are treating, or use evidence  
8 from a different population to guide  
9 practice."

10 You see that?

11 A. I do. And I would agree with  
12 that, that particularly in pediatric  
13 patients, the clinical trial approach  
14 oftentimes is -- is not available because  
15 of the nature of the condition and so on.  
16 But in the -- in this case, there's a --  
17 it's not an all or none, it's got to be  
18 clinical trials or -- or nothing.

19 There's longitudinal  
20 population-based studies, long-term  
21 results seen in a population that has  
22 matured through this therapy, and looking  
23 at, you know, cohort studies



1       longitudinally, cohort study, which is --  
2       which is an alternative when -- when the  
3       clinical trial is not available to you  
4       for ethical reasons. Like you wouldn't  
5       do sham surgery on somebody. That would  
6       be ethically untenable. But you can look  
7       at population-based studies where you  
8       have a cohort to compare. And that's --  
9       that's where we should be. That's where  
10      the European literature is now.

11               So I would agree with that  
12      statement that -- that the APA is making  
13      there, but I would qualify it by saying  
14      that there's an alternative available  
15      that brings you to a higher level of  
16      evidence that may in fact bring it to  
17      on-label use if they were to bother to do  
18      it.

19           Q.     The APA recognizes that for the  
20      pediatric population in particular,  
21      results from clinical trials are often  
22      not available; right?

23           A.     Right.

1           Q.     And the answer in those  
2           situations is not to stop prescribing  
3           these drugs altogether; right?

4                     MR. KNEPPER:   Objection, form.

5           A.     Yeah.   The "altogether" would be  
6           the qualifier there because there are  
7           some circumstances where it would be -- I  
8           mean, it wouldn't be good to stop its  
9           prescription, but there would be others  
10          that you would have to examine more  
11          carefully because of the risk issue.

12          Q.     Yeah.   Instead, what the APA  
13          says is that when clinical trial results  
14          are not available, doctors have to rely  
15          on less definitive -- definitive  
16          information; right?

17          A.     That's what -- that's all you  
18          have.   That's right.

19          Q.     Yeah.   The APA says it may be  
20          appropriate for doctors to prescribe  
21          drugs to pediatric patients on an  
22          off-label basis even when that use is not  
23          supported by randomized clinical trials;

1 correct?

2 A. Right.

3 Q. Because the reality is that for  
4 a lot of conditions, in the pediatric  
5 population, there are no randomized  
6 clinical trial results available; right?

7 MR. KNEPPER: Objection, form.

8 A. Again, so you're holding out  
9 randomized clinical trial, or they're  
10 holding out randomized clinical trial as  
11 the only alternative to the lowest form  
12 of evidence. And I -- I agree that  
13 randomized clinical trial are not always  
14 available, and we have to have recourse  
15 to perhaps lesser but nonetheless more  
16 convincing forms of evidence to fall back  
17 on rather than falling back to the lowest  
18 form of evidence as is the case today  
19 with the application of these drugs.

20 Q. All right. Look at the last  
21 paragraph in the left column of this  
22 page.

23 A. Okay.

1           Q.     It says: "In most situations,  
2     off-label use of medications is neither  
3     experimentation nor research. The  
4     administration of an approved drug for a  
5     use that is not approved by the FDA is  
6     not considered research and does not  
7     warrant special consent or review if it  
8     is deemed to be in the individual  
9     patient's best interest." Do you see  
10    that?

11          A.     I do.

12          Q.     If the physician deems an  
13     off-label use to be in the individual  
14     patient's best interest, that's not  
15     experimental use, according to the APA;  
16     right?

17                MR. KNEPPER: Object to the  
18     form.

19          A.     Well, according to the --  
20     according to the APA, in most situations.

21          Q.     Yeah.

22          A.     So in that statement, it  
23     acknowledges that there are some

1 situations where that would be  
2 considered. That's the implication in  
3 that statement. So "most" is the  
4 qualifier, implying that there are  
5 situations where it would be considered  
6 experimental.

7 Q. Okay.

8 A. And that's what we propose in  
9 our expert testimony, is that this is one  
10 of those situations. This is  
11 experimental use.

12 MR. TISHYEVICH: Now let's go  
13 off the record.

14 THE VIDEOGRAPHER: This is the  
15 end of Media Unit No. 3. We are off the  
16 record at 12:30 p.m.

17 (Break taken.)

18 THE VIDEOGRAPHER: This is the  
19 start of Media Unit No. 4. We are on the  
20 record at 1:21 p.m.

21 Q. (By Mr. Tishyevich) All right,  
22 Doctor. You know you're still under  
23 oath; right?

1           A.     Yes.

2           Q.     Before lunch, we were talking  
3     about off-label use of prescription  
4     drugs. Do you know how common or  
5     uncommon off-label use of prescription  
6     drugs is in the overall population?

7           A.     I'm not familiar with that  
8     number, no.

9           Q.     All right. You don't know if  
10    it's 5 percent or 10 percent or 50  
11    percent of all drugs are prescribed off  
12    label; right?

13          A.     I have no idea.

14          Q.     How about pediatrics  
15    specifically? Do you know how common or  
16    uncommon off-label use is in the  
17    pediatric population?

18          A.     I do not.

19          Q.     Let me introduce an exhibit.

20                 MR. KNEPPER: One second.

21                 Dr. Lappert?

22                 THE WITNESS: Yes.

23                 MR. KNEPPER: Your camera has

1 moved accidentally, yeah.

2 THE WITNESS: It just allows me  
3 to look at the bottom of the other screen  
4 here so I can look at the exhibits.

5 MR. KNEPPER: Okay. I think  
6 just for the video recording, we want to  
7 make sure that the camera stays on your  
8 face.

9 THE WITNESS: I'll go like this,  
10 then.

11 MR. KNEPPER: Perfect.

12 Q. (By Mr. Tishyevich) So this is  
13 going to be Exhibit 15. Let me know when  
14 you have it.

15 (Exhibit 15 was marked for identification  
16 and is attached.)

17 A. All right. I have it.

18 Q. All right. This is a study from  
19 2019 by Dr. Yackey, Y-A-C-K-E-Y, titled  
20 "Off-label Medication Prescribing  
21 Patterns in Pediatrics: An Update." Do  
22 you see that?

23 A. I do.

1           Q.     All right.   And the objective is  
2     "To describe the frequency of off-label  
3     drug use in 2014 as defined by the  
4     FDA-approved age ranges in patients 18 or  
5     under 18 years of age."   Do you see that?

6           A.     I do.

7           Q.     All right.   Look at "Methods."  
8     Do you see that section?

9           A.     I do.

10          Q.     It says, "This is a  
11     retrospective cohort study of an  
12     administrative database containing  
13     inpatient resource use data from January  
14     1, 2014, to December 31, 2014."   And do  
15     you see that?

16          A.     I do.

17          Q.     Look at the "Results" section.

18          A.     Okay.

19          Q.     The first sentence says, "At  
20     least 1 drug was prescribed off-label in  
21     779,270 of 2,773,770 (28.1%) patient  
22     visits during the study period."   Do you  
23     see that?



1           A.     I do.

2           Q.     And skipping a sentence, then it  
3           says: "Off-label usage of certain  
4           medications differed between care  
5           settings. Rates of off-label medication  
6           use were higher in observational (45.5%),  
7           inpatient (53.9%), and ambulatory (54.2%)  
8           settings." Do you see that?

9           A.     I do.

10          Q.     All right. The study concluded  
11          after reviewing 2.7 patient visits that  
12          overall, 28.1 percent of patients were  
13          prescribed an off-label -- prescribed a  
14          drug on an off-label basis; right?

15          A.     Right.

16          Q.     And depending on the setting,  
17          off-label prescriptions in the pediatrics  
18          context can be as high as 45 to 54  
19          percent; right?

20          A.     That's what the study shows.

21          Q.     All right. The reality is that  
22          prescribing drugs to children and  
23          adolescents on an off-label basis is a

1       fairly common practice; right?

2               MR. KNEPPER:  Objection to form.

3       A.     It appears to be, yes.

4       Q.     You did not know this before you  
5       formed your expert opinions?

6       A.     I knew that it was more common  
7       in children than in adults, and I knew  
8       that it was, you know, fairly common,  
9       having -- having prescribed off-label  
10      myself to children, that it's -- it's  
11      probably fairly common.  I didn't know  
12      the exact numbers, though, until now.

13      Q.     Okay.

14      A.     Again, my -- my expert opinion  
15      about this is not about does it happen.  
16      It's about the particular case of the  
17      transgendered person receiving an  
18      off-label use of a -- of a fairly  
19      problematic drug in light of the recently  
20      changing evidence about its efficacy.  So  
21      the issue of off-label use that I  
22      presented was not about are drugs  
23      prescribed off-label.  The issue was

1       these particular drugs in these  
2       particular patients off-label in light of  
3       the recent change in the world literature  
4       about the risk/benefits of doing those  
5       things. And the evidence now is that  
6       that whole position about puberty  
7       blockade and cross-sex hormones, it's  
8       falling apart in the last three years,  
9       and there's a -- there's a growing wave  
10      of evidence that says do not do this.  
11      And in fact, that's where the Court  
12      stepped in in Great Britain, and it's  
13      where the Karolinska Institute stepped  
14      in.

15               It's not that it's off-label  
16      use. It's that it's particularly  
17      problematic in the case of these drugs in  
18      these suffering patients. That's what my  
19      expert opinion was about. It was not  
20      about drug policy. It was about these  
21      patients, these problems, these drugs.  
22      And the fact is that when you off-label  
23      use, the responsibility falls much more

1 heavily on the provider. When the FDA  
2 approves it, the responsibility falls to  
3 the shoulders of the approving authority.  
4 But if you're going off-label, it's on  
5 you as the provider to be certain that  
6 you're doing good to the patient. And up  
7 until the last three years, the evidence  
8 wasn't there. Now it's there. The  
9 continued use of the drugs in this way  
10 has become very problematic, and that's  
11 -- that's what my expert opinion was  
12 about, not about drug policy, but about  
13 these drugs, these patients.

14 Q. Doctor, there's actually no  
15 question pending, so I'm going to ask  
16 that you stick with listening to my  
17 questions and then answering them instead  
18 of making speeches. Okay?

19 All right. You -- we talked  
20 earlier about the Botox injections that  
21 you've done; right?

22 A. Yes.

23 Q. You told me you've been doing

1       Botox injections in the forehead for over  
2       ten years; right?

3           A.     Correct.

4           Q.     You've told me that you've been  
5       doing Botox injections for crow's feet  
6       for over ten years; right?

7           A.     Yes.

8           Q.     Do you know when the FDA first  
9       approved Botox for the use of treating  
10      forehead wrinkles?

11          A.     Let's see. I recall that it was  
12      when I was the chief of plastics at  
13      Portsmouth, Virginia, because we had been  
14      using it for dystonias and things like  
15      that in children. And it got approved  
16      for cosmetic use I'm going to say before  
17      we moved to the new hospital, so it had  
18      to have been around ninety- -- I want to  
19      say '97, somewhere in there. I'm just  
20      ballparking it here.

21          Q.     So when you were using Botox to  
22      do forehead injections, you think that  
23      was an on-label FDA approved use for the

1 last ten years; right?

2 A. Yeah. When used in the  
3 corrugator and procerus muscles, that's  
4 the on-label use for cosmetic botulinum  
5 toxin.

6 Q. Let me introduce another  
7 exhibit. All right. This is going to be  
8 Exhibit 16, and let me know when you have  
9 it.

10 (Exhibit 16 was marked for identification  
11 and is attached.)

12 A. All right. I have it.

13 Q. Top right corner, you see it  
14 says, "Food and Drug Administration"?

15 A. Yes.

16 Q. Below that, do you see it says,  
17 "Supplement Approval"?

18 A. Yes.

19 Q. You know what this is?

20 A. It looks to be a -- a letter  
21 from the FDA to the Allergan corporation,  
22 to a particular Ph.D. there who is the  
23 director of regulatory affairs. And it's

1 a supplemental -- I guess it's an  
2 amendment. I haven't read it. Can I  
3 have a moment to read it?

4 Q. I'll -- I'll point you to it.  
5 Don't worry.

6 A. All right.

7 Q. Allergan is a manufacturer of  
8 Botox; right?

9 A. Allergan, yes, uh-huh.

10 Q. Go to page 3.

11 A. Okay.

12 Q. And you see there's a signature  
13 line, and under that, it says,  
14 "10/02/2017"?

15 A. Correct.

16 Q. You understand this was issued  
17 on October 2, 2017; right?

18 A. That's -- that's what the  
19 document appears to show, yeah.

20 Q. Go back to the first page.

21 A. Okay.

22 Q. First paragraph says, "Dear Dr.  
23 Richmond: Please refer to your

1 Supplemental Biologics License  
2 Application, dated and received December  
3 2, 2016." Do you see that?

4 A. I do.

5 Q. The next paragraph says, "This  
6 Prior Approval supplemental biologics  
7 application proposes an additional  
8 indication for the temporary improvement  
9 in the appearance of moderate to severe  
10 forehead lines associated with frontalis  
11 muscle activity."

12 A. Right.

13 Q. Do you see that?

14 A. I do.

15 Q. All right. Then the next  
16 section says, "Approval & Labeling."  
17 Right?

18 A. Yes.

19 Q. It says, "We have completed our  
20 review of this supplemental application,  
21 as amended. It is approved, effective on  
22 the date of this letter, for use as  
23 recommended in the enclosed, agreed-upon



1       labeling text."   Do you see that?

2           A.     I do.

3           Q.     All right.   You understand that  
4       Botox was not an FDA-approved treatment  
5       for improvement in moderate to severe  
6       forehead lines until October 3, 2017 --

7                   MR. KNEPPER:   Objection --

8           Q.     -- right?

9                   MR. KNEPPER:   -- to form.

10          A.     The sense I get of your question  
11       is that you -- you're conflating the  
12       injection of corrugator and procerus  
13       muscles with the injection of the  
14       frontalis muscles.   I consider all those  
15       muscle groups to be forehead muscles  
16       because they all animate the brow.   The  
17       approval of Botox for the corrugator and  
18       frontalis -- I mean, corrugator and  
19       procerus muscle that goes way back is, I  
20       thought, what you were -- you were asking  
21       me about with ten years application to  
22       the forehead.   So yeah.   So I consider  
23       the -- the corrugator and procerus

1 muscles (indicating) forehead muscles.  
2 Maybe others would call them glabellar,  
3 but glabellar is the lesser-included  
4 category. So yeah.

5 So I was aware of the broadened  
6 application, and I was aware that for  
7 most of the time it's been on the market,  
8 it has been limited, the approval been  
9 limited to the corrugator and procerus.  
10 And the frontalis marginal radicularis  
11 was considered off-label use, as was its  
12 use in hyperhidrosis, like we talked  
13 about earlier. Yeah.

14 Q. You have prescribed Botox  
15 cosmetic -- or strike that.

16 You have used Botox for  
17 treatment of moderate to severe forehead  
18 lines associated with frontalis muscle  
19 activity before October 3, 2017; correct?

20 A. Yes.

21 MR. KNEPPER: Objection to form.

22 A. Absolutely.

23 Q. It's an off-label use; right?

1           A.     As we've talked about before,  
2     yes, I've -- I've used it off-label.

3           Q.     And do you know when Botox  
4     received this indication for treatment of  
5     crow lines?

6           A.     I'm sorry.   Of?

7           Q.     Treatment of crow lines.

8           A.     Crow lines?

9           Q.     Yes.

10          A.     Oh, crow's feet (indicating).

11          Q.     Sorry, crow's feet.

12          A.     Yeah.   Yeah.   I don't know -- I  
13     don't know the exact date of that.   I  
14     just know that it's been broadened.

15          Q.     All right.   Before -- strike  
16     that.

17                 Before you first started using  
18     Botox on an off-label basis, did you do a  
19     literature search to see if there was a  
20     randomized, double-blinded controlled  
21     trial to demonstrate that this forehead  
22     use was safe and effective?

23          A.     No.

1 MR. KNEPPER: Objection, form.

2 Q. So you were using it without  
3 having any idea if there was randomized  
4 controlled clinical trials to demonstrate  
5 the safety and effectiveness of that use;  
6 correct?

7 MR. KNEPPER: Objection, form.

8 A. So the question is, was I using  
9 it in other than the on-label purposes  
10 before the approval was handed down by --  
11 to the -- by the FDA?

12 Q. No. I already heard the answer  
13 to that question.

14 A. Oh, okay.

15 Q. I'm asking you a different  
16 question.

17 A. Okay.

18 Q. At the time you were using  
19 Botox on --

20 A. Oh.

21 Q. -- an off-label basis --

22 A. Right.

23 Q. -- you were doing that without

1       having results from a randomized  
2       controlled trial to demonstrate that this  
3       off-label use was safe and effective;  
4       correct?

5           A.     Correct.   Correct.

6                   MR. KNEPPER:   Objection, form.

7           Q.     The same is true for respective  
8       cohort studies; right?

9           A.     Correct.

10          Q.     The same is true for case  
11       control studies; right?

12                  MR. KNEPPER:   Objection, form.

13          A.     Right.   And that's an example of  
14       what we were talking about earlier where  
15       a low-risk application begins with  
16       anecdotal experience, shared anecdotal  
17       experience, and -- and the literature  
18       that comes later leading to the  
19       controlled trial that the Allergan  
20       company may have done and it's then  
21       subsequently approved by the FDA.   That's  
22       right.   So this would fit into that  
23       category.

1           Q.     All right.  Let's talk more  
2     about randomized controlled trials  
3     outside of Botox.  If I call them RCTs  
4     for short, you'll know what I'm referring  
5     to; right?

6           A.     Yes.

7           Q.     An RCT typically involves two  
8     groups, an experiment group and a control  
9     group; right?

10          A.     Yes.

11          Q.     RCTs are typically  
12     double-blinded; right?

13          A.     Well, in most cases.  But when  
14     you're talking about things where there's  
15     going to be an outward change in the  
16     patient, it's -- it's difficult to blind  
17     such studies.  You're essentially just --  
18     for example, you couldn't have a  
19     double-blinded study of a surgical  
20     procedure, or you couldn't have a  
21     double-blinded study of a -- of a medical  
22     intervention where there's outward change  
23     to the patient that would be evident to

1 both the experimenter and the subject.

2 So yeah.

3 Q. Yeah. So -- yeah, we'll get to  
4 that in a minute. Let me ask just some  
5 more general questions first.

6 A. Okay.

7 Q. Because I want to figure out  
8 your experience with RCTs. You  
9 personally have never been the lead  
10 investigator for an RCT; correct?

11 A. That's correct.

12 Q. You personally -- strike that.  
13 Have you ever been involved with  
14 an RCT?

15 A. Yes. When I was a resident at  
16 the University of California-San  
17 Francisco working on the neurosurgical  
18 trauma unit, we were doing a randomized  
19 controlled trial of the medical  
20 management of elevated intracranial  
21 pressure, and I was -- because I was part  
22 of the team, I was responsible for  
23 gathering data in the critical care unit

1 and -- and working with the investigators  
2 ensuring the integrity of the data. So I  
3 was not the lead investigator, obviously.  
4 I was just one of the participants as one  
5 of the treating physicians.

6 Q. The only time you worked on a  
7 randomized controlled trial was during  
8 your surgery res- -- general surgery  
9 residency; correct?

10 MR. KNEPPER: Objection, form.

11 A. I'm trying to think if there  
12 were other instances here. At UC-Davis  
13 -- I'm trying to think. Give me just a  
14 moment. I just want to --

15 Q. Sure.

16 A. -- make sure I'm not missing any  
17 more. I think that's the only one where  
18 it was a randomized blinded study.  
19 That's right, yeah.

20 Q. And that residency was '87  
21 through '91?

22 A. That's right.

23 Q. Okay. You've never published



1       any articles in peer-reviewed journals  
2       about RCTs; correct?

3           A.     That's correct.

4           Q.     You've personally never designed  
5       an RCT; correct?

6           A.     That's correct.

7           Q.     You don't hold yourself out as  
8       an expert in RCT design; right?

9                   MR. KNEPPER:  Objection, form.

10          A.     Well, I would qualify that  
11       answer by saying that part of my training  
12       involves me being able to understand and  
13       review published literature on the  
14       subject even though I'm not the  
15       investigator because of my training as a  
16       plastic and reconstructive surgeon, as a  
17       general surgeon.  As just a physician in  
18       general, we're trained on how to  
19       interpret the validity or the veracity of  
20       the medical literature, including how to  
21       interpret the randomized controlled trial  
22       and -- and understand its validity, which  
23       is -- what I'm testifying about is not my

1       personal experience. It's my opinion of  
2       the validity of the scientific data. So  
3       I -- so it's not that I -- that I can't  
4       express an opinion on it. It's just that  
5       I haven't personally conducted one, but I  
6       have been trained on how to interpret  
7       them.

8           Q.     I understand that distinction  
9       you're making.

10          A.     Thank you.

11          Q.     But when it comes to designing  
12       RCT, you're not an expert in that aspect  
13       of RCT?

14                 MR. KNEPPER: Objection, form.

15          A.     Well, again, part of the  
16       evaluation of a randomized controlled  
17       trial is to evaluate how the study was  
18       designed. That's one of the criteria  
19       used for understanding the validity of a  
20       published document like a RCT. So you  
21       always look at -- that's why it's such an  
22       essential part of a -- of a RCT  
23       publication is you look at the materials

1       and methods and you look at the study  
2       design, and that's where, really, your  
3       analysis begins if you're trying to  
4       interpret the data. Did they design the  
5       study properly? Does it have the power  
6       of discrimination of what they claim that  
7       it has? And then you look at the actual  
8       results, and it's on -- it's on your  
9       shoulders as the -- as the professional,  
10      whether you're a -- you know, a  
11      researcher or somebody who's seeking to  
12      apply it in his practice, you're  
13      responsible for interpreting the data  
14      quite apart from their interpretation of  
15      it.

16               So an example of that would be  
17      the Branström study, where they --  
18      they -- they generated a good -- a  
19      reasonable study design, but they  
20      misinterpreted the data, and that's what  
21      caused the retraction of the Branström  
22      study, is that all the other people who  
23      were not RCT investigators, but they were

1 all physicians, endocrinologists,  
2 pediatricians, they looked at the data  
3 and said, "You've misinterpreted the  
4 study."

5 And that's really what we're  
6 talking about here. There are those who  
7 perform the study, and then there's us  
8 who have to live with it, and we have to  
9 be able to understand what they're --  
10 what they're purporting to. So we have  
11 to interpret the data even before reading  
12 their conclusions.

13 Q. Do you know what the CONSORT  
14 criteria are? C-O-N-S-O-R-T.

15 A. I've read it sometime before. I  
16 can't -- I can't -- I can't quote it for  
17 you, but it's -- it's germane to the  
18 study design process? I'm not sure.

19 Q. Okay. Can you describe for me  
20 what the CONSORT criteria are in general  
21 terms?

22 A. I cannot.

23 Q. All right. How about cohort

1 studies? You've personally never  
2 designed a cohort study; correct?

3 A. No, I have not.

4 Q. You've personally never been an  
5 investigator in a cohort study; correct?

6 A. Well, so -- so, that experience  
7 at -- at UC-San Francisco was a -- well,  
8 so are you asking -- by cohort study, are  
9 you talking about like a retrospective  
10 study of a -- of a population cohort? Is  
11 that what you're asking me about?

12 Q. Prospective or retrospective,  
13 either -- either/or.

14 A. I haven't designed any of those  
15 studies, no.

16 Q. Okay. And outside the one  
17 experience in your residency, have you  
18 ever been involved with any prospective  
19 or retrospective cohort study?

20 A. No.

21 Q. And how about case-control  
22 studies? Have you ever personally  
23 designed a case-control study?

1           A.     No, I have not.

2           Q.     Have you ever been an  
3 investigator in a case-control study?

4           A.     I'm just trying to think if the  
5 -- if the head trauma investigation would  
6 fit the category of a case control. It  
7 was a randomized study. It had its own  
8 internal controls. So I guess I've  
9 assisted in that investigation, but only  
10 as a -- as a provider and a -- and a data  
11 gatherer.

12          Q.     Outside of that one experience,  
13 you have not been involved with any  
14 prospective or retrospective cohort  
15 study; right?

16          A.     No.

17          Q.     Or a case-control study? Excuse  
18 me.

19                 Okay. Let's go back to your  
20 report, Exhibit 1, and go to page 13.

21          A.     Okay. Okay.

22          Q.     You see there's a header that  
23 says in capital letters, "Anecdotal

1 Patient Stories Are Not Data." Do you  
2 see that?

3 A. I do.

4 Q. And you write, "Drs Schechter  
5 and Brown also failed to disclose and  
6 properly discuss that Anecdotal Data  
7 unverified patient reports without  
8 control groups, randomized trials, or  
9 other scientific protections for the  
10 integrity of the medical system -- are  
11 not reliable science." Do you see that?

12 A. I do.

13 Q. And then you reference personal  
14 patient stories, and you say, "This is  
15 unreliable Anecdotal Data and it is not  
16 credible, scientific information." Do  
17 you see that.

18 A. I do.

19 Q. All right. You think that case  
20 reports are anecdotal evidence; right?

21 A. Yeah, they're --

22 MR. KNEPPER: Objection.

23 THE WITNESS: I'm sorry?

1 MR. KNEPPER: Objection, form.

2 Go ahead.

3 THE WITNESS: I'm sorry.

4 A. Yeah. And so anecdotal data is  
5 personal experience of a -- of a  
6 practitioner, for example. So -- so a  
7 surgeon reporting on five cases that he  
8 did would be considered anecdotal  
9 reporting, or case reports and things  
10 like that, yeah. That's anecdotal,  
11 personal experience, a personal exper- --

12 Q. And you think --

13 A. I'm sorry?

14 Q. Go ahead. Sorry.

15 A. Personal experience as distinct  
16 from more stringent scientific evidence  
17 like a longitudinal study or a cohort  
18 study or something like that. Or even --  
19 even personal experience with pre- and  
20 posttreatment testing rises to a higher  
21 level than anecdotal. So you can base --  
22 you can base scientific evidence on that  
23 next level, which would be anecdotal



1       experience elevated to the next level by  
2       pretreatment and posttreatment testing.  
3       This is -- this is from the guidance that  
4       the American Society of Plastic Surgery  
5       puts out.

6               So depending on the -- depending  
7       on the type of study, if it's a -- if  
8       it's a therapeutic study or a diagnostic  
9       study or a prognostic study, depending on  
10      what you're looking at, if -- if you --  
11      if you take it to that next level with  
12      pre- and posttreatment testing with a  
13      validated scientific instrument, you  
14      know, a validated study even of  
15      subjective reporting from the  
16      psychiatric/psychological side of things,  
17      that has more validity than the anecdotal  
18      reports of a practitioner or even an  
19      institution.

20           Q.     Do you think that a case report  
21      that doesn't have this before and after  
22      comparator that you describe is  
23      essentially worthless from the --

1           A.     No.

2           Q.     -- scientific perspective?

3           A.     No, no. Not worthless. Not  
4 worthless, but it's what's considered in  
5 the -- in the -- in plastic surgery  
6 circles, certainly, it's considered the  
7 lowest form of evidence. So for a number  
8 of years now, the American Society of  
9 Plastic Surgery has insisted that  
10 publications -- if you're going to  
11 publish a case series, for example, that  
12 they have to be a sequential -- you can't  
13 pick the cases you're reporting on. It  
14 has to be a sequential series of  
15 patients, and you have to declare in the  
16 publication, in your -- in your article,  
17 the level of evidence that you're  
18 presenting.

19                 So if -- if it's merely a --  
20 case reports, that would be level 5  
21 evidence. If you added to that a review  
22 of the literature with a -- you know, a  
23 definitive review of the literature

1 looking at the -- at where the weight of  
2 evidence lies, then you raise it to the  
3 next level. But we're -- we're now  
4 required when we're publishing in -- in  
5 the ASPS journal, for example, to state  
6 in the -- in the document level of  
7 evidence. So a case report is not zero  
8 scientific evidence. It's level 5  
9 evidence. It's the lowest form of -- of  
10 evidence is what it is.

11 Q. You personally would not rely on  
12 a level 5 case report to decide if a  
13 surgical technique is effective?

14 A. It would be the beginning of my  
15 interest in a particular technique. As a  
16 surgeon, we tend to be very conservative,  
17 and we call upon our personal experience  
18 very much and certainly upon our  
19 training. So if somebody proposes  
20 something radically new and all they have  
21 to support it is level 5 evidence,  
22 generally -- there's a saying that I  
23 learned in training is never be the first

1 or -- first one to do a procedure or the  
2 last one to do a procedure.

3 And so, yeah, you know, surgeons  
4 tend to not jump in early on -- on  
5 low-quality evidence. We tend to be  
6 conservative about it. And I would  
7 number myself among them.

8 Q. All right. Let me ask the flip  
9 side.

10 A. Okay.

11 Q. Do you think it's necessary for  
12 a surgical procedure to be supported by  
13 results from a level 5 RCT before it can  
14 be considered effective?

15 A. No.

16 MR. KNEPPER: Objection to form.

17 A. That would -- that would be one  
18 of those circumstances where what is the  
19 risk to the patient and -- and what's the  
20 potential benefit to the patient.  
21 That's -- that's what kind of would drive  
22 my decision to act on a level 5 case  
23 report, offering something like that to

1       one of my patients.

2           Q.     Do you think that a surgical  
3       procedure has to be supported by a level  
4       2 controlled study before that surgical  
5       procedure can be considered  
6       nonexperimental?

7           A.     Not necessarily. It would  
8       depend on what is -- what is -- what is  
9       at risk here. Certainly, we're much more  
10      willing to -- to proceed with -- with  
11      techniques and procedures that aren't  
12      hugely supported if there's great risk to  
13      the patient of not doing anything. So  
14      level of risk and what is at stake kind  
15      of drives that and -- and yeah.

16                   Did I answer that question? Is  
17      that what you were asking?

18           Q.     Yeah. It's basically a  
19      case-by-case decision; right?

20                   MR. KNEPPER: Objection, form.

21           A.     Well, I wouldn't say case by  
22      case. I would say, you know, you're  
23      relying on -- on -- on a lifetime of

1       experience possibly, and you're relying  
2       also on -- on conversations with your  
3       peers, your colleagues, what is their  
4       experience in the area and how much of a  
5       risk are you going to subject to the  
6       patient -- subject the patient to in  
7       order to achieve a result. The greater  
8       the risk, the greater the expectation of  
9       a defined scientifically supported  
10      outcome.

11               So in the case -- in the issue  
12      at hand here, great risk of doing, for  
13      example, a transition surgery, because  
14      you're talking about permanent  
15      sterilization, irreversible  
16      sterilization, or the removal of the  
17      breasts, permanent and irreversible loss  
18      of the breasts, that's a huge stake, a  
19      huge risk to the patient that the -- the  
20      expected outcomes have to be consummately  
21      much larger in order to justify something  
22      like that if you don't have scientific  
23      support. If you're at low levels of

1       scientific evidence, then clearly, you  
2       have an obligation to the patient not to  
3       -- not to try something risky if you  
4       don't have extensive and very valid  
5       scientific -- and that's where we are  
6       now. We're at very low-level evidence  
7       for these things. That's kind of why  
8       we're here today.

9       Q.     I guess I'm asking a more  
10      specific question. You're not taking the  
11      position that in order to be considered  
12      nonexperimental, a particular surgical  
13      procedure has to be supported by at least  
14      level 1 or level 2 evidence; right?

15           MR. KNEPPER:  Objection, form.

16      A.     Oh, okay. So you're asking me  
17      the definition of experimental. Is  
18      that -- do I understand you correctly?

19      Q.     Sure.

20      A.     Yes. Am I saying that something  
21      is nonexperimental once it reaches level  
22      2 evidence or higher and not before?

23      Q.     Correct.

1           A.     I'm not saying that, no.

2           Q.     Okay.   How about level 3?   Are  
3     you taking the position -- strike that.

4                     Are you expressing the opinion  
5     that a surgical procedure can only be  
6     considered not experimental if it reaches  
7     evidence level 3?

8           A.     Well, it's getting closer.   So  
9     when you're -- when you're at level 3,  
10    you're talking about a retrospective  
11    study with a cohort.   And if we were  
12    talking about some simple technique of  
13    reconstructing, say, a wound on the face  
14    for cancer therapy, then I certainly  
15    wouldn't wait to try a new technique.   If  
16    it promised to get a better result, I  
17    wouldn't wait until I got to level 3  
18    evidence.

19                    But if you're talking about a  
20    very drastic operation where I'm  
21    amputating healthy parts, then yeah, I'm  
22    going to want to go at least to level 3  
23    before I consider that, because again,



1       you're talk about tremendous risk to the  
2       patient, permanently life-altering  
3       changes. You better have very strong  
4       evidence that you're doing the patient  
5       good because you're doing the patient a  
6       great harm by, you know, removing their,  
7       genitals, permanently sterilizing them,  
8       removing their breasts. So again, it's  
9       -- it's not a case by case, but let's --  
10      let's say broad categories of -- of  
11      techniques or surgery.

12                If you're talking about  
13      something small like reconstructing a  
14      facial defect, then yeah, you don't need  
15      to get to level 3. But if you're talking  
16      about something large and permanently  
17      life-altering, then at least level 3.

18           Q.     All right. We talked earlier a  
19      while ago about some of the surgical  
20      procedure you performed, and I think one  
21      of the things you mentioned was breast  
22      reductions.

23           A.     Yes.

1 Q. Right?

2 A. Yes.

3 Q. You've done those; right?

4 A. I have done so many of those.

5 Q. All right. You've done breast  
6 reduction surgery without having the  
7 results from a randomized controlled  
8 clinical trial; right?

9 A. I believe the -- the bulk of the  
10 evidence in the therapeutic benefit of  
11 breast reduction is primarily given to us  
12 by a long-term longitudinal cohort study  
13 that we actually get from the insurance  
14 industry. Because when you do breast  
15 reduction surgery, one of the key issues  
16 in a breast reduction is, is it going to  
17 be efficacious in curing an orthopedic  
18 problem. So if you're talking about  
19 breast reduction surgery as a quote,  
20 unquote reconstructive procedure, then  
21 really, it's being applied to an  
22 orthopedic condition.

23 And the insurance companies have

1 a wealth of evidence about, for example,  
2 the weight of the specimen that has to be  
3 submitted in order to have a hope of  
4 relieving the orthopedic complaint of  
5 neck, back, and shoulder pain.

6 So -- and vir- -- and I can tell  
7 you categorically, because I'm very  
8 fastidious about this, that all of the  
9 breast reduction operations that I've  
10 ever done for the orthopedic condition of  
11 neck, back, and shoulder pain have met  
12 the criteria based upon this long-term  
13 longitudinal cohort study that the  
14 insurance companies have been running  
15 since back in the '80s at least.

16 Q. All right. Doctor, again, I  
17 need you to listen to my questions. I  
18 didn't ask about cohort studies. I asked  
19 about randomized clinical trial.

20 A. Oh.

21 Q. You have done -- you have done  
22 breast reductions without having results  
23 from a randomized controlled clinical

1 trial?

2 A. Oh, forgive me. I -- I  
3 misunderstood the question, then. No.  
4 The -- I have not, no. The industry --  
5 the plastic surgery community does not  
6 rely on a randomized trial for the -- the  
7 operation to be merited. That's correct.

8 Q. Right. Nobody in this industry  
9 waits for results from a randomized  
10 controlled trial before determining that  
11 a particular surgical procedure is  
12 nonexperimental; right?

13 MR. KNEPPER: Objection, form.

14 A. Well, this gets back to what we  
15 were talking about before, what the --  
16 what the level of evidence is, what's at  
17 risk, and what are the potential  
18 benefits. So in the case of breast  
19 reduction surgery, yes, we have not  
20 relied on randomized controlled trials  
21 because there was such an abundance of  
22 level 3 evidence to justify the  
23 procedure. And so -- and level 3

1 evidence is sufficient to answer the  
2 question, is this experimental or not?  
3 This procedure doesn't rise to the level  
4 of level 2 or level 1 in order to be  
5 justified. I believe there have been --  
6 well, no, I can't say categorically, so I  
7 won't.

8 So yeah, to answer your  
9 question, breast reduction does not rely  
10 on randomized trials. It relies on level  
11 3 evidence.

12 Q. All right. Let's take it out of  
13 the realm of breast reduction in  
14 particular.

15 A. Okay.

16 Q. It is not uncommon for plastic  
17 surgeons to perform procedures that are  
18 not supported by results from an RCT;  
19 correct?

20 MR. KNEPPER: Objection, form.

21 A. As a general principle, plastic  
22 surgeons are perhaps more innovative than  
23 other surgeons, so we're inclined to try

1 new techniques. And then, of course, you  
2 have to exercise some significant  
3 prudential judgment about what risk are  
4 you placing the patient in before you get  
5 experimental with them. Yeah. So yes,  
6 we -- we do that all -- we're innovators,  
7 as -- as a general principle.

8 Q. And as a general principle,  
9 plastic surgeons will often commonly  
10 perform procedures that are not supported  
11 by level 2 evidence; correct?

12 MR. KNEPPER: Objection, form.

13 A. Yes.

14 Q. And as innovators, plastic  
15 surgeons will often perform surgical  
16 procedures that are not level 3 evidence;  
17 right?

18 MR. KNEPPER: Objection, form.

19 A. Yeah. They -- if you're talking  
20 about small like technical improvements  
21 in -- in low-risk procedures, then yeah,  
22 we -- we do that very commonly.

23 Q. Okay. You know what the

1       Plastics and Reconstructive Surgery  
2       journal is; right?

3           A.     Yes.

4           Q.     It's the official publication of  
5       the ASPS; correct?

6           A.     Correct.

7           Q.     It's a peer-reviewed medical  
8       journal; right?

9           A.     Correct.

10          Q.     It's published monthly; right?

11          A.     And plus supplements as well and  
12       online.    Yes, sir.

13          Q.     One purpose of that journal is  
14       to educate members about new surgical  
15       techniques; right?

16          A.     Yes.

17          Q.     Would you agree that the journal  
18       is the premier peer-reviewed source for  
19       current information on reconstructive and  
20       cosmetic surgery?

21          A.     I would.

22          Q.     All right.    Are you -- I know  
23       that you're no longer a member.    Are you

1 still subscribing to the journal?

2 A. No, I'm not. It's a -- it's for  
3 members that you get the journal, so  
4 yeah. That's what my subscription relied  
5 on, so -- all those years.

6 Q. I understand. So not -- you  
7 haven't had access to it since 2018?

8 A. Well, I -- no, I go online, and  
9 I'll pay for access to particular  
10 articles. So yeah. So it's not that  
11 I've lost contact with it, it's just that  
12 I do literature searches, and if an ASPS  
13 citation comes up, I'll pay to look at  
14 it.

15 Q. I understand. Sitting here  
16 today, what percent of publications in  
17 that journal do you think consist of  
18 results from RCTs?

19 MR. KNEPPER: Objection, scope,  
20 form.

21 A. Yeah, I'm -- I'm not sure I  
22 could hazard a guess even.

23 Q. Ballpark, do you think it's 10



1       percent?   50 percent?

2           A.     Of their published articles that  
3       are randomized controlled trials?

4           Q.     Yes.

5                   MR. KNEPPER:   Objection to form,  
6       scope.

7           A.     Gosh, I'm going to guess it's  
8       probably somewhere -- probably less than  
9       10 percent.

10          Q.     How about cohort studies?   If  
11       you had to estimate, what percentage of  
12       publications in that journal do you think  
13       consist of results from cohort studies?

14                   MR. KNEPPER:   Objection, form.

15          A.     Again, just ballparking here  
16       after, you know, 35 years of reading that  
17       article -- that journal for 35 years, I  
18       would say that -- I don't -- I may be  
19       guessing, but 15 percent maybe are -- are  
20       cohorts that are usually single-center  
21       studies.   There's a lot of those in  
22       the -- in the White Journal.   There'll be  
23       a single-center cohort study of -- of

1       some operation or technique, and they'll  
2       usually report it as three or four  
3       surgeons at a single center reporting a  
4       -- a longitudinal cohort of, say, breast  
5       cancer reconstructions with implants  
6       versus breast reconstruction with  
7       autologous flaps and comparing  
8       satisfaction surveys and things like  
9       that. So I'm going to ballpark it at 15  
10      percent, but I don't know. I don't know  
11      for a fact.

12       Q.     Let me introduce an exhibit. So  
13      this will be Exhibit 17, and let me know  
14      when you get it.

15      (Exhibit 17 was marked for identification  
16      and is attached.)

17       A.     Okay. All right. I have it.

18       Q.     All right. This is a study from  
19      2019 by Sugrue, S-U-G-R-U-E, titled  
20      "Levels of Evidence in Plastic and  
21      Reconstructive Surgery Research." See  
22      that?

23       A.     I do.

1 Q. All right. See there's a  
2 "Summary" box on the first page?

3 A. Yes.

4 Q. The third sentence says, "The  
5 aim of this study is to determine if the  
6 quality of evidence in plastic surgery  
7 research has improved over the past 10  
8 years. Systematic review of research  
9 published in Plastics and Reconstructive  
10 Surgery journal over the years, 10-year  
11 period (2008, 2013, 2018), was  
12 performed." Do you see that?

13 A. I do.

14 Q. Now, you understand what this  
15 study was trying to accomplish; right?

16 A. Yeah. They were measuring the  
17 level of success that the American  
18 Society of Plastic Surgery was having  
19 after having applied those criteria we  
20 talked about earlier, the -- this  
21 requirement of reporting levels of  
22 evidence, seeking the clarity on levels  
23 of evidence. And so I expect -- I

1 haven't read this -- this article before,  
2 but I guess that's what they're looking  
3 at, is how successful have we been as a  
4 professional society in publishing --

5 Q. Yeah.

6 A. -- these things.

7 Q. And this references the levels  
8 of evidence, LOE, metric; right?

9 A. Yes.

10 Q. And that's the same metric that  
11 you referenced earlier, levels 1 through  
12 5; right?

13 A. Right. Well, the levels 1  
14 through 5 that I referenced includes  
15 the -- sort of the subcategorizing,  
16 depending on if it's a therapeutic trial  
17 or a -- or a trial of risk or things like  
18 that. So the -- the document that the  
19 ASPS published some years ago includes  
20 risk studies and diagnostic studies, but  
21 they're all ranked 1 through 5. That's  
22 right.

23 Q. And you see a couple of

1 sentences down, it says 884 studies were  
2 included in the final analysis. You see  
3 that?

4 A. Yes, I do.

5 Q. Okay. Go to page 2.

6 A. Okay.

7 Q. You see there's a Table 1?

8 A. Yes, I do.

9 Q. Table 1 is "Percentage of Each  
10 Level of Evidence Published per Year."  
11 Do you see that?

12 A. I do.

13 Q. And there's columns for 2008,  
14 2013, and 2018; right?

15 A. Yes.

16 Q. All right. Let's start with  
17 level 1, and that's randomized control  
18 trials or metaanalyses of those trials;  
19 right?

20 A. Right.

21 Q. In 2018, only 2.1 percent of all  
22 publications in the journal were level 1  
23 evidence; right?

1           A.     That's right.

2           Q.     And in 2008 and 2013, those  
3 percentages were 0.3 and 1.7 percent  
4 respectively; correct?

5           A.     Correct.

6           Q.     Not very common for the journal  
7 to report on results of RCTs, according  
8 to this summary; right?

9                   MR. KNEPPER:   Objection, form.

10          A.     Yeah.   And it even goes along  
11 with what -- my ballpark earlier, so I'm  
12 surprised -- yes, it was less than 10  
13 percent were -- were level 1 evidence and  
14 somewhere around -- yeah, so those  
15 numbers are consistent.   But yeah.

16                   And the other thing to note  
17 about it is that they appear to have been  
18 successful in choosing what they publish  
19 to support higher levels of evidence.   So  
20 I guess they're to be commended for  
21 having done this, yeah.

22          Q.     Okay.   All right.   Then level 2  
23 are -- level 2 evidence includes

1 prospective cohort or comparative  
2 studies; right?

3 A. Yes.

4 Q. With controls; right?

5 A. Yeah. There's a level of  
6 randomization that -- that's there as  
7 well --

8 Q. Okay.

9 A. -- in those prospective studies.  
10 That's right.

11 Q. And for that level 2 evidence,  
12 only 13.6 percent of all publications in  
13 the journal in 2018 consisted of that  
14 evidence; right?

15 A. Yes. That's what it says there,  
16 yes.

17 Q. All right. Level of evidence 4  
18 is case series with a pre- or posttest or  
19 only posttest; right?

20 A. Right.

21 Q. And in 2018, those amounted to  
22 41.7 percent of all publications; right?

23 A. Right. It looks as though more

1 of those level 4 have been shifted up  
2 into level 3, given that the level 5 has  
3 declined. So it looks like they're  
4 pushing more of the level 4 up into level  
5 5. Yeah.

6 Q. Yeah. Much of the research on  
7 which your field relies doesn't consist  
8 of results from RCTs or controlled cohort  
9 studies; right?

10 A. Well, I wouldn't --

11 MR. KNEPPER: Objection, form.

12 A. I wouldn't say that based on  
13 this. I would say that much of the  
14 published research in this journal is of  
15 that -- of what you described, relying on  
16 RCTs and so on.

17 This is a -- this is not a  
18 document about what the profession is  
19 doing. This is a document about what  
20 this journal is publishing. And what  
21 they're publishing is more papers of  
22 higher value, for which they're to be  
23 commended. So this says nothing about



1        what people are investigating. This says  
2        about -- this says something about what  
3        this journal is publishing.

4            Q.     Well, this is the journal for  
5        the ASPS; right?

6            A.     Right. With limited space for  
7        publication. So they're being,  
8        apparently, more selective about what  
9        they'll publish, that it's not just that  
10       well, this is the chief of plastic  
11       surgery at NYU, so we're going to publish  
12       his paper. It's the chief of plastic  
13       surgery has a level 2 case. Let's --  
14       let's present -- let's publish that one.  
15       I think that's what this is telling us,  
16       that they're being more fastidious about  
17       what they publish, whereas before, they  
18       might have been more -- well, less  
19       selective, let's say.

20           Q.     Have you ever been involved with  
21        selecting articles to be published in  
22        this journal?

23           A.     I've never been involved in --

1 in journal publication staff or -- no, I  
2 have not.

3 Q. You don't know the process by  
4 which they select what article to  
5 publish; right?

6 MR. KNEPPER: Objection, form.

7 A. I have some idea, but I'm --  
8 it's not my -- my area of professional  
9 expertise.

10 Q. Yeah.

11 A. I merely read the journal, and  
12 have for approaching forty years now.

13 Q. Look at Table 2.

14 A. Okay.

15 Q. And look at the column under  
16 2018.

17 A. Yes.

18 Q. The first two rows, "Systematic  
19 review/meta analysis" and "Randomized  
20 control trials," account for 3.2 plus 3.8  
21 percent of all publications of the  
22 journal in 2018. Correct?

23 A. Right.

1 MR. KNEPPER: Objection.

2 Q. Case series account for 26.3  
3 percent; right?

4 A. Right.

5 Q. Okay. Go to page 3 of this  
6 exhibit.

7 A. Okay. I'm there.

8 Q. All right. First full  
9 paragraph, first sentence says, "Case  
10 series are the backbone of surgical  
11 research." Do you see that?

12 A. I do.

13 Q. You don't disagree that case  
14 series can be helpful scientific  
15 evidence; right?

16 A. No. As I -- as I testified  
17 before, this is the beginning of  
18 research. It always begins with perhaps  
19 a serendipitous discovery, then to case  
20 reports, then to case series, single --  
21 single-provider case series or multiple  
22 providers in a -- in a -- an institution.  
23 But that's the beginning of surgical

1 research, yeah. That's how it always  
2 begins.

3 Q. Well, it's a beginning, but  
4 sometimes it's also the end; right?  
5 Because look at the third sentence. It  
6 says: "The absence of a control group  
7 justifiably ranks this design at the  
8 lower end of the evidence pyramid.  
9 Despite this, case series are vital.  
10 They may be the only feasible and ethical  
11 study methodology obtainable, as seen  
12 with craniofacial surgery." You see  
13 that?

14 A. Yeah. And to that -- to that  
15 particular point, so I've got extensive  
16 experience with craniofacial surgery, and  
17 -- and it's -- this is one of those  
18 procedures where the outward change to  
19 the child can't be blinded. You cannot  
20 blind the investigator because,  
21 obviously, he's doing the surgery, and  
22 you can't blind the patient or the family  
23 to it because the results are quite

1 obvious. And that's what they're saying  
2 here. And obviously, they're not saying  
3 that it's never useful or is never  
4 necessary. They're saying that in many  
5 cases, you don't need to rise to that  
6 level because you have evident benefit to  
7 the patient and the risk is not only  
8 manageable but -- but sufficiently low to  
9 warrant the application of a particular  
10 technique.

11 So that was certainly the case,  
12 for example, when we introduced external  
13 fixation devices for advancement of the  
14 mid face in certain congenital  
15 deformities. Nobody had done a  
16 randomized trial because you can't.  
17 You've got this hardware sitting on the  
18 patient's face. So -- but yet, the --  
19 the luminaries in craniofacial surgery  
20 were able to demonstrate through a case  
21 series that this was a valid technique,  
22 and then the rest of us adopted it. So  
23 that's an example of how plastic surgery

1       works.

2               Now, if the patient was at risk  
3       of death because this technique was being  
4       applied or if the patient was at risk of  
5       permanent life-altering changes that  
6       couldn't be reversed, then yeah, you  
7       would have to proceed with much greater  
8       caution, and you may be looking at  
9       finding some way, longitudinal  
10      study-wise, to -- to quantify the benefit  
11      of using your technique over using  
12      established techniques.

13       Q.     There are some areas in plastic  
14      surgery and reconstructive surgery where  
15      case series are basically as good as it  
16      gets in terms of scientific evidence;  
17      right?

18               MR. KNEPPER:   Objection, form.

19       A.     Yeah.   I suppose in the newer --  
20      at the newer end of techniques, that's  
21      all you got for now until the technique  
22      has been applied over a sufficiently long  
23      time that you can look at a retrospective

1 cohort.

2           So for example, in the case of  
3 gender transitioning surgery, the -- the  
4 -- the surgeons have been at it now for  
5 several decades. And we should be  
6 already at the level of level 3 evidence,  
7 but -- but we're not.

8           Q. Well, you --

9           A. So I wouldn't put that in the  
10 category of -- you're talking there about  
11 a high-risk procedure that has a long  
12 track record that can be examined. And  
13 -- and clearly, the examination of that  
14 technique in the last three years, give  
15 or take, has -- has shown us that that  
16 this is in the category of those  
17 operations that demand higher levels of  
18 evidence than a case series, whether it's  
19 single provider, single institution, or  
20 even single nation. You've got to --  
21 you've got to look at the data now and --  
22 and prove that you are doing something  
23 good for the patient.

1           And quite frankly, it hasn't  
2       been proven in the -- in the American  
3       literature. Certainly, WPATH hasn't  
4       proven that. But in the European  
5       literature, they're looking at it and  
6       saying, gosh, you know, the -- the  
7       Swedish study shows us that if you only  
8       follow patients for five years at the  
9       most, you're not even going to see the  
10      long-term effect of what you did to them.  
11      And if you look at them eight years and  
12      beyond, you'll see that you haven't  
13      solved the suicidality, the self-harm,  
14      the incarceration, psychiatric diagnosis  
15      admissions, and things like that.

16           So -- so yeah, as far as what  
17      we're talking about today, yeah, there's  
18      a whole spectrum of what's acceptable  
19      levels of evidence for a particular  
20      procedure. The higher the risk, the  
21      higher the level of evidence is demanded.  
22      And sometimes you have to wait to get to  
23      that level of evidence if you're dealing



1 with something potentially  
2 life-threatening.

3 Like certainly, the providers  
4 were fully justified in considering this  
5 because of the high suicide rate of  
6 transgender patients. Case series,  
7 totally valid reason given that the life  
8 of the patient is at risk here, totally  
9 valid to go with a case series as the  
10 evidence by which you're consenting the  
11 patient to surgery. But we're now beyond  
12 that. We're now beyond that. We're at  
13 -- we're now -- the ethics demands that  
14 we look at higher levels of evidence  
15 because of the long-term risk to the  
16 patient and the fact that the long-term  
17 evidence doesn't support the indication  
18 for surgery, which is lower suicide rate,  
19 lower self-harm, lower drug abuse.  
20 That's really what we're talking about  
21 here.

22 Q. I have some other questions.  
23 You agree that -- strike that.

1                   Do you agree that it is not  
2                   possible to perform RCTs for some  
3                   surgical procedure because you can't  
4                   blind the patient or the investigator to  
5                   what the procedure is?

6                   A.     Absolutely agree, yeah.

7                   Q.     So, let's take phalloplasty;  
8                   right?

9                   A.     Okay.   Yeah.

10                  Q.     When a surgeon performs a  
11                  phalloplasty on a patient, both the  
12                  surgeon and the patient are going to know  
13                  that the procedure was done; right?

14                  A.     Yes.

15                  Q.     It's not possible to have a RCT  
16                  for phalloplasty because you can't blind  
17                  the participant or the investigator;  
18                  right?

19                  A.     Yeah.   That's typical of most  
20                  surgical interventions.   The only  
21                  exception to that would be intraabdominal  
22                  or intrathoracic surgeries or even  
23                  intracranial surgeries.   And -- and

1       that's considered sham surgery, which is  
2       considered malpractice and ethical  
3       violation of professional standards. So  
4       you can pretty much rule out most all  
5       surgical procedures from the randomized  
6       control trial category. Correct.

7           Q.     And we agree that the same would  
8       apply to metoidioplasty, for example;  
9       right?

10          A.     Yes.

11          Q.     To all types of, again,  
12       colloquially known as bottom surgery;  
13       right?

14          A.     Correct.

15          Q.     All right. Let's take  
16       puberty-blocking hormones.

17          A.     Okay.

18          Q.     When patients with gender  
19       dysphoria treatment start  
20       puberty-blocking hormones, they're not  
21       going to undergo puberty, basically;  
22       right?

23          A.     Well, that's the intended use,

1       that's correct.

2           Q.     So there's going to be  
3       observable physical effects of the  
4       hormones that will be apparent to the  
5       patient; right?

6           A.     Yes.   Within a year, that child  
7       is going to look much smaller than his  
8       peers.   He's going to be developmentally  
9       delayed psychologically,  
10      neurophysiologically.   His -- his  
11      movements are not going to be as -- his  
12      coordination is going to be less matured.  
13      His higher executive functions will be  
14      impaired.   So it will be very obvious  
15      that this child is now different from his  
16      peers.   So I would agree with you; you  
17      couldn't find a way to blind such a study  
18      because the evidence of effect is so  
19      obvious within the first year that  
20      everyone would know that they're taking  
21      the -- the puberty-blocking  
22      gonadotropin-releasing hormone agonist.

23           Q.     We agree that -- we agree that

1       it's not possible to do an RCT for  
2       puberty-blocking hormones because of  
3       these apparent physical effects; right?

4               MR. KNEPPER:  Objection, form.

5           A.     I -- I would agree, yes.

6           Q.     Okay.  Let's take cross-sex  
7       hormones.

8           A.     And the -- the last question you  
9       asked me, did you qualify that as you  
10      couldn't do a double-blinded study using  
11      puberty-blocking drugs in self-identified  
12      transgender children?

13          Q.     Yes.

14          A.     Yeah.  Because if you're  
15      applying the drug to other conditions  
16      like precocious puberty, it -- it may be  
17      possible.  It may be possible to -- I  
18      don't know.  I'd have to think about that  
19      but -- okay.  Sorry.

20          Q.     Let's take cross-sex hormones.

21          A.     Okay.

22          Q.     When somebody -- someone is  
23      treated with estrogen or testosterone for

1 gender dysphoria, there are also going to  
2 be physical effects from those  
3 treatments; correct?

4 A. Yes. Given that sex hormones  
5 have such a profound effect on every body  
6 system, then it's going to be impossible  
7 to conceal the fact that the person is on  
8 sex hormones because every -- every  
9 function of the body is affected by sex  
10 hormone levels, particularly at the age  
11 of early adolescence.

12 Q. And given these visible physical  
13 effects, it's not possible to design a  
14 double-blind RCT for cross-sex hormones  
15 for gender dysphoria; correct?

16 A. It would probably be an invalid  
17 study, yes.

18 Q. All right. Let's go back to  
19 your -- actually, you know what? I'm  
20 going to move to a different area. It's  
21 been about an hour. Let's take a quick  
22 break.

23 MR. TISHYEVICH: Off the record.

1 THE VIDEOGRAPHER: This is the  
2 end of Media Unit No. 4. We are off the  
3 record at 2:16 p.m.

4 (Break taken.)

5 THE VIDEOGRAPHER: This is the  
6 beginning of Media Unit No. 5. We are on  
7 the record at 2:24 p.m.

8 Q. (By Mr. Tishyevich) Let's go  
9 back to your report, Exhibit 1.

10 A. Okay.

11 Q. Go to page 21.

12 A. Twenty-one. Okay.

13 Q. And you see there's a paragraph  
14 starting with, "Failure to discuss the  
15 failure to conduct"?

16 A. Yes.

17 Q. Okay. So in the second line,  
18 you reference the "unknown number and  
19 percentage of patients who drop out of  
20 transitioning or reverse the process  
21 parentheses (Detransitioners)."

22 A. Right.

23 Q. You see that?

1           A.     I do.

2           Q.     All right. You agree that the  
3           number and percentage of patients with  
4           gender dysphoria who drop out of  
5           transitioning or who reverse the process  
6           is currently unknown; right?

7           A.     Well, it depends on if you're  
8           asking that question about the general  
9           population or in a particular study. So  
10          in particular studies, that number is  
11          known, but in the general population,  
12          it's an unknown.

13          Q.     Yeah.

14          A.     And the reason -- the reason  
15          it's unknown in the general population is  
16          because the people doing the research  
17          aren't following those patients. That's  
18          why we don't know.

19          Q.     In the overall population, the  
20          number and percentage of patients who  
21          drop out of transitioning or reverse the  
22          process is unknown; agree?

23          A.     Yeah. I would agree that's



1 unknown, yeah.

2 Q. All right. Given that,  
3 obviously, you're not offering any expert  
4 opinions on what that number or  
5 percentage is in the general population;  
6 right?

7 A. Yeah, I don't -- I don't think  
8 it's possible for anyone to break out the  
9 difference, for example, between somebody  
10 who isn't followed up because they've  
11 detransitioned or somebody who isn't  
12 followed up because they've taken their  
13 own life. We have no way of knowing  
14 because nobody's following up.

15 Q. All right. Look toward the  
16 bottom of this page 21. You cite a case  
17 series from I believe it's Djordjevic,  
18 D-J-O-R-D-J-E-V-I-C. Do you see that?

19 A. I do.

20 Q. And you say, "More dramatically,  
21 a surgical group prominently active in  
22 the SRS field has published a report on a  
23 series of seven male-to-female patients

1        requesting surgery to transform their  
2        surgically constructed female genitalia  
3        back to their original male form."

4        Right?

5            A.     I see that, yes.

6            Q.     Okay. Now, this article was not  
7        an RCT, obviously; right?

8            A.     Right, right.

9            Q.     It was not a cohort study;  
10       right?

11          A.     No. This would be a case -- a  
12       case series.

13          Q.     Yeah. The lowest level of  
14       evidence; right?

15          A.     No. Actually, the lowest level  
16       of evidence would be sort of single  
17       patient -- well, it's sort of somewhere  
18       between 4 and 5, I suppose. I'd have to  
19       look at the article again to see what the  
20       -- what the denominator is, but --

21          Q.     Yeah. Well, generally, you  
22       think that anecdotal patient stories like  
23       these are not reliable scientific

1 information; right?

2 MR. KNEPPER: Objection, form.

3 A. No. They're the first clue to a  
4 problem or the first clue to a solution.  
5 That's exactly right. So that -- that  
6 sort of points to the controversial  
7 nature of these therapies, is that -- is  
8 that we don't have the answer. We can't  
9 explain why these detransitioners weren't  
10 predicted preoperatively because we don't  
11 have a test instrument to figure that  
12 out.

13 So when you see a series like  
14 this -- this is what we talked about  
15 earlier, about the -- the history of  
16 progression of levels of evidence. You  
17 start out with reports like this. This  
18 leads to further research. And I'm just  
19 trying to remember, when I read the  
20 article, where that study was done. I  
21 don't have it in front -- I'm just trying  
22 to remember what -- what country that was  
23 done in.

1           Q.     Yeah.  I'll -- I'll show it to  
2     you.

3           A.     Okay.

4           Q.     Hold on.  Let me introduce it.

5           A.     Thank you.

6           Q.     You did read these -- this  
7     article in full before you cited it;  
8     right?

9           A.     Yeah.  That -- it was -- it was  
10    probably about seven months ago, but yes,  
11    I did.

12          Q.     Sure.

13                 THE COURT REPORTER:  I didn't  
14    hear anything.  So it's just --

15                 THE WITNESS:  Okay.

16                 THE COURT REPORTER:  We're  
17    losing it in Zoom.  Thank you.

18                 THE WITNESS:  Forgive me.  I'm  
19    sorry.

20                 THE COURT REPORTER:  No, that's  
21    okay.  It's awkward.

22          Q.     (By Mr. Tishyevich) Okay.  This  
23    is going to be Exhibit 18, and let me

1 know when you have it.

2 (Exhibit 18 was marked for identification  
3 and is attached.)

4 A. Okay. Okay. Yeah, there it is.  
5 Yes. Yeah, right. Okay. It's coming  
6 back to me now. And this was published  
7 out of the -- Amsterdam. That's right.  
8 Okay. All right. Yeah.

9 Q. All right. Let me ask you --  
10 strike that.

11 Bottom of the page, there's a  
12 section titled "Introduction." You see  
13 that?

14 A. The bottom of the first page?

15 Q. Yes.

16 A. Yes, I see that.

17 Q. Look at -- look to the column on  
18 the right.

19 A. Okay.

20 Q. The last sentence says, "In  
21 general, most researchers have reported  
22 their patients are extremely satisfied  
23 overall with their surgical outcomes,

1 with a low rate of complications." You  
2 see that?

3 (Witness reviews document.)

4 A. Right. I see -- I do see that,  
5 yes.

6 Q. Then it cites three footnotes, 5  
7 through 7; right?

8 A. Right.

9 Q. You don't acknowledge this  
10 portion of the article in your report;  
11 right?

12 A. Well, it is in the discussion, I  
13 think. Well, actually, probably maybe in  
14 the summary of the -- of the medical  
15 evidence. The -- I would put this in the  
16 category of subjective reporting and  
17 short -- subjective reporting and short  
18 follow-up. Right. That's what --

19 Q. Well, you --

20 A. I'm sorry. Go ahead.

21 Q. No, no, go ahead.

22 A. So I think the reason I included  
23 this was to show that there are -- you

1 know, that there's a growing pool of  
2 patients who are returning for reversal  
3 surgery. I don't think I discussed in  
4 this part of my report -- yeah. I'm just  
5 talking about increasingly visible  
6 community and patient -- increasing  
7 number of patients requesting reversal  
8 surgery. And as an example of that,  
9 again, going to a single-center case  
10 collection as an example, early evidence,  
11 we're starting to see this now as numbers  
12 of patients who have surgically  
13 transitioned increases, the numbers of  
14 patients who regret is going to increase,  
15 particularly in light of what these  
16 authors speak about here.

17 Let me see if I -- yeah. So in  
18 the second sentence of the abstract in  
19 the introduction, it says, "However,  
20 misdiagnosed patients sometimes regret  
21 their decisions." And one of the reasons  
22 for including this article is the fact  
23 that misdiagnosis is not measured. The

1 world literature doesn't present error  
2 rates. This would be what I would  
3 consider an error rate, that an erroneous  
4 diagnosis was acted upon surgically,  
5 leading to this complication of regret  
6 and a -- and a desire for reversal.  
7 Yeah.

8 Q. Your expert testimony is that  
9 there's no data available on the  
10 percentage of people who have received  
11 treatment for gender dysphoria who  
12 experience regret?

13 A. Yeah. It's very, very low --  
14 low-level evidence right now. It's  
15 basically we're in the -- we're in the  
16 case collection study, whereas actually  
17 in the -- well, that's not regret. But  
18 -- but perhaps in the category of  
19 misdiagnosis would be the -- the reports  
20 out of Sweden, certainly the -- yeah, so  
21 beginning with the Swede -- Swedish  
22 studies by Cecilia Dhejne and others that  
23 shows us a lack of efficacy. Whether or



1 not the patient presented for reversal is  
2 definitely an unknown number, definitely.

3 Q. All right. That study doesn't  
4 quantify anything about patient regret;  
5 right?

6 A. The Swedish study does not. It  
7 quantifies lack of -- of effect from the  
8 surgical interventions. Lack of benefit,  
9 I should say.

10 Q. Go to page -- PDF page 7 of this  
11 document and look at the Conclusions --

12 A. Okay.

13 Q. -- section.

14 A. All right. Let's see that page.  
15 Conclusions. Okay. I'm there.

16 Q. The first sentence says, "The  
17 vast majority of properly diagnosed  
18 transsexual patients are satisfied with  
19 their decision to undergo SRS, with only  
20 a few coming to regret it." Right?

21 A. Right. So this -- the other  
22 reason why this study is useful to our  
23 conversation is that this is the same

1 language and the same metrics that's used  
2 to describe the success of cosmetic  
3 surgery. They don't include in here,  
4 apart from the regret number that they're  
5 actually publishing here -- not number  
6 but the examples, I should say. They  
7 don't include in their -- in their  
8 conclusions any statement about objective  
9 quantifiable benefit from the surgery.  
10 They talk about subjective reporting.

11 So this is an example of a -- of  
12 a peer-reviewed journal article that  
13 measures the efficacy of this surgery  
14 based solely upon a satisfaction survey  
15 of patients who have returned for  
16 follow-up, so this would be an example of  
17 that. Yes, sir.

18 Q. Do you know what metric was used  
19 to measure satisfaction or  
20 nonsatisfaction in these studies?

21 A. I'd have to reread the -- the  
22 methods and materials here, but I  
23 would -- I would guess it was one of the

1 approved instruments for measuring  
2 satisfaction. There are a variety of  
3 test instruments used for -- in  
4 satisfaction surveys, particularly in the  
5 world of plastic surgery.

6 Let's see. They used the --  
7 these are the kind of things I don't keep  
8 in my long-term memory here for a  
9 particular article. Okay.

10 (Witness reviews document.)

11 A. Okay. There's the outcomes  
12 measures. Forgive me for eating up your  
13 time.

14 Q. Let me -- let help you, Doctor.  
15 Go to page --

16 A. Okay. There it is.

17 Q. -- PDF page 5.

18 A. Yeah. Fif- -- yeah.

19 Q. Yeah.

20 A. Fifteen, right.

21 Q. Question on the page --

22 A. So there's a -- there's a test  
23 instrument there. Right.

1           Q.     Yeah.  There's a test instrument  
2     that measures things like erectile  
3     function, sexual desire, orgasmic  
4     function, intercourse satisfaction, and  
5     overall satisfaction; right?

6           A.     Right.

7           Q.     They don't just ask the patient,  
8     "Hey, are you happy with the surgery?"  
9     There's five criteria that are applied;  
10    right?

11          A.     Right.

12          Q.     This is an approved instrument  
13    for measuring this type of satisfaction  
14    for surgery; right?

15               MR. KNEPPER:  Objection, form.

16          A.     This is -- this is -- yeah, it's  
17    definitely a valuable instrument for  
18    measuring things, but none of them are  
19    the -- are the indication for surgery,  
20    which is things like reduced suicidality,  
21    reduced self-harm, reduced alcohol use,  
22    all of those other things which are --  
23    which are the reason, the indication for

1 the operation. So you generally try to  
2 match the surgical procedure with the  
3 indication for the surgery.

4 They're measuring things that  
5 weren't involved in the indications for  
6 surgery. They didn't get, you know,  
7 reconstructive surgical approval so that  
8 they could achieve erections, for  
9 example. This was approved because of  
10 the risk of self-harm, suicide, those  
11 sorts of things. Yeah. But none of  
12 those are measured. They -- it is -- it  
13 is they do have objective measures, and  
14 this is one of the -- one of the values  
15 of this study. But I don't think they  
16 report the complication rate in this  
17 study, as I recall.

18 Q. This -- this study specifically  
19 did not purport to seek out anything  
20 about suicidality or mortality or other  
21 adverse outcomes of that nature; right?

22 A. Let's see. I'm trying to  
23 remember in their introduction.

1 (Witness reviews document.)

2 A. Yeah. I think their indications  
3 used language that was more consistent  
4 with -- with aesthetic, aesthetic surgery  
5 rather than the reconstructive language.  
6 So yeah.

7 (Witness reviews document.)

8 A. Yeah. So --

9 Q. Yeah. Here's --

10 A. Yeah, I would --

11 Q. Here's what I find interesting,  
12 Doctor.

13 A. Okay.

14 Q. Your report cites this one case  
15 series of seven patients to make the  
16 point that there's this regret occurring  
17 without even mentioning that there's  
18 multiple case series that say the vast  
19 majority of these patients end up being  
20 satisfied with this type of surgery?

21 A. No. I don't think --

22 Q. You don't think that's  
23 appropriate to mention?

1           A.     No.    I -- actually, what I  
2     present these examples to show, that --  
3     that the literature in support of these  
4     surgeries is characterized by very short  
5     follow-up and subjective reporting.   So  
6     this is an example of some objective  
7     reporting, mostly subjective reporting.  
8     And most of the articles, for example,  
9     that you just asked me about involve  
10    subjective reporting and short follow-up.  
11    That's right, yeah.

12          Q.     All right.

13          A.     And in this case, you also --  
14    I'm -- I'm pleased that they reported  
15    that one, two, three, four, five, six,  
16    seven -- so nearly half of their patients  
17    had a surgical complication of a urethral  
18    fistula, and if you have a urethral  
19    fistula and you have a malleable  
20    prosthesis, probably they went on to  
21    remove the prosthesis as well.   But  
22    that's -- I mean, I -- props for this --  
23    this team that they reported their

1 complications.

2 Q. Where -- what page is the  
3 complications portion you're looking at?

4 A. That's on -- just before you get  
5 -- the last page before the -- the same  
6 page as the conclusions. There's a table  
7 at the top, and they have the seven  
8 patients, and you can see -- what's also  
9 interesting here, too, is -- is that if  
10 you look at the period after sex  
11 reassignment surgery, that the -- that  
12 the dissatisfaction level really kicks in  
13 when you're beyond eight years.

14 Actually, if you look at even six years  
15 beyond.

16 Initially, there's no patients  
17 reporting dissatisfaction at anything  
18 less than five years, and so this is  
19 actually further evidence of the -- of  
20 the inadequacy of the -- the papers that  
21 are in the literature right now which  
22 have follow-ups that are typically two to  
23 three years. So none of these patients



1 would have been seen, with most of the  
2 literature that supports these  
3 techniques, as a way to, you know, avoid  
4 -- avoid dissatisfaction or -- or  
5 suicidality or drug use or anything else  
6 like that. So that's an interesting -- I  
7 hadn't noticed that before, but yeah.

8 Q. Yeah. Are you reading Table 1  
9 to say that these complications like  
10 urethral fistula and stricture were from  
11 the original surgery?

12 A. Well, I'm -- I'm merely --

13 Q. Or is it from the reversal  
14 surgery that was being done later?

15 A. So they're talking here about  
16 flaps. They're talking about  
17 complications from the -- the -- the  
18 surgeries. Yeah. So this --

19 Q. Yeah. This is --

20 A. They're speaking about urethral  
21 fistulas and strictures are the main  
22 problem after total phalloplasty. So  
23 that's the construct of the counterfeit

1       phallus because of insufficient vascular  
2       supply. I also discuss that in my  
3       complications section. These are  
4       characteristic complications of these  
5       free flaps, radial forearm free flaps,  
6       and you see those complications here.  
7       And you even see them later in -- in the  
8       case, so. Some of them are step  
9       procedures. In fact, all of them are.

10       Q. All right. Let me -- let me  
11       show you another study.

12       A. Okay.

13       Q. Let me reintroduce this with an  
14       exhibit -- exhibit stamp. Give me a  
15       second. All right. I'm reintroducing  
16       this as Exhibit 20. Let me know when you  
17       have it.

18       (Exhibit 20 was marked for identification  
19       and is attached.)

20       A. I just got Exhibit 19. Is there  
21       another? There's a 20 to follow?

22       Q. It -- it should load  
23       momentarily. Yeah.

1           A.     Oh, I'm sorry.

2                   MR. KNEPPER:   Are 19 and 20 the  
3 same, just one's missing the little  
4 stamp?

5                   MR. TISHYEVICH:   Correct.

6                   THE WITNESS:   Okay.   I'll just  
7 go to 20, then, when it comes in.

8           Q.     Okay.   This is a study titled  
9 "The Amsterdam Cohort of Gender Dysphoria  
10 Study (1972-2015): Trends in Prevalence,  
11 Treatment, and Regrets."   Do you see  
12 that?

13          A.     I do.

14          Q.     And then it's by an author,  
15 let's say Wiepjes, W-I-E-P-J-E-S.

16          A.     Yeah.

17          Q.     Right?

18          A.     I agree.

19          Q.     Have you seen this study before?

20          A.     I'm trying to gloss it to see if  
21 I've read this before.   I -- I may have.  
22 Give me just a moment, if that's okay.

23          Q.     Sure.

1 (Witness reviews document.)

2 A. Yeah, this looks familiar.

3 Q. I don't think I saw this in your  
4 report, but tell me if you remember  
5 otherwise.

6 (Witness reviews document.)

7 A. Yeah, no. I remember this being  
8 evidence of the growing population of  
9 self-reported transgender patients,  
10 and it's a retro- --

11 Q. Okay. Let me --

12 A. -- retrospective trial. Yeah.

13 Q. Yeah. Let's go through this.

14 A. Retrospective study, I should  
15 say.

16 Q. All right. You see the  
17 "Abstract" section on the first page?

18 A. I do.

19 Q. See the "Results" section?

20 A. I do.

21 Q. It says, "6,793 people (4,432  
22 birth-assigned male, 2,361 birth-assigned  
23 female) visited our gender identity

1 clinic from 1972 through 2015." See  
2 that?

3 A. I do.

4 Q. All right. So you understand  
5 that as part of this study, the authors  
6 reviewed medical records of 6,793 people  
7 who visited this gender identity clinic  
8 from 1972 to 2015; right?

9 A. I do.

10 Q. All right. And you see the  
11 "Strengths and Limitations" section?

12 A. Yes, I do.

13 Q. And you understand that this  
14 Dutch gender identity clinic treats more  
15 than 95 percent of the transgender  
16 population in the Netherlands; right?

17 A. Right.

18 Q. Pretty comprehensive study;  
19 right?

20 MR. KNEPPER: Objection, form.

21 A. As of 2015, yes. So it's a  
22 7-year-old study, and it's -- it's  
23 certainly large in numbers, that's for

1       sure. So it's a retrospective chart  
2       review of patients visiting the -- the  
3       center in the Netherlands, and it's -- it  
4       concludes in 2015.

5           Q.     This is certainly a better study  
6       than that seven series case report that  
7       you cited in your report; right?

8           A.     It's a different type of study.  
9       Yes, it is. Right.

10          Q.     Yeah. This study reports on  
11       6,793 people, whereas the case series on  
12       which you rely has seven what you call  
13       anecdotes; right?

14          A.     I wouldn't say I relied on that  
15       study. I merely presented it as an  
16       example of -- of reporting on transgender  
17       regret. I didn't present it as a study  
18       that I relied all my opinions on.  
19       Certainly, there's other study types and  
20       other studies in the literature that --  
21       that one might rely more heavily on.

22          Q.     Well, let the --

23          A.     A retro- -- a retrospective

1 chart review, for example, might be more  
2 useful.

3 Q. Yeah.

4 A. But not -- not definitive. And  
5 again, we've got to examine the fact that  
6 we're looking at old data here.

7 Q. Well, let's see what this  
8 30-year retrospective review found. Look  
9 at the "Results" section.

10 A. Scroll down. Okay.

11 Q. Look at the last two sentences.  
12 "The percentage of people who underwent  
13 gonadectomy within 5 years after starting  
14 HT remained stable over time" --

15 A. Right.

16 Q. -- "(74.7% of transwomen and  
17 83.8% of transmen). Only 0.6% of  
18 transwomen and 0.3% percent of transmen  
19 who underwent gonadectomy were identified  
20 as experiencing regret." Do you see  
21 that?

22 A. I do. And that has caused me to  
23 want to look back and see -- okay. So

1       they started with the 6,800, roughly, and  
2       they report on 6,000 -- 7,000 almost.

3       Okay. And clinic. Okay. And increase.

4               So I'm just trying to see if  
5       they reported the average follow-up.  
6       They're reporting when they underwent  
7       gonadectomy after starting hormone  
8       therapy, but they don't report the length  
9       of follow-up, which is one of the key  
10      reporting points there, because regret,  
11      as we talked about earlier, is a -- tends  
12      to be a function of time postsurgically.  
13      So, let's just scroll down because it's  
14      been a long time since I looked at this  
15      article. Transwomen, transmen total  
16      underwent gonadectomy.

17             Yeah. As I recall, they don't  
18      report average follow-up time. Every  
19      five-year cohort. So they're looking --  
20      they -- they did look at when they  
21      entered the system. Prevalence and  
22      treatment. Confidence interval.

23             Yeah, as I -- yes. So I think



1       that's -- this is coming back to me now.  
2       I think they didn't report the average  
3       follow-up or the -- let's see if I'm  
4       missing something here. Age for each  
5       year, so they did break them out in age  
6       that they -- they entered the -- the  
7       process, the years during which they  
8       entered the process, age groups. And  
9       yeah, I think that's -- that was one of  
10      the -- one of the issues.

11               And this is -- consonant with --  
12      with a lot of the literature, is they  
13      don't report the follow-up interval. And  
14      that's what the Swedish study is showing  
15      us, that if -- if you don't have a handle  
16      on the length of follow-up after sex  
17      reassignment surgery, then you don't have  
18      a -- you don't have any way to fully  
19      understand the issue of lack of efficacy  
20      or regret.

21               If you're asking the questions  
22      is the surgery effective in correcting  
23      the most calamitous problems that a

1 transgender person has, which is  
2 suicidality, self-harm, and all those  
3 things that we talked about earlier, then  
4 you have to look at the interval  
5 postsurgery in order to have a full  
6 understanding of the efficacy of the  
7 procedure. And as I recall now, looking  
8 it over again, this study does not report  
9 on the follow-up period. The median age  
10 at first visit was younger, 25. Yeah.  
11 So they talk about age. They talk about  
12 the years in which they were cared for,  
13 but they don't talk about the length of  
14 the follow-up interval, so.

15 Q. All right. Let me move on --

16 A. Okay.

17 Q. -- to save time.

18 A. All right.

19 Q. Go to page 4 and where it says  
20 "Regret."

21 A. Okay.

22 Q. You with me?

23 A. I am.

1           Q.     Third sentence says -- fourth  
2           sentence says, "Reasons for regret were  
3           divided into social regret, true regret,  
4           or feeling non-binary." You see that?

5           A.     I do.

6           Q.     And social regret -- strike  
7           that.

8                     It says, "Transwomen who were  
9           classified as having social regret still  
10          identified as women, but reported reasons  
11          such as 'ignored by surroundings' or 'the  
12          loss of relatives is a large sacrifice'  
13          for returning to the male role." Do you  
14          see that?

15          A.     I do.

16          Q.     All right. So some of the  
17          persons who are being counted as  
18          experiencing regret in the study did not  
19          experience regret in the sense of they're  
20          realizing they're not transgender; right?

21          A.     Realizing they're not  
22          transgender? I'm -- I'm trying to  
23          understand your question here. So you're

1 -- you're pointing me to the -- social  
2 regret, true regret, feeling non-binary  
3 is what's stated here.

4 "Transwomen who were classified  
5 as having social regret still identified  
6 as women, but reported reasons such as  
7 'ignored by surroundings' or 'the loss of  
8 relatives is a large sacrifice' for  
9 returning to the male role."

10 Okay. Yeah. So -- so it's --  
11 it's reporting without quantifying the  
12 reasons for regret and the -- basically  
13 all of them, subjective reporting again,  
14 so -- okay.

15 Q. Well -- well, let's go to page  
16 6.

17 A. That's the next page, isn't it?  
18 Am I on the right page?

19 Q. On page 6, it has a large  
20 vertical table on the left side.

21 A. Okay. There we are.

22 Q. And you may want to rotate it so  
23 that you can see that table 6.

1           A.     When I got -- let's see.

2           There's a way to do that, isn't there?

3           THE COURT REPORTER:   Yeah.   If  
4           you put your cursor over the document, a  
5           black rectangle will come up at the  
6           bottom.

7           THE WITNESS:   I see it now.

8           Yes.

9           THE COURT REPORTER:   There you  
10          go.

11          THE WITNESS:   All right.   There  
12          we are.

13          Q.     Table 4 is titled  
14          "Characteristics of people with regret."

15          A.     Okay.

16          Q.     According to this table, out of  
17          6,793 patients who received treatment, 14  
18          of them reported regret of any type;  
19          right?

20          A.     Okay.

21          Q.     And all the way on the right,  
22          you see there's a "Reason for regret"  
23          column; right?

1           A.     Right.

2           Q.     And you're welcome to count it,  
3     but by my count, only 7 of those 14  
4     reported, quote, unquote, true regret;  
5     right?

6           A.     Yeah.   And what's interesting  
7     about that is that those are the same  
8     criteria that were used to seek  
9     transgender surgery to solve their  
10    interior problems.   So many patients will  
11    present for care because they feel  
12    socially isolated and because they have,  
13    you know, issues of -- well, for example,  
14    being non-binary and so on, those --  
15    those -- like social acceptance and  
16    feeling non-binary is among the  
17    indications for the procedure.   So it's  
18    interesting to note also that time after  
19    surgery, the regretters seem to favor --  
20    postsurgical, you start to see them,  
21    what, maybe 50 to 90 months out and a lot  
22    of them, years -- ten years out.   Yeah.  
23    So that -- that speaks to what we talked

1       about earlier, that you see these regrets  
2       and these problems beyond five years.

3           Q.     All right.  Whatever criticism  
4       you have of the methodology, what the  
5       study reports is -- are rates of regret  
6       that are below 1 percent; right?

7           MR. KNEPPER:  Objection, form.

8           A.     Yeah.  Again, so as we talked  
9       about earlier, that's the problem with  
10      this study, is that -- is that the -- the  
11      denominator is a much larger number than  
12      these 14 patients, and they don't address  
13      the length of follow-up out of which they  
14      extracted these 14 patients.  So it makes  
15      it difficult to interpret the study, and  
16      the claim that it's a small number is  
17      hard to support by their own evidence  
18      because they didn't follow them long  
19      enough.  As their own data shows, you got  
20      to follow them longer to see the regret  
21      in most patients.  And they don't tell us  
22      what that number is.

23          Q.     Are you aware that there are

1 studies on patient regret outside of the  
2 treatment for gender dysphoria?

3 A. Am I aware of -- of transgender  
4 transition regret outside of --

5 Q. No. I'm going to ask -- I'm  
6 going to ask this again.

7 A. I'm sorry.

8 Q. Are you aware there are studies  
9 on rates of patient regret outside of  
10 surgical treatment for gender dysphoria?

11 A. Yes. Absolutely, yeah. So --

12 Q. Okay.

13 A. One of the -- one of the most  
14 important --

15 Q. Okay. Let me ask -- yeah,  
16 Doctor, let's -- this is going to be a  
17 long day. Just listen to my questions.

18 Did you do a literature search  
19 to find out what the average rates of  
20 patient regret are for other surgical  
21 procedures compared to surgical treatment  
22 for gender dysphoria?

23 A. I did not.



1           Q.     Do you know if those rates are  
2           higher, lower, or about the same as the  
3           rates of regret for surgical treatment  
4           for gender dysphoria?

5           A.     I would say there's no way of  
6           knowing because we don't have the -- the  
7           rate of regret in transgender regretters.  
8           We don't have that number, so there's no  
9           way to compare or to know which is the  
10          higher number.

11          Q.     Okay.

12          A.     Like we talked about earlier, we  
13          don't have this number.

14          Q.     Well, this one study I just  
15          showed you showed a finding of 0.3  
16          percent to 0.6 percent; right?

17          A.     Right. And I -- and as I said,  
18          this is -- this is -- it's difficult to  
19          use this to compare to other regret cases  
20          because of the poor quality of this  
21          study. So I can't use this to compare it  
22          to the other studies on regret because  
23          this is not -- not useful to that end. I

1 mean, it's useful in seeing that 14 -- 14  
2 regretters had these complications, 14  
3 regretters had these -- these  
4 explanations for their regret.

5 And so it's kind of like a case  
6 collection, and retrospective reviews of  
7 -- of patient records are helpful in  
8 getting a sense of the size of the  
9 problem. Certainly, this study shows us  
10 that there's an increasing patient pool  
11 of people who self-identify as  
12 transgender. So in that regard, this  
13 publication is very useful. But in terms  
14 of comparing the regret rate based on  
15 this paper, I'd say this paper is  
16 useless.

17 Q. Okay. Open Exhibit 21.

18 (Exhibit 21 was marked for identification  
19 and is attached.)

20 A. Okay.

21 Q. Let me know when you have it.

22 A. Okay.

23 Q. All right. This is a

1 publication from 2017 by Wilson,  
2 W-I-L-S-O-N, titled "Regret in Surgical  
3 Decision Making: a Systematic Review of  
4 Patient and Physician Perspectives." See  
5 that?

6 A. I do.

7 Q. All right. Look at the  
8 abstract. You with me?

9 A. I'm -- I'm looking -- I'm just  
10 reading it now.

11 Q. The third sentence says, "We  
12 performed a systematic review of the  
13 literature focused on patient and  
14 physician regret in the surgical  
15 setting." See that?

16 A. I do.

17 Q. Now look at "Results." See  
18 that?

19 A. I'm there now, yes.

20 Q. It says, "Of 889 studies  
21 identified, 73 patient studies and 6  
22 physician studies met inclusion  
23 criteria." Do you see that?

1           A.     I'm reading it now, yes.

2           Q.     I understand this is a  
3           systematic review of 73 patient studies  
4           and 6 physician studies on regret and  
5           surgical decision-making; right?

6           A.     That's what it says here, yes.

7           Q.     Then the third sentence of  
8           "Results" says, "Interestingly  
9           self-reported patient regret was  
10          relatively uncommon with an average  
11          prevalence across studies of 14.4%."  
12          Right?

13          A.     Right.

14          Q.     And then "Conclusion" says,  
15          "Self-reported decisional regret was  
16          present in about 1 in 7 surgical  
17          patients." You see that?

18          A.     I do.

19          Q.     All right. So according to this  
20          systematic review, one out of seven  
21          surgical patients, on average, report  
22          having decisional regret; correct?

23                 MR. KNEPPER: Objection, form.

1           A.     Right.   So actually, I would go  
2     a little deeper than that.   The first  
3     thing to note about this study -- and  
4     again, this is my first reading of it, so  
5     I'm on the fly here.

6                     The first thing to note about it  
7     is that they looked at nearly 900  
8     studies, of which only 73 qualified as  
9     having sufficient validity to include in  
10    their study.   So this -- this speaks to a  
11    problem in the literature.   I'd have to  
12    read lower to see what particular -- if  
13    they even examined what kind of surgeries  
14    were performed, because regret can happen  
15    for a number of reasons, including  
16    postsurgical complications and so on,  
17    types of surgery.

18          Q.     We don't need --

19          A.     Yeah.

20          Q.     We don't need to dig into this  
21    too deeply.   But, I mean, you don't  
22    dispute that regret is not uncommon for  
23    patients who have any kind of surgical

1 procedure; right?

2 MR. KNEPPER: Objection to form.

3 A. No. You know, there's --  
4 there's -- it's such a life-changing  
5 event that the potential for regret is  
6 very high, so that's why you have to be  
7 careful in consenting the patient.

8 Q. Okay. Let me -- let's go back  
9 to your report.

10 A. Okay.

11 Q. Because I hear you criticizing  
12 all this evidence, and I want to see the  
13 stuff that you're relying on. Go to page  
14 22.

15 A. All right.

16 Q. All right. About halfway down  
17 this paragraph, you say, "As reported by  
18 one author in 2021, 60,000 testimonies of  
19 personal de-transition can be found on  
20 the Internet."

21 A. Yeah, that's a typo. That's a  
22 typo. That should have been 16, not 60.

23 Q. Okay. Well, I think it's more

1       than that.

2           A.     Okay.

3           Q.     So we'll look at this in a  
4       second.

5           A.     Sure, sure.

6           Q.     And you cited this article from  
7       Pablo Exposito-Campos.

8           A.     Yes.

9           Q.     E-X-P-O-S-I-T-O, dash,  
10       C-A-M-P-O-S. Right? That's what you  
11       rely on; right?

12          A.     Not relying. I'm basically just  
13       putting that out there as an example of a  
14       growing number of patients regretting  
15       transitioning, yeah.

16          Q.     Well, no. What you say in your  
17       report is that according to this  
18       publication, you can find 60,000 -- or  
19       let's call it 16,000 testimonies of  
20       personal de-transition on the Internet;  
21       right? That's the point you're making?

22          A.     Sixteen thousand, right. Yeah.

23          Q.     Let's look at what that article

1       actually says.

2           A.     Okay.

3           Q.     Okay. This is going to be  
4       Exhibit 22. And let me know when you get  
5       it.

6           A.     Doesn't seem to be coming  
7       through.

8           Q.     Yeah, it may be stuck on my end.  
9       Okay. Just went through, so you should  
10      see it shortly.

11      (Exhibit 22 was marked for identification  
12      and is attached.)

13          A.     There it is. Okay. Right.

14          Q.     All right. This is the article  
15      that you're citing in your report; right?

16          A.     Uh-huh.

17          Q.     All right. So before we get  
18      there, you know that what this author was  
19      talking about was a Reddit website;  
20      right?

21          A.     Yeah. That was -- that was  
22      their data source, yeah. Right.

23          Q.     Reddit is not a peer-reviewed



1 publication, obviously; right?

2 A. Clearly.

3 MR. KNEPPER: Objection.

4 A. Yeah.

5 Q. Right?

6 A. Yes. It's not a peer-reviewed.

7 Q. It's a social website that  
8 anyone can access; right?

9 A. Right. Correct.

10 Q. Anyone can post -- can register  
11 an account on Reddit and post whatever  
12 they want; right?

13 A. Right.

14 Q. A post on Reddit is not  
15 something that you would consider  
16 reliable scientific evidence, I assume;  
17 right?

18 A. Yeah, no.

19 MR. KNEPPER: Objection, form.

20 A. I would -- I would put that as  
21 self-reporting anecdotal-level evidence,  
22 that's right. So it's -- it's not  
23 definitive, but it's suggestive of an

1 area in need of examination. And that's  
2 the reason I include it here, is not as  
3 definitive evidence of a particular level  
4 of problem but the -- the presence of a  
5 problem that needs to be addressed. So  
6 the substance of my testimony there where  
7 I call this study up is to show that  
8 there's a growing body of patients, as we  
9 talked about earlier, a growing body of  
10 patients who regret their transition and  
11 are seeking reversal. So that's what  
12 this is about.

13 It's not a quantification of the  
14 phenomenon. It's not a level 3 evidence  
15 of the phenomenon. It's a level 5,  
16 self-reported, anecdotal stuff that --  
17 that is basically just calling us to look  
18 more carefully at what promises to be a  
19 controversial area of medical care. So  
20 this is just part -- part of the  
21 controversy is what we're looking at  
22 here. We're not looking at a definitive  
23 scientific document, so.

1           Q.     It's not even level 5 because at  
2     least a case report that's published in a  
3     peer-reviewed journal has someone looking  
4     at that case report to figure out if it's  
5     a real thing; right?

6           A.     Right.

7           MR. KNEPPER:   Objection, form.

8           A.     What we have here is a clinical  
9     psychologist who's looking at something  
10    going on online, and the clinical  
11    psychologist is -- is reporting this,  
12    that's right.

13          Q.     Go to page 4 of this article.

14          A.     One, two, three, four.   Okay.

15          Q.     See there's a second paragraph  
16    under "Further clarifications"?

17          A.     Yes, I do.

18          Q.     All right.   And it references  
19    this Reddit/detrans subreddit; right?

20          A.     Right.

21          Q.     And it says it's "a subreddit  
22    for detransitioners to share their  
23    experiences with more than 16,000

1 members."

2 A. That's correct.

3 Q. Right?

4 A. Uh-huh.

5 Q. Then it says, "one can find  
6 several stories of people who call their  
7 transgender status into question." You  
8 see that?

9 A. Right.

10 Q. All right. This author is not  
11 saying that there's 16,000 separate  
12 testimonies of people tran- --  
13 detransitioning on that subreddit; right?

14 A. I think the author is saying  
15 that there's a pool of 16,000 people  
16 among whom are evidence of regret or  
17 cessation of transition. That's what --  
18 I think that's what the author's saying.

19 Q. Well, let's be more specific,  
20 because what he actually says is "one can  
21 find several stories." Right?

22 A. Right.

23 Q. There's a very big difference

1       between, quote, several stories and  
2       16,000 stories of detransitioning; right?

3       A.     I think what the author is  
4       saying is that -- that there are -- let's  
5       see. Subreddit -- detran- --  
6       experiences -- more than 16- -- one can  
7       find several stories of a particular kind  
8       of transgender -- persons who call their  
9       transgender status into question after  
10      stopping transition.

11             So the several stories have to  
12      do with people who call their transgender  
13      status into question. Not people who  
14      regret the surgery, but these are people  
15      who regret the diagnosis. So he's  
16      talking about several stories of  
17      regretters of the diagnosis. It doesn't  
18      speak about regretters of the transition.  
19      He doesn't address that in that.

20      Q.     All right. A bunch of posts on  
21      a social website is not scientifically  
22      reliable evidence to show the number of  
23      different people who actually

1        detransition; right, Doctor?

2                MR. KNEPPER:    Form.

3                A.        Yeah.    As we said before, we  
4        have no way of -- at present, of knowing  
5        the number of people.

6                Q.        Okay.    Go back to your report.

7                A.        Okay.

8                Q.        Go to page 40.

9                A.        All right.    Okay.

10              Q.        All right.    Your first paragraph  
11        at the top of this page says, "A  
12        currently unknown percent-" --  
13        "percentage and number of patients  
14        reporting gender dysphoria are being  
15        manipulated by a -- peer group, social  
16        media, YouTube role modeling, and/or  
17        parental -- social contagion and social  
18        pressure processes."    Right?

19              A.        That's right.

20              Q.        I take it you're not aware of  
21        any peer-reviewed studies that quantifies  
22        the number of people with gender  
23        dysphoria that are being, quote, unquote,

1 manipulated by social contagion or social  
2 pressure; right?

3 A. Again, as I said before, we  
4 don't know the numbers because that's not  
5 -- it's not adequately reported in the  
6 literature. But what we do know is that  
7 the social -- Lisa Littman's article, for  
8 example, in 2017 shows us that there's a  
9 significant factor in this new  
10 demographic of self-reported transgender  
11 patients, the new demographic being  
12 adolescent to young adult females without  
13 prior history of gender dysphoria or  
14 gender discordance suddenly reporting  
15 transgender self-identification.

16 And -- and what it shows us,  
17 what Lisa -- Lisa Littman's publication  
18 from Brown University shows us is that  
19 underlying these outbreaks is peer group  
20 networks of people online, peer groups  
21 online, social media, a modeled speech, a  
22 rehearsed speech, and -- and these --  
23 these sudden outbreaks of -- of

1 self-identified transgender patients.

2           So we know it's there, but we  
3 can't quantify it yet. It's just it's --  
4 but it's -- we have at present no other  
5 explanation for why the demographic of  
6 self-reported transgender patients has  
7 suddenly shifted from virtually all young  
8 boys to 50 to 60 percent of the new cases  
9 being adolescent to young adult females.  
10 And that's -- that's what we're -- what  
11 we're talking about here. This just  
12 speaks to the controversial nature of  
13 this -- medical and surgical  
14 interventions is that we don't even  
15 understand the origin of that phenomenon.  
16 And -- and what that Littman article  
17 shows us is precisely these things: that  
18 there's an element of social contagion,  
19 that there's peer pressure, there's  
20 rehearsed speech, online networks that  
21 cause these outbreaks of these new kind  
22 of patients, adolescent young adult  
23 females who previously had no



1 self-reporting of trans- -- cross-sex  
2 self-identification.

3 MR. TISHYEVICH: This is not  
4 responsive to my question, and I move to  
5 strike it.

6 Q. Here's my question, Doctor. You  
7 are not aware of any peer-reviewed study  
8 that quantifies the number of people with  
9 gender dysphoria who are being  
10 manipulated by social contagion or social  
11 pressure; correct?

12 A. No. We're at the -- we're at  
13 the level of level 4/5 evidence now.  
14 Lisa Littman's article is a level 5,  
15 possibly 4. A level 5. So --

16 Q. It's not a -- you're also not  
17 aware of any peer-reviewed study that  
18 quantifies the percentage of people with  
19 gender dysphoria who are being  
20 manipulated by social contagion or social  
21 pressure; correct?

22 A. No. That's part of the -- part  
23 of the problem with the literature.

1 Exactly right.

2 Q. Yeah.

3 A. Exactly right.

4 Q. Given this lack of reliable  
5 studies, do you agree that this  
6 phenomenon of social contagion is  
7 currently hypothetical?

8 MR. KNEPPER: Objection, form.

9 A. I would not agree with that.  
10 It's not hypothetical.

11 Q. Do you -- did you read the  
12 response from Lisa -- from Littman to the  
13 criticisms to that article?

14 A. I did. And -- and I also noted  
15 that the -- the -- the organization under  
16 which she published that article put  
17 considerable pressure on her. But she  
18 can't retract her data. She can retract  
19 her conclusions, but she can't retract  
20 her data, and she can't retract the  
21 findings in the paper itself that show  
22 the rehearsed speech, that show the  
23 networks that are involved, that showed

1 the -- the character of the -- the  
2 rehearsed speech, like, you know, if  
3 you're talking to the psychologist, tell  
4 them you've been thinking about suicide;  
5 if you're talking to the endocrinologist,  
6 tell them you feel better now that you're  
7 started on T, that sort of stuff. So --  
8 so it's not hypothetical, it's actual.

9 The -- the size of the  
10 phenomenon can only be compared to the  
11 change in the demographic. Why are 60  
12 percent of patients fitting into that  
13 category suddenly, whereas before, only  
14 20 percent of patients were females?

15 Q. Do you remember --

16 A. That's what --

17 Q. Okay. Do you remember the part  
18 of the correction from Ms. Littman where  
19 she said that this is a  
20 hypothesis-generating article?

21 A. Hypothesis as to -- as to  
22 mechanism of -- of action, and some of  
23 the hypotheses are what's listed there:

1       social network peer -- media -- I'm  
2       sorry -- peer pressure, social media,  
3       role modeling, social contagion. So she  
4       admits that is a -- it is not understood.  
5       She admits that those phenomena are  
6       there, but it -- at present, we're  
7       hypothesizing about the actual cause.  
8       And this speaks again to the  
9       controversial nature of even the  
10      diagnosis, much less the treatment.

11       Q.     Go back to your report.

12       A.     Okay.

13       Q.     Page 40.

14       A.     I'm there.

15       Q.     Toward the bottom, you say, in  
16       capital letters, "Not Generally  
17       Accepted." You see that?

18       A.     I do.

19       Q.     And you say, "Affirmation  
20       medical treatments -- hormones and  
21       surgery -- for gender dysphoria and  
22       transitioning have not been accepted by  
23       the relevant scientific communities." Do

1       you see that?

2           A.     I do.

3           Q.     It's your expert opinion that  
4       it's generally accepted that puberty  
5       blockers are not medically necessary;  
6       right?

7           A.     No.

8                   MR. KNEPPER:  Objection, form.

9           A.     I would say puberty blockers in  
10      the setting of a self-identified  
11      transgender is not medically necessary,  
12      but puberty blockers are often medically  
13      necessary, just not in that particular  
14      patient population.

15          Q.     Is it also your expert opinion  
16      that it's generally accepted that hormone  
17      treatment for gender dysphoria is not  
18      medically necessary?

19          A.     Well, the scientific evidence  
20      now shows that it is -- is not useful.  
21      That's what I said --

22          Q.     Answer my question.  Is it your  
23      expert opinion that it's generally

1       accepted that hormone treatment for  
2       gender dysphoria is not medically  
3       necessary?

4           A.     Yes.

5           Q.     Is it also your expert opinion  
6       that it's generally accepted that  
7       gender-affirming surgery for gender  
8       dysphoria is not medically necessary?

9           A.     Yes. I would say so, yeah. I  
10       can't put a number on it, but yeah.

11          Q.     All right. Let me -- let me  
12       show you another document. Okay. Let me  
13       introduce this. Okay. This is going to  
14       be Exhibit 23. And let me know when you  
15       get it.

16       (Exhibit 23 was marked for identification  
17       and is attached.)

18          A.     Okay. All right. I'm there.

19          Q.     Okay. Top of the page says,  
20       "BlueCross BlueShield of North Carolina."  
21       Right?

22          A.     Correct.

23          Q.     You know what Blue Cross and

1 Blue Shield is; right?

2 A. Right.

3 Q. It's a healthcare insurer;  
4 right?

5 A. Yes.

6 Q. Are you aware that Blue Cross  
7 Blue Shield is the largest private  
8 insurer in the state of North Carolina?

9 A. I am now.

10 MR. KNEPPER: Objection, form.

11 Q. All right. This document is  
12 titled "Corporate Medical Policy,"  
13 "Gender Affirmation Surgery and Hormone  
14 Therapy." Right?

15 A. Right.

16 Q. Do you know what this is?

17 A. Do I know what what is?

18 Q. Do you know what this document  
19 is?

20 A. It appears to be an insurance  
21 company document concerning the coverage  
22 of certain services. I would have to  
23 read it to know what it is specifically,

1 but I think it's probably a policy  
2 statement about what is covered and what  
3 is not covered and what the diagnostic  
4 criteria are.

5 Q. Yeah.

6 A. What the policy of the company  
7 is. Yeah. So, shall I read it or?

8 Q. I'll walk you through it.

9 A. Okay.

10 Q. You see it says "Last Review"  
11 near the top?

12 A. Right.

13 Q. It's 3/2021. That's March 2021;  
14 right?

15 A. Yes.

16 Q. All right. You understand this  
17 policy was a -- strike that.

18 In your report, you cite a  
19 number of articles that you say Dr. Brown  
20 and Dr. Schechter overlooked, like a  
21 bunch of 2020 articles; right?

22 A. Right.

23 Q. You understand this was



1 published -- updated after all those  
2 studies that you cited were published;  
3 right?

4 A. It appears to be.

5 Q. Okay. Go to page 7. You see it  
6 says "Scientific Background and Reference  
7 Sources"?

8 A. Right.

9 Q. You understand this section of  
10 the policy provides some of the  
11 scientific background on which the policy  
12 is based; right?

13 A. I see that, yes.

14 Q. And if you go to page -- the  
15 next page, page 8, you see there's a  
16 bunch of references to Specialty Matched  
17 Consultant Advisory Panel; right?

18 A. I see that, yeah.

19 Q. And there's some references to  
20 sen- -- Senior Medical Director reviews;  
21 right?

22 A. I see that, yeah, from 2016.

23 Q. Yeah. Well, if you keep

1 looking, there's a bunch from 2020;  
2 right?

3 A. I see medical director review in  
4 2020. Yes, I do. I see that.

5 Q. And then including a medical  
6 director review in March 2021; right?

7 A. I see it. That's probably what  
8 generated this document. Am I right?

9 Q. Yeah. Good guess. Now,  
10 obviously --

11 A. That's why they pay me the big  
12 bucks. Sorry.

13 Q. Obviously, you had no  
14 involvement with the development of this  
15 policy from BlueCross BlueShield of North  
16 Carolina; right?

17 A. Correct.

18 Q. You have no idea how BlueCross  
19 BlueShield of North Carolina came to  
20 decide what gender affirmation surgeries  
21 or hormone therapy they're going to cover  
22 or not; right?

23 A. Wrong. I -- I have now some

1 idea of what they used because you've  
2 listed -- or they've listed the  
3 scientific background and reference  
4 sources for coming to their company  
5 policy. And what I would point you to is  
6 the fact that every one of the documents,  
7 the scientific documents that support  
8 their decision-making, I think the most  
9 recent one is 2014. You've got some that  
10 go back to the year 2000. So you've got  
11 21-year-old DSM-4 characterizations.  
12 You've got 2001 Harry Benjamin Gender  
13 Dysphoria Association publications. The  
14 most recent thing is a -- is a -- well,  
15 that's actually an advisory panel. So  
16 the most recent medical article is the  
17 Cohen-Kettenis Hembree article from 2016.  
18 So what's used to support a March 2021  
19 document is essentially six-year-old  
20 information. And as we talked about  
21 earlier, it hasn't -- it's changed a lot.  
22 It's changed a lot since then.

23 The fact that Blue Cross Blue

1       Shield is slow off the mark would be  
2       troublesome to the shareholders, I  
3       suppose. But as far as what I'm here to  
4       talk about, the scientific basis for  
5       this, the scientific basis is old data.

6       Q. Doctor, you don't know whether  
7       this is an exhaustive list of every  
8       scientific resource that Blue Cross Blue  
9       Shield considered in making the March  
10      2021 update; right? You have no idea?

11               MR. KNEPPER: Objection, form.

12      A. I can only go by what they've  
13      disclosed.

14      Q. Right.

15      A. And what they've disclosed --  
16      which I would assume they would be  
17      leading with their best information  
18      rather than their worst -- I would call  
19      that -- the scientific support of low  
20      quality because of the -- the  
21      better-quality data that's now available  
22      in the last three years.

23      Q. You don't know personally

1       whether Blue Cross Blue Shield considered  
2       any of the articles that you've cited  
3       when they're making this policy change in  
4       2021; right? You don't know that?

5           A.     I have no way of knowing how --

6           Q.     Yeah.

7           A.     -- that committee worked. I  
8       only -- I only assume that they would  
9       have put out their best scientific  
10      support rather than their weakest.

11          Q.     Yeah. Bottom of this page, by  
12      the way, see there's a section that says,  
13      "Policy Implementation/Update  
14      Information"?

15          A.     Yes, I see that.

16          Q.     And it says, "7/19/11" --

17          A.     Yeah.

18          Q.     -- "New policy developed."  
19      Right?

20          A.     Right.

21          Q.     You understand that Blue Cross  
22      Blue Shield has had some form of this  
23      policy for gender affirmation surgery

1       since July 2011?

2               MR. KNEPPER:   Objection, form.

3               A.     I can see that they have had a  
4       policy, according to their own reporting,  
5       since July of 2011.

6               Q.     All right.   So, let's look at  
7       what Blue Cross Blue -- Blue Cross Blue  
8       Shield thinks about whether these  
9       procedures are medically necessary.   Go  
10      to page 5.

11              A.     Let's see.   So we're at page 8.  
12      We're going up to page 5?   Okay.   Okay.

13              Q.     Give me a second.   Actually, let  
14      me start you on page 1.   You see there's  
15      a description of -- let me know when you  
16      get there.

17              A.     I'm there.

18              Q.     Okay.   Now, the beginning says,  
19      "Gender Dysphoria is the formal diagnosis  
20      used by professionals to describe persons  
21      who experience significant gender  
22      dysphoria (discontent with their  
23      biological sex and/or birth gender)."

1 Right?

2 A. Yes, I see that.

3 Q. All right. You understand what  
4 this policy is addressing; right?

5 A. Yeah. It's addressing a  
6 psychiatric classification, not medically  
7 classified as a medical illness. So  
8 they're -- yeah.

9 Q. Okay. Go to page 2.

10 A. Can you give me just a moment to  
11 reread that sentence for just a second.

12 (Witness reviews document.)

13 A. Okay. Yeah. So that's  
14 boilerplate. I'm sorry. Sorry for  
15 slowing you down here.

16 Q. That's fine. Go to page 2.

17 A. Okay.

18 Q. Top of the page says, "Policy."  
19 Right?

20 A. Correct.

21 Q. And it says, "Services for  
22 gender affirmation surgery and hormone  
23 therapy may be considered medically

1       necessary when the criteria below are  
2       met."   You see that?

3       A.     Right.   So that's -- that's  
4       language that insurance companies use.  
5       If you're not in the category of medical  
6       necessity, there's no insurance coverage.  
7       So whether or not one could classify it  
8       as a medical diagnosis is not at issue.  
9       What's at issue is, is the insurance  
10      company going to cover this -- this  
11      benefit.

12      Q.     Yeah.   Because insurers  
13      typically are not in the business of  
14      covering services that are not medically  
15      necessary; right?

16      A.     No.   I wouldn't --

17              MR. KNEPPER:   Objection, form.

18      A.     -- characterize it that way.

19              THE WITNESS:   I'm sorry.

20      A.     I wouldn't characterize it that  
21      way.   Insurance companies are in the  
22      business of -- certainly, they're in the  
23      business of -- of paying for covered



1       benefits. But that's the problem with  
2       the insurance industry, is their primary  
3       fiduciary duty is to their investors.  
4       And so the question of coverage has more  
5       to do with are we going to make an  
6       insurance policy that earns us money or  
7       are we going to be paying for something  
8       and not seeing the money. Okay? Does  
9       that make sense?

10       Q. Doctor, you --

11       A. I think that's what -- that's  
12       what this language here is talking about  
13       is -- is medical necessity is the  
14       language that's used when an insurance  
15       company will cover. They will not cover  
16       cosmetic surgery, but they're -- they're  
17       proposing to cover transgender surgery  
18       beginning by attempting to define it as a  
19       medical diagnosis. That's what's at  
20       stake here is.

21       Q. No. What -- what this policy  
22       says is that when certain criteria are  
23       met --

1           A.     Right.

2           Q.     -- gender affirmation surgery  
3           and hormone therapy may be considered  
4           medically necessary; right? That's what  
5           it says in black and white.

6                     MR. KNEPPER: Objection, form.

7           A.     Yeah, again, so medically  
8           necessary from the standpoint of an  
9           insurance company is if you meet these  
10          criteria, we'll pay for it; if you don't  
11          meet these criteria, we won't pay for it.  
12          That's -- that's --

13          Q.     Right. And the difference is  
14          whether the surgery is considered to be  
15          medically necessary or not; right?

16                     MR. KNEPPER: Objection, form.

17          A.     Well, again, so medically  
18          necessary in this case is has the  
19          insurance company decided that they're  
20          going to cover this benefit. It says  
21          nothing about the scientific support for  
22          the efficacy of the procedure. They  
23          haven't said anything in that about it.

1       They've just called it medically  
2       necessary.

3           Q.     All right.   Let's -- let's go  
4       off the record.

5           A.     Okay.

6                   THE VIDEOGRAPHER:   This is the  
7       end of Media Unit No. 5.   We are off the  
8       record at 3:25 p.m.

9                           (Break taken.)

10                   THE VIDEOGRAPHER:   This is the  
11       beginning of Media Unit No. 6.   We are on  
12       the record at 3:36 p.m.

13           Q.     (By Mr. Tishyevich) All right.  
14       I'm going to introduce another exhibit,  
15       Doctor.

16           A.     Okay.

17           Q.     It's being slow on my end.   Bear  
18       with me.   Okay.   This will be Exhibit 24.  
19       Let me know when you have it.

20       (Exhibit 24 was marked for identification  
21       and is attached.)

22           A.     I will.   Okay.   I've got it.

23           Q.     Okay.   You've seen this study

1 before; right?

2 A. Yes, I have.

3 Q. How do you pronounce the lead  
4 author's name?

5 A. That's the subject of great  
6 debate, but I think it's Dhejne or -- I  
7 think it's Dhejne, Cecilia Dhejne, but  
8 I -- I -- I'm not -- I'm not a  
9 Swissophone.

10 Q. I'll use Dhejne as well.

11 A. Okay.

12 MR. TISHYEVICH: And for the  
13 court reporter, it's D-H-E-J-N-E.

14 Q. Okay. This is a study from  
15 2011; right?

16 A. Yes.

17 Q. And you cited this study in  
18 several places in your report --

19 A. I do.

20 Q. -- right?

21 And one of the points for which  
22 you cite this study is to say that  
23 Swedish patients who underwent

1 gender-affirming surgery had a 19.1 times  
2 greater suicide rate than the control  
3 group; right?

4 A. Yeah. The hazard ratio for --  
5 well, for all reassigned persons is 19.1,  
6 and they further break out the -- that  
7 into subgroups of female-to-male and  
8 male-to-female.

9 Q. Yeah. And you understand how  
10 the control group in this study was  
11 defined; right?

12 A. Yes.

13 Q. The control group did not  
14 consist of patients with gender dysphoria  
15 who did not undergo gender-affirming  
16 surgery; correct?

17 A. Correct.

18 Q. The control group consisted of  
19 patients without gender dysphoria; right?

20 A. Yeah. That's kind of the point  
21 of the -- of the research, yes. That's  
22 right.

23 Q. Yeah. What this Dhejne study

1 compared was the suicide rate for  
2 patients who underwent gender-affirming  
3 surgery against the general Swedish  
4 population; right?

5 A. Right.

6 Q. And you know there's many  
7 studies that find that patients with  
8 gender dysphoria, as a population, have a  
9 higher risk of suicide compared to the  
10 general population; right?

11 A. Very much accepted fact, yes.

12 Q. Yeah. All right. We'll go to  
13 page 7.

14 A. Let's see here.

15 Q. You see there's a "Strengths and  
16 limitations of the study" section?

17 A. Two, three, four, five, six,  
18 seven. Yes, I'm there.

19 Q. All right. Look at the third  
20 full paragraph in that column.

21 A. Okay.

22 Q. All right. Second sentence  
23 says: "The caveat with this design is

1       that transsexual persons before sex  
2       reassignment might differ from healthy  
3       controls (although this bias can be  
4       statistically corrected for by adjusting  
5       for baseline differences). It is  
6       therefore important to note that the  
7       current study is only informative with  
8       respect to transsexual persons health  
9       after sex reassignment; no inferences can  
10      be drawn as to the effectiveness of sex  
11      reassignment as a treatment for  
12      transsexualism."

13                You see that?

14           A.     Right. Yeah.

15           Q.     Then it says: "In other words,  
16      the results should not be interpreted  
17      such as sex reassignment per se increases  
18      morbidity and mortality. Things might  
19      have been even worse without sex  
20      reassignment." Correct?

21           A.     Yeah. It's -- the -- let's see.  
22      The -- yeah, so -- and I don't think I  
23      ever make the claim that the surgery

1 increases the risk of morbidity and  
2 mortality. Yeah, I -- I would agree with  
3 that.

4 Q. Yeah, no --

5 A. But I would -- I would also  
6 wonder on what basis they -- there's  
7 nothing to support that it might have  
8 been worse either. It's for the same  
9 reason.

10 Q. Yeah. This study does not  
11 support the conclusion that sex  
12 reassignment surgery by itself increases  
13 risk of suicide; correct?

14 A. That's what they -- they say,  
15 yes.

16 Q. And they also say that this  
17 study does not support the conclusion  
18 that surgical procedure for gender  
19 dysphoria by themselves increase risk of  
20 morbidities other than suicide; right?

21 A. Right.

22 Q. Okay. All right. Let me -- you  
23 mentioned that -- in your report the 2020



1 Finland guidelines. You recall that?

2 A. I do.

3 Q. Let me ask you a couple of  
4 questions on those.

5 A. Okay.

6 Q. So I'll introduce another  
7 exhibit. This will be Exhibit 25, and  
8 let me know when you get it.

9 (Exhibit 25 was marked for identification  
10 and is attached.)

11 A. Okay.

12 Q. Let me ask you before we get  
13 into this, look at page 46 of your  
14 report.

15 A. Okay.

16 Q. Near the top, there's a "2020 -  
17 Finland" reference. You see that?

18 A. I see that, yeah.

19 Q. You say, "This new Finnish  
20 guidance prioritizes psychological  
21 therapy over treatment with hormones or  
22 surgery and suggests different care plans  
23 for early-onset vs late-onset childhood

1 gender dysphoria." You see that?

2 A. I do.

3 Q. And then you say in the last  
4 sentence, "The Finland National  
5 Guidelines appear quite contrary to the  
6 opinions of Drs Brown and Schechter and  
7 WPATH." Do you see that?

8 A. I do.

9 Q. Is it your opinion that the  
10 WPATH guidelines recommend that children  
11 who experience gender dysphoria should  
12 transition to a different gender role?

13 MR. KNEPPER: Objection, form.

14 A. No. I would say that the WPATH  
15 guidelines essentially leaves us with  
16 affirmation care only, that it does -- it  
17 does, you know, recom- -- recommend all  
18 of the psychological support but all of  
19 it in support of transition. I would say  
20 that. Yeah.

21 Q. Yeah. The WPATH guidelines do  
22 not recommend that children with gender  
23 dysphoria automatically be put on puberty

1 blockers; right?

2 A. They don't make that  
3 recommendation, no. They don't state  
4 that recommendation, no.

5 Q. Yeah. Let's look at what they  
6 actually say.

7 A. Okay.

8 Q. I'm going to introduce one more  
9 exhibit.

10 A. So we're going to leave the  
11 Finland article for now and go to --

12 Q. Yeah. We'll come back to it. I  
13 want to show you the WPATH --

14 A. Okay.

15 Q. -- Standards of Care Version 7  
16 first.

17 A. Uh-huh.

18 Q. All right. This will be Exhibit  
19 26. Let me know when you have it.  
20 (Exhibit 26 was marked for identification  
21 and is attached.)

22 A. Okay.

23 Q. This is a larger file, so this

1       may take an extra minute or so.

2           A.     Okay. I've got it.

3           Q.     Okay. These are the WPATH  
4 Standards of Care Version 7; right?

5           A.     Yes.

6           Q.     Turn to page 23.

7           A.     Okay.

8           Q.     All right. There's a section  
9 titled "Social Transition in Early  
10 Childhood." You see that?

11          A.     I must be on the wrong page.  
12 Did you say page 23?

13          Q.     It's PDF page 23, which is going  
14 to be page 17 in the standards.

15          A.     Oh, I'm sorry. Okay. Let's go  
16 back, then. Page 17. Okay. I'm there.  
17 Right. "Social Transition in Early  
18 Childhood."

19          Q.     All right. It says: "Some  
20 children state that they want to make a  
21 social transition to a different gender  
22 role long before puberty. For some  
23 children, this may reflect an expression

1 of their gender identity. For others,  
2 this could be motivated by other forces."

3 You see that?

4 A. I do.

5 Q. And then a couple of sentences  
6 down, it says: "This is a controversial  
7 issue, and divergent views are held by  
8 health professionals. The current  
9 evidence base is insufficient to predict  
10 the long-term outcomes of completing a  
11 gender role transition during early  
12 childhood." You see that?

13 A. I do.

14 Q. All right. The WPATH Standards  
15 of Care Version 7 is not making any  
16 clinical recommendations encouraging  
17 children in early childhood to go through  
18 gender transition roles; correct?

19 A. Yeah, I would -- yes. I would  
20 add to that that they're also not  
21 offering any clinical guidance on how to  
22 distinguish who might or who might not be  
23 suitable for transition. Right.

1 Q. Do you know whether that's  
2 explored somewhere else in this Standards  
3 of Care Version 7?

4 A. Yeah. I think it's discussed.

5 Q. Okay.

6 A. But -- but it's -- but I --  
7 yeah. So what's -- what's important, I  
8 think, in what you cite here is that the  
9 current evidence base is insufficient to  
10 predict the long-term outcome. Yes.

11 Q. Okay. Go to the next page.

12 A. Okay.

13 Q. Page 18, PDF page 24.

14 A. Okay.

15 Q. There's a section titled  
16 "Physical Interventions for Adolescents."

17 A. Right.

18 Q. Right?

19 A. Yes.

20 Q. You understand that adolescents  
21 are different than children; right?

22 MR. KNEPPER: Objection, form.

23 A. Well, yeah. So, adolescents are

1 treated in pediatric clinics, but they're  
2 different from prepubertal children, yes.

3 Q. Yeah. This section does not  
4 provide any clinical recommendations for  
5 hormone therapy in prepubescent children;  
6 right?

7 A. Let's see. I've just got to  
8 refresh my memory here on the verbiage.

9 (Witness reviews document.)

10 A. Yeah. So it -- it addresses the  
11 important issue of gender fluidity in  
12 adolescents, potential for shift to  
13 conformity and -- that may not persist.  
14 Yeah. Right.

15 Q. Okay. And this section also  
16 does not provide any clin- -- clinical  
17 recommendations for surgical intervention  
18 in prepubescent children; right?

19 A. This section doesn't address  
20 prepubescent children. It addresses  
21 adolescents.

22 Q. Yeah, exactly. And you don't  
23 know of any other section in these

1 Standards of Care Version 7 that provide  
2 those guidelines for prepubescent  
3 children; right?

4 A. No.

5 Q. Okay. Go to the next page, PDF  
6 page 25, page 19 in the document.

7 A. Okay.

8 Q. And you see there's a section  
9 that says, "Criteria for  
10 Puberty-Suppressing Hormones"?

11 A. Yes.

12 Q. It says, "In order for  
13 adolescents to receive  
14 puberty-suppressing hormones, the  
15 following minimum criteria must be met."  
16 You see that?

17 A. Yes.

18 Q. And then there's four items;  
19 right?

20 A. Yes.

21 Q. Number 4 says, "The adolescent  
22 has given informed consent and,  
23 particularly when the adolescent has not



1       reached the age of medical consent, the  
2       parents or other caretakers or guardians  
3       have consented to the treatment and are  
4       involved in supporting the adolescents  
5       throughout the treatment process."

6                You see that?

7           A.     Yeah.  That -- in fact, that was  
8       one of the most troubling things I read  
9       when I reviewed this whole document from  
10      the WPATH guidelines, is that -- yeah,  
11      that using those words in the same  
12      sentence, an adolescent giving informed  
13      consent, is a -- is a non sequitur  
14      because I -- I don't think -- in all my  
15      years of practice as a surgeon, which  
16      amounts to greater than 35, the idea of  
17      obtaining consent from an adolescent was  
18      never accepted by the surgical community  
19      or the medical community, to my  
20      understanding.

21          Q.     Well, this also talks about  
22      getting informed consent from the parents  
23      or other caretakers or guardians; right?

1           A.     Yeah.    So in their role  
2     supporting the adolescent's decision.   It  
3     doesn't say -- yeah.   So the parents or  
4     other caregivers have consented in  
5     support.   Right.

6           Q.     Yeah.    What the guidelines  
7     contemplate is that it's not just the  
8     adolescent that's going to give an  
9     informed consent, it's also the parents  
10    or other caretakers or guardians; right?

11          A.     Yeah.    But again, that's the  
12    problem I have with it, because that's --  
13    the introductory sentence has -- has no  
14    meaning -- or the introductory part of  
15    the one sentence has no meaning.   If the  
16    beginning point of the process is  
17    adolescent consent, that's -- that's not  
18    an ethical thing to do because --

19          Q.     Yeah.

20          A.     -- because an adolescent can't  
21    grasp -- they don't have enough executive  
22    function or development, particularly if  
23    they have been through a period of

1       puberty suppression before they begin the  
2       period of cross-sex hormones, that it's  
3       -- it's already quite evident that these  
4       patients, these children do not have  
5       enough -- and it's just known in society  
6       at large that adolescent children don't  
7       have the capacity for long-term reckoning  
8       of things like risk and outcomes and  
9       neither do they have the executive  
10      capacity in their brains to make an  
11      informed consent decision. So that part  
12      of it is meaningless to me. Yeah.

13       Q.     Yeah. But you understand  
14      there's two components to this  
15      requirement; one is informed consent by  
16      the adolescent, and two is informed  
17      consent by parents or other caretakers or  
18      guardians. Right?

19       A.     Yes.

20       Q.     Okay.

21       A.     That's what it says.

22       Q.     All right. Let's now go back to  
23      the Finland guidelines. It's Exhibit 25.

1           A.     Okay.

2           Q.     And go to PDF page 9 which has  
3     Section 8, "Summary" -- "Summary of the  
4     Recommendations." Let me know when you  
5     get there.

6           A.     Okay.

7           Q.     All right. This page provides  
8     recommendations for treatment of minors  
9     with gender dysphoria in Finland; right?

10          A.     Yes.

11          Q.     All right. Look at number 2 at  
12     the bottom.

13          A.     At the bottom. Okay. Okay.

14          Q.     All right. So it starts with,  
15     "If a child is diagnosed prior to the  
16     onset of puberty with a persistent  
17     experience of identifying as the other  
18     sex and shows symptoms of gender-related  
19     anxiety, which increases in severity in  
20     puberty." You see that?

21          A.     Yes, I do.

22          Q.     All right. And then next  
23     sentence says, "Based on these

1        assessments, puberty suppression  
2        treatment may be initiated on a  
3        case-by-case basis after careful  
4        consideration and appropriate diagnostic  
5        examinations if the medical indications  
6        for the treatment are present and there  
7        are no contraindications."

8                    Do you see that?

9            A.     I do.

10          Q.     All right. You understand that  
11        these Finland guidelines do not  
12        categorically prohibit the use of  
13        puberty-blocking agents in minors;  
14        correct?

15                   MR. KNEPPER: Objection, form.

16          A.     Right. They don't  
17        categorically, but what they do is they  
18        express uncertainty about the data that  
19        -- that's been used to support the use of  
20        those drugs in children.

21          Q.     Yeah. But -- but despite that  
22        data, what the guidelines recognize is  
23        that puberty-blocking treatment may still

1 be initiated for some minor patients in  
2 certain circumstances.

3 A. Right.

4 Q. Right?

5 A. Agree.

6 MR. KNEPPER: Objection, form.

7 Q. All right. Let's go back to  
8 your report. Go to page 46.

9 A. I'm there.

10 Q. So in your discussion of these  
11 Finland guidelines, you cite something  
12 called -- it's a website,  
13 genderreport.ca.

14 A. Correct.

15 Q. Do you see that?

16 A. I do.

17 Q. And I saw at least two other  
18 references to this source in your report.  
19 All right. This is -- genderreport is  
20 not a peer-reviewed publication, Doctor;  
21 right?

22 A. No. It's a data collection  
23 site. Yeah.

1 Q. It's a data collection site?

2 A. I think that's what the -- so,  
3 let me just review what I wrote here.

4 (Witness reviews document.)

5 A. All right. Okay. Yeah. Okay.  
6 Yeah, no. I agree they're not  
7 peer-reviewed to my knowledge, no.

8 Q. It's a blog; right?

9 A. Right. It's on -- it's online,  
10 exactly.

11 Q. Blogs are not generally  
12 considered reliable scientific evidence,  
13 I take it. Right?

14 MR. KNEPPER: Objection, form.

15 A. No, they're not.

16 Q. Okay. Do you know who started  
17 this genderreport blog?

18 A. I do not.

19 Q. Do you know this person was a  
20 doctor?

21 A. I don't know the person, no.

22 Q. You don't know they're a  
23 scientist?

1           A.     I'm sorry?

2           Q.     You don't know whether they're a  
3     scientist; right?

4           A.     I don't know.

5           Q.     Did you know that this blog was  
6     started by a parent who was upset that  
7     her daughter was told in school that  
8     girls are not real and who filed a  
9     lawsuit about it?

10           MR. KNEPPER:   Objection, form.

11           A.     I did not know those details,  
12     no.

13           Q.     Assuming that's true, do you  
14     think this is an unbiased, objective  
15     resource?

16           MR. KNEPPER:   Objection to form.

17           A.     I -- I don't know.   I don't know  
18     the answer to that question.

19           Q.     Do other experts in your field  
20     rely on blogs like this one to support  
21     their opinions?

22           MR. KNEPPER:   Objection, form.

23           A.     And I don't, and neither did I



1       rely on this as sole support for my  
2       opinion. This -- again, this is just  
3       evidence of -- of controversy that exists  
4       out in the literature, or that exists out  
5       in the -- in the greater world, I should  
6       say, in this case because this is not  
7       medical literature, but in the wider  
8       world.

9       Q.     Well, as I read this, your page  
10      46, you're -- you're citing this gender  
11      report for your analysis of the 2020  
12      Finland guidelines.

13             MR. KNEPPER:  Objection, form.

14      Q.     Right?

15      A.     I think I'm using the Finland  
16      guidelines as a standalone and just  
17      referencing this gender report as  
18      evidence of events in Finland rather than  
19      scientific support for the conclusions of  
20      the Finland review.

21      Q.     Okay.  Another article you cite  
22      is the Carmichael 2021 study.

23      A.     Right.

1           Q.     Let's look at that one. I'll  
2     introduce it as Exhibit 27. Let me know  
3     when you have that.  
4     (Exhibit 27 was marked for identification  
5     and is attached.)

6           A.     Okay. Okay. I have it.

7           Q.     Okay. This is titled,  
8     "Short-Term outcomes of pubertal  
9     suppression in a selected cohort of 12 to  
10    15 year old young people with persistent  
11    gender dysphoria in the UK."

12          A.     Right.

13          Q.     Right?

14          A.     Yeah.

15          Q.     All right. Look at the -- on  
16    page 1, you see there's an abstract?

17          A.     Yes.

18          Q.     Under "Methods," it says, "We  
19    undertook an uncontrolled prospective  
20    observational study." Right? Do you see  
21    that?

22          A.     Right.

23          Q.     All right. This is not a

1 randomly controlled clinical trial;  
2 right?

3 A. Right.

4 Q. Not a cohort study --

5 A. Right.

6 Q. -- right?

7 A. Right.

8 Q. There's no control group; right?

9 A. Correct.

10 Q. You don't mention any of that in  
11 your report even though you spend a lot  
12 of time discussing the limitations of  
13 other studies. Why is that?

14 MR. KNEPPER: Objection, form.

15 A. I -- we include this to one to  
16 show the raging controversy in the world  
17 of transgender medicine, and this is an  
18 example of that, the -- the evidence of  
19 uncertain result or no result, no change  
20 from baseline effect.

21 Let's see. Let me just review  
22 because I've reviewed so many of these  
23 articles lately.

1 (Witness reviews document.)

2 A. Right. Yeah. So -- yeah. So  
3 that's right. So they were unable to  
4 quantify benefit or harm from puberty  
5 suppression.

6 Q. Go to page 21. See there's a  
7 "Strength and Limitations" section?

8 A. I see it. Yes, I do.

9 Q. The second sentence says: "The  
10 study size and uncontrolled design were  
11 key limitations. The small sample size  
12 limited our ability to identify small  
13 changes in outcomes. This was an  
14 uncontrolled observational study and thus  
15 cannot infer causality." See that?

16 A. I do.

17 Q. Again, you don't acknowledge any  
18 of these limitations in your report;  
19 right?

20 MR. KNEPPER: Objection, form.

21 A. Right. I believe I made  
22 reference to this in terms of it's  
23 evidence of -- of controversy in the

1 literature, that they could not see a  
2 benefit from it. So again, at lower  
3 levels of evidence, evidence of benefit  
4 would suggest further study. This shows  
5 that further study is needed because, at  
6 the observational level, you don't see  
7 effect.

8 Q. All right. Another study -- not  
9 a study, a review that you cite is this  
10 Cochrane 2020 --

11 A. Yes.

12 Q. -- review; right?

13 A. Right.

14 MR. TISHYEVICH: And for the  
15 court reporter, that's C-O-C-H-R-A-N-E.

16 Q. I'm going to introduce that one  
17 next.

18 A. Okay.

19 Q. All right. I'm introducing this  
20 as Exhibit 28, and let me know when you  
21 get it.

22 (Exhibit 28 was marked for identification  
23 and is attached.)

1           A.     I will.    Okay.

2           Q.     Okay.    This is from the Cochrane  
3     Library.    This is the review that you  
4     cite in your report; right?

5           A.     Right.

6           Q.     Go to page 2.

7           A.     Okay.

8           Q.     All right.   You see there's the  
9     section titled, "Authors' Conclusions"?

10          A.     Okay.    Yes, I do.

11          Q.     All right.   Toward the end, do  
12     you see it says, "We will include  
13     non-controlled cohort studies in the next  
14     iteration of this review, as our review  
15     has shown that such studies provide the  
16     highest quality evidence currently  
17     available in the field."   You see that?

18          A.     Yes, I do.

19          Q.     All right.   So the Cochrane  
20     review is not saying they're just going  
21     to ignore all those studies going  
22     forward; right?

23          A.     Right.

1 MR. KNEPPER: Objection, form.

2 Q. They rec- -- they recognize that  
3 those noncontrolled studies currently  
4 represent the best available evidence;  
5 right?

6 MR. KNEPPER: Objection, form.

7 A. Well, yeah. Before they say  
8 best available evidence, they speak about  
9 the level of the evidence now. And  
10 what's -- what's interesting about this  
11 Cochrane review, because it's a worldwide  
12 review of the literature on the subject  
13 of cross-sex hormones and hormone  
14 blockade in transwomen, is that they  
15 found over a thousand references, and by  
16 the time they got through qualifying  
17 those references for suitability, they  
18 got down to thirteen studies. And when  
19 they fully screened the text, they got  
20 down to a single study. And that's --  
21 that's kind of characteristic of -- of  
22 the data used to support hormonal  
23 transitioning.

1                   And so yeah, they -- they have  
2                   to -- they have to backpedal in order to  
3                   get any data because what they have in  
4                   hand now is -- is not supportive of -- of  
5                   the use of cross-sex hormones in  
6                   transwomen, so.

7                   Q.     All right.   Let me introduce  
8                   another exhibit.

9                   MR. TISHYEVICH:   Can we go off  
10                  the record?

11                  THE VIDEOGRAPHER:   We are off  
12                  the record at 4:07 p.m.

13                               (Break taken.)

14                  THE VIDEOGRAPHER:   We are back  
15                  on the record at 4:20 p.m.

16                  Q.     (By Mr. Tishyevich) All right.  
17                  Doctor, let me ask you about what  
18                  experience you have with the individual  
19                  plaintiffs in this case specifically.

20                        You personally did not meet with  
21                  any of the plaintiffs in this case;  
22                  correct?

23                  A.     No.   I did a review of their



1 charts and nothing more. Yeah.

2 Q. All right. You've personally  
3 never spoken with any of the plaintiffs;  
4 correct?

5 A. I have not.

6 Q. You obviously were not present  
7 in any meetings that any of these  
8 plaintiffs may have had with their mental  
9 health professionals; right?

10 A. I was not.

11 Q. And you don't know specifically  
12 what was said or not said during those  
13 meetings; correct?

14 A. The only information I have  
15 about those meetings was what's entered  
16 in the medical record that was given to  
17 me to review.

18 Q. Yeah. You were also not present  
19 in any meetings any of the plaintiffs may  
20 have had with their endocrinologists;  
21 right?

22 A. Correct.

23 Q. And outside of reading medical

1 records, you don't know what was said or  
2 not said during those meetings; correct?

3 A. Correct.

4 Q. And finally, for plaintiffs who  
5 had undergone surgical procedures, you  
6 were also not present in any meetings  
7 between these plaintiffs and their  
8 surgeons; correct?

9 A. Correct.

10 Q. And outside of medical records,  
11 again, you don't know what was said or  
12 not said during those meetings; correct?

13 A. Correct.

14 Q. Okay. You should see a new  
15 exhibit pop up, Exhibit 29.

16 A. Okay.

17 (Exhibit 29 was marked for identification  
18 and is attached.)

19 Q. And if you can go to PDF page  
20 54.

21 A. PDF page 54. Okay.

22 Q. First of all, you understand  
23 what this document is; right?

1           A.     I didn't get to see the header  
2     on it. I haven't seen this before, I  
3     don't think.

4           Q.     Oh, feel free -- yeah, feel free  
5     to go back to the first page if you want  
6     to.

7           A.     Okay.

8                     (Witness reviews document.)

9           Q.     All right. This is the --

10          A.     Okay. Okay. So it's --

11          Q.     Yeah.

12          A.     -- a benefits booklet for the  
13     State health plan. Is that right?

14          Q.     For North Carolina, right.

15          A.     Yes. The teachers union --  
16     teachers and employ- -- and State  
17     employees, right. Okay.

18          Q.     You know what a benefit plan is;  
19     right?

20          A.     Yes, uh-huh.

21          Q.     At a high level, it sets out  
22     what the insurer is going to cover or not  
23     cover; right?

1           A.     Correct.

2           Q.     Among other things.   Okay.   And  
3           earlier, we talked about medical  
4           necessity.   You recall that?

5           A.     Yes.

6           Q.     All right.   Go to -- now go back  
7           to PDF page 54 of this plan.

8           A.     Okay.   I'm there.

9           Q.     You see at the top, it says,  
10          "What is not Covered?"   And it's a list  
11          of items?

12          A.     Am I on the right page?   I'm  
13          on -- on PDF page 54?

14          Q.     Yeah.

15          A.     That's the -- the -- oh, I'm  
16          sorry.

17          Q.     Plan page 46, so that's --

18          A.     Plan page 46.   Let me back up  
19          real quickly here.   Sorry.   Okay.   I'm  
20          there.

21          Q.     At the top or near the top, it  
22          says, "What is not Covered?"   You see  
23          that?

1           A.     I do.

2           Q.     There's a list of items  
3           alphabetically. See that?

4           A.     Yes.

5           Q.     And under M, it says, "Services  
6           or supplies deemed not medically  
7           necessary." "Medically necessary" is in  
8           bold; right?

9           A.     Right.

10          Q.     All right. Let's look at that  
11          definition. Go to PDF page 89, which is  
12          page 81 of the plan.

13          A.     Okay.

14          Q.     All right. At the bottom, you  
15          see there's a definition of "Medically  
16          Necessary (or Medical Necessity"; right?

17          A.     Yes.

18          Q.     And it says, "those covered  
19          services or supplies that are: a)  
20          Provided for the diagnosis, treatment,  
21          cure, or relief of a health condition,  
22          illness, injury, or disease; and, except  
23          for clinical trials as described under

1       this health benefit plan, not for  
2       experimental, investigational, or  
3       cosmetic purposes." Right?

4           A.     Okay.

5           Q.     I understand that as part of  
6       determining what the benefit plan is  
7       going to consider medically necessary,  
8       whether or not the treatment is  
9       experimental is one of the factors;  
10      right?

11          A.     As would be defined -- so all of  
12      the definitions here are determined by  
13      the insurance provider. So they've  
14      defined these listed necessities as  
15      covered under their plan, yes.

16          Q.     Yeah. So under this definition,  
17      if a treatment is experimental, it is  
18      likely not going to be covered under the  
19      plan; right?

20          A.     Right. According to their  
21      definition, it doesn't appear they would  
22      cover experimental surgery or cosmetic  
23      surgery.

1           Q.     Conversely, if a treatment is  
2     not experimental, it may be covered by  
3     the plan in some circumstances; right?

4           A.     It would seem --

5                     MR. KNEPPER:   Objection, form.

6           Q.     Yeah.   And I showed you earlier  
7     a policy from BlueCross BlueShield of  
8     North Carolina from March 2021 that says  
9     that gender-affirming hormone and  
10    surgical treatment is considered  
11    medically necessary; right?

12                    MR. KNEPPER:   Objection, form.

13          A.     Yeah, no.   As we talked about  
14    before, these are definitions formulated  
15    by the insurance company to define  
16    coverage, not medical definitions in  
17    terms of medical care.   This is strictly  
18    coverage by insurance.   Yeah.

19          Q.     Well, one of the factors that  
20    goes into that consideration is whether  
21    or not that treatment in question is  
22    experimental; right?

23                    MR. KNEPPER:   Objection, form.

1           A.     Right.    The plan excludes  
2     experimental or investigational or  
3     cosmetic procedures.

4           Q.     Okay.   All right.   We're talking  
5     about BlueCross BlueShield of North  
6     Carolina.   Let me ask you about another  
7     insurer, Aetna, A-E-T-N-A.   You've heard  
8     of Aetna; right?

9           A.     Yes.

10          Q.     Are you aware that Aetna is one  
11     of the five largest health insurance --  
12     insurers in the U.S.?

13          A.     It would not surprise me to  
14     learn that.

15                 MR. KNEPPER:   Form.

16          Q.     Do you have any idea whether  
17     Aetna considers gender-affirming surgery  
18     and hormone therapy to be medically  
19     necessary?

20                 MR. KNEPPER:   Objection, form,  
21     scope.

22          Q.     Would it surprise you if Aetna  
23     --



1                   THE COURT REPORTER: I'm sorry.  
2 I didn't hear the answer over the  
3 objection.

4                   THE WITNESS: I haven't answered  
5 yet.

6                   THE COURT REPORTER: Okay.

7                   THE WITNESS: Sorry.

8           A. So as to the size of Aetna or  
9 the -- that they cover --

10          Q. Yeah, let me just ask -- I'll  
11 ask the question again.

12          A. Okay.

13          Q. Do you have any idea whether  
14 Aetna considers gender-affirming surgery  
15 and hormone therapy to be medically  
16 necessary?

17               MR. KNEPPER: Objection, form,  
18 scope.

19          A. I don't.

20          Q. Well, let me show you. I'm  
21 going to introduce another exhibit.  
22 Okay. This is going to be Exhibit 30.  
23 Let me know when you have it.

1 (Exhibit 30 was marked for identification  
2 and is attached.)

3 A. Okay. All right. I have it.

4 Q. All right. This is a policy  
5 from Aetna titled "Gender Affirming  
6 Surgery." You see that?

7 A. I do.

8 Q. You see there's a "Policy  
9 History" on the right?

10 A. Yes.

11 Q. Under "Last Review," it says  
12 January 12th, 2021; right?

13 A. Yes.

14 Q. So you understand this was  
15 revised within this year; right?

16 A. Yes.

17 Q. And under Policy, it says,  
18 "Aetna considers gender affirming surgery  
19 medically necessary when all of the  
20 following criteria are met." Right?

21 A. Right.

22 MR. KNEPPER: Form.

23 Q. All right. So according to this

1 policy, in Aetna's view, gender-affirming  
2 surgery is medically necessary, therefore  
3 nonexperimental; right?

4 MR. KNEPPER: Objection, form.

5 A. Yeah, Aetna's definition of what  
6 is medically necessary appears to allow  
7 for gender-affirming surgery.

8 Q. Okay. Go to page 3.

9 A. Okay.

10 Q. Look at the bottom of the page.

11 A. Okay.

12 Q. The second to the last paragraph  
13 says, "Aetna considers  
14 gonadotropin-releasing hormone medically  
15 necessary to suppress puberty in trans  
16 identified adolescents if they meet World  
17 Professional Association for Transgender  
18 Health (WPATH) criteria." Do you see  
19 that?

20 A. I do.

21 Q. Okay. According to Aetna,  
22 puberty-blocking hormones are medically  
23 necessary to suppress puberty in

1 trans-identified adolescents if they meet  
2 the WPATH criteria; right?

3 MR. KNEPPER: Objection, form.

4 A. That -- that's what it states  
5 there, yes.

6 Q. By the way, look at the next  
7 paragraph. See it says, "Aetna considers  
8 reversal of gender affirming surgery for  
9 gender dysphoria not medically  
10 necessary."

11 MR. KNEPPER: Objection.

12 Q. Do you see that?

13 A. I do.

14 Q. Okay. We talked about Blue  
15 Cross Blue Shield, talked about Aetna.  
16 Do you know what Cigna is?

17 A. Yeah. It's one of the largest  
18 health insurance providers.

19 Q. Do you know what position Cigna  
20 takes on whether gender dysphoria  
21 treatment is medically necessary?

22 MR. KNEPPER: Objection, form,  
23 scope.

1 A. I have not read their policies.

2 Q. You don't know; right?

3 A. Correct.

4 Q. Let me show you that policy.

5 A. Okay.

6 Q. All right. This is going to be  
7 Exhibit 31. Let me know when you have  
8 it.

9 (Exhibit 31 was marked for identification  
10 and is attached.)

11 A. Okay. Okay. I have it.

12 Q. All right. This is a Cigna  
13 medical coverage policy titled "Treatment  
14 of Gender Dysphoria." Do you see that?

15 A. Yes, I do.

16 Q. On the right top, it says  
17 "Effective Date," May 18th, 2021; right?

18 A. Yes.

19 Q. Also recently updated; right?

20 A. Yes.

21 Q. Go to page 2. Under "Coverage  
22 Policy," look at the third paragraph in  
23 bold. It says, "Medically necessary

1 treatment for an individual with gender  
2 dysphoria may include any of the  
3 following services, when services are  
4 available in the benefit plan." Do you  
5 see that?

6 A. I do.

7 Q. All right. And then there's  
8 five different bullets of different  
9 categories of services; right?

10 A. One, two, three, four, five.  
11 Yes.

12 Q. Number two is "Hormonal therapy,  
13 including but not limited to androgens,  
14 anti-androgens, Gn-" -- "GnRH analogues,  
15 estrogens, and progestins." Right?

16 A. Yes.

17 Q. That's a medically necessary  
18 benefit in Cigna's view; right?

19 MR. KNEPPER: Objection, form.

20 A. It is a -- medically necessary  
21 as defined by a insurance company for  
22 purposes of a policy.

23 Q. Yeah.

1           A.     Yes.

2           Q.     And the last bullet point says,  
3     "Gender reassignment and related surgery  
4     (see below)." Do you see that?

5           A.     I do.

6           Q.     According to this policy, in  
7     Cigna's view, gender reassignment and  
8     related surgery is a medically necessary  
9     service; right?

10           MR. KNEPPER: Objection, form.

11           A.     Again, so -- so the insurance  
12     company makes a distinction between  
13     medically necessary, meaning things that  
14     they will cover, versus not medically  
15     necessary, meaning things they won't  
16     cover. It's not based on an actual  
17     medical diagnosis but a -- a managerial  
18     diagnosis, because if it's not medically  
19     necessary, it's not covered by insurance.  
20     So if they choose to cover it, they will  
21     call that medically necessary. And  
22     that's what they're detailing here, what  
23     they will cover and what they won't

1 cover.

2 Q. Okay.

3 A. And they call what they will  
4 cover medically necessary.

5 Q. Let me show you one last policy.  
6 Do you know -- strike that.

7 You know what UnitedHealthcare  
8 is; right?

9 A. Yes, I do.

10 Q. It's another health insurer;  
11 right?

12 A. Yes.

13 Q. They're the largest health  
14 insurer in the country; right?

15 A. I don't know that for a fact.  
16 I'll assume if you're telling me so.

17 Q. All right. Well, do you have  
18 any idea whether United considers  
19 gender-affirming surgery and hormone  
20 treatment to be medically necessary for  
21 gender dysphoria?

22 A. I have a dawning suspicion that  
23 they do.



1           Q.     Yeah. I think you can probably  
2 tell where this is heading at this point;  
3 right?

4           A.     Sure. The insurance industry  
5 likes these services.

6           Q.     Let me introduce this next  
7 exhibit. This is going to be Exhibit 32.  
8 All right at the top it says, "United  
9 Healthcare." You see that?  
10 (Exhibit 32 was marked for identification  
11 and is attached.)

12          A.     I don't have it yet.

13          Q.     Oh, I apologize.

14          A.     That's okay.

15          Q.     Let me know when.

16          A.     Okay. Yes.

17          Q.     All right. Top right says  
18 "United Healthcare" -- "Healthcare  
19 Commercial Medical Policy." Right?

20          A.     Yes.

21          Q.     Under that, it says, "Gender  
22 Dysphoria Treatment." Right?

23          A.     Yes.

1           Q.     See there's an effective date of  
2     April 1, 2021; right?

3           A.     Yes.

4           Q.     Also fairly recently updated;  
5     right?

6           A.     Yes.

7           Q.     Okay. And then you see there's  
8     a bunch of bullet points setting forth  
9     criteria for the services on page 1;  
10    right?

11          A.     Yeah. Yes.

12          Q.     Then go to page 2.

13          A.     Okay.

14          Q.     And the first full paragraph  
15    says, "When the above criteria are met,  
16    the following surgical procedures to  
17    treat Gender Dysphoria are medically  
18    necessary and covered as a proven  
19    benefit." Do you see that?

20          A.     I do.

21          Q.     Okay. So United also covers --  
22    also considers this treatment to be  
23    medically necessary; right?

1 MR. KNEPPER: Objection to form.

2 A. Yeah, again, so the interesting  
3 thing about this that I'm just reading --  
4 because, again, this is the first time  
5 I've seen this -- is that the same policy  
6 declares that the policy does not apply  
7 to individuals with objectively ambiguous  
8 genitalia or disorders of sexual  
9 development. So that's an example of the  
10 insurance company choosing what to call  
11 medically necessary based upon an  
12 insurance definition rather than a  
13 medical definition. Because under, you  
14 know, plastic surgical/general medical  
15 wisdom, ambiguous genitalia and disorders  
16 of sexual development are objective  
17 medical surgical -- well, medical  
18 conditions, at least, that would be  
19 covered -- would be considered medically  
20 necessary to treat, you know, because  
21 disorders of sexual development can  
22 include emergencies like adrenal  
23 hyperplasia. So that's a -- you've given

1 an example of how insurance companies  
2 make their own definitions for the sake  
3 of distinguishing what they will cover  
4 and what they will not cover.

5 Q. Go to page 9.

6 A. Okay.

7 Q. You see there's a section toward  
8 the bottom that says, "Benefit  
9 Considerations"?

10 A. Yes.

11 Q. Third paragraph says, "Unless  
12 otherwise specified, if a plan covers  
13 treatment for Gender Dysphoria, coverage  
14 includes psychotherapy, cross-sex hormone  
15 therapy, puberty suppressing medications  
16 and laboratory testing to monitor the  
17 safety of hormone therapy." Do you see  
18 that?

19 A. I do.

20 Q. You understand that United  
21 considers not just surgery but all these  
22 other services, including cross-sex  
23 hormone therapy and puberty suppressing

1 medications, to be medic- -- medically  
2 necessary for the treatment of gender  
3 dysphoria; right?

4 MR. KNEPPER: Objection, form,  
5 scope.

6 A. Yeah, again, the same -- same  
7 issues of definition. So they -- they  
8 can define it any way they choose for the  
9 sake of the business of insuring people,  
10 yeah. So they -- they definitely have  
11 defined all of the services associated  
12 with gender dysphoria as covered  
13 benefits.

14 Q. And not just as covered  
15 benefits, as medically necessary; right?

16 A. Again --

17 MR. KNEPPER: Objection, form  
18 and scope.

19 A. Again, they use -- the use of  
20 the word "medically necessary" is defined  
21 by the insurance company to distinguish  
22 covered benefits from not covered  
23 benefits, and it's not based in medical

1 evidence of efficacy or anything else.  
2 It's just an internal definition for the  
3 sake of their business model.

4 Q. You think that insurers do not  
5 look at scientific literature in deciding  
6 whether or not to cover something?

7 MR. KNEPPER: Objection, form.

8 Q. Is that really what you think?

9 A. Your -- your first example that  
10 we've gone through is a -- is an example  
11 of the level of literature they've been  
12 using, and that example showed that the  
13 most recent paper that they used to  
14 support it was 2016. So in my mind, it's  
15 in doubt. I don't know for a fact what  
16 this particular policy used as  
17 references. All I have is what you've  
18 shown me on that particular policy. And  
19 the evidence there was they're not  
20 current in the -- in the literature. But  
21 they're still doing good business,  
22 apparently, because they continue even  
23 after reviewing.

1 Q. Okay. Go to page 10.

2 A. Okay. All right.

3 Q. See there's a section at the  
4 bottom that says, "Clinical Evidence"?

5 A. Yes.

6 Q. Do you know what that means?

7 A. Yes, I do.

8 Q. You see then the first thing  
9 that's said -- cited is a study from 2019  
10 and the second thing is a study from  
11 2019, the third thing is a study from  
12 2019. You see that?

13 A. I do.

14 MR. KNEPPER: Objection, form.

15 Q. Do you under- -- do you  
16 understand what this section represents?

17 MR. KNEPPER: Objection, form.

18 A. Permit me to just look at the  
19 particular names and the particular cited  
20 articles, if I could.

21 (Witness reviews document.)

22 A. Sorry. I just wanted to see if  
23 there were any -- and then they go to --

1       okay.   Okay.   Could I ask you to ask your  
2       question again?   I'm sorry to have to do  
3       that.   I just wanted to see what you were  
4       referring to.

5           Q.     Yeah.   You understand that this  
6       "Clinical Evidence" section provides an  
7       overview of some of the scientific  
8       evidence on which United based its  
9       policy; right?

10           MR. KNEPPER:   Objection, form.

11           A.     Yes.   They -- they have listed  
12       some of the scientific evidence available  
13       in the literature.

14           Q.     Including studies as recently as  
15       2019 --

16           A.     Yes.

17           Q.     -- right?

18           A.     Right.

19           Q.     And because you weren't involved  
20       with writing this policy or updating for  
21       United, you don't know what else they may  
22       have considered outside of this policy;  
23       right?



1           A.     I have no way of knowing what  
2           they would have considered. That's  
3           right.

4           Q.     Okay. All right. Let's shift  
5           gears a little bit. You've heard the  
6           term "Christian anthropology." Right?

7           A.     Yes, I have.

8           Q.     You've used that term yourself;  
9           right?

10          A.     Yes, I have.

11          Q.     The view that Christian  
12          anthropology takes is that the -- a  
13          person's sex assigned at birth is  
14          intrinsic and unchangeable; correct?

15          A.     No.

16                 MR. KNEPPER: Objection, form,  
17          scope.

18          A.     I would not say that.

19          Q.     What would you -- how would you  
20          describe it?

21          A.     Well, your use of the term "sex  
22          assigned at birth" is not -- is not  
23          contained within Christian anthropology.

1 Q. Let me try this --

2 A. By the -- by the way, I don't --  
3 I don't use definitions in Christian  
4 anthropology to confect my expert  
5 opinion. My opinion is based in the  
6 scientific literature, my review of that  
7 literature, and my 30-plus years'  
8 experience as a reconstructive surgeon.

9 Q. I understand. The view that  
10 Christian -- to use your words, the view  
11 that Christian anthropology takes is that  
12 a person's biologic sex is intrinsic and  
13 unchangeable; right?

14 A. Yes.

15 MR. KNEPPER: Objection, form,  
16 scope.

17 Q. You think that people with  
18 gender dysphoria should be welcomed, but  
19 they should be told that they're  
20 biological sex cannot be changed; right?

21 MR. KNEPPER: Objection, form,  
22 scope.

23 A. Yeah. So, persons who

1 self-identify as transgender are to be  
2 welcomed and are to be cared for because  
3 they suffer greatly, and they -- they  
4 deserve, in justice -- they deserve, out  
5 of justice, I should say, our -- our care  
6 and support. But that care and support  
7 must always be rooted in the truth of the  
8 nature of the human person, the nature of  
9 the biology that informs our  
10 understanding of that, because that has  
11 to drive our medical and surgical  
12 decision-making.

13 So that's why my -- my expert  
14 opinion is based in the objective  
15 scientific evidence. I don't make  
16 reference to my -- any faith statements  
17 when I'm -- when I'm developing my expert  
18 opinion on transgender medicine and  
19 surgery.

20 Q. In your expert report, you refer  
21 to plaintiff Julie -- Dr. Julie McKeown;  
22 right?

23 A. Could you walk me to where I

1 speak about her?

2 Q. Yeah. Go to -- go to page 54 of  
3 your report.

4 A. Fifty-four. Thank you.

5 MR. TISHYEVICH: And the  
6 spelling is M-C-K-E-O-W-N.

7 A. Fifty-four. Okay. I'm there.

8 Q. Give me a second. Yeah. This  
9 is -- this is you discussing one of the  
10 plaintiffs; right?

11 A. Yes. Yes. I'm on page 53, 54.

12 Q. Yeah. And the second full  
13 paragraph on page 54, you refer to Dr.  
14 McKeown as a he; right?

15 (Witness reviews document.)

16 A. Am I looking at the right -- oh,  
17 yes. Okay. I'm sorry. Right at the  
18 very beginning. Yes.

19 Q. Page 48 of your report, this is  
20 you discussing minor plaintiff CB; right?

21 A. Right.

22 Q. And you refer to minor plaintiff  
23 as a she; right?

1 A. Correct.

2 Q. Go to page 51.

3 A. Fifty-one?

4 Q. Five one.

5 A. Okay. All right.

6 Q. This is you talking about  
7 plaintiff Connor Thonen-Fleck; right?

8 A. Let me go to the preceding page  
9 because I've got to see where the names  
10 -- oh, I only used the initials. Yes.  
11 CT-F, yes.

12 Q. It's T-H-O-N-E-N, dash,  
13 F-L-E-C-K. And you refer to him as a  
14 she; right?

15 A. Yes.

16 Q. Now, you personally do not  
17 believe that a person's sex assigned at  
18 birth can ever be changed?

19 MR. KNEPPER: Objection.

20 Q. Sorry, let me -- let me use your  
21 terms. You personally do not believe  
22 that a person's biological sex can ever  
23 be changed; right?

1 MR. KNEPPER: Objection, form.

2 A. A person's biological sex can  
3 never be changed, yes.

4 Q. Do you know what the term  
5 "misgendering" is?

6 A. It's a -- it's a political term,  
7 yes. It's a political, cultural term, I  
8 should say. Political, cultural term.

9 Q. Misgendering means referring to  
10 a person in a way that doesn't align with  
11 their gender; right?

12 MR. KNEPPER: Objection, form.

13 A. In -- within their hearing, I  
14 could see a problem with that. But from  
15 the standpoint of offering medical  
16 evidence, I'm obliged to honor objective  
17 biological realities when I speak about  
18 an examination of their medical record.

19 There's so many things at stake  
20 relating to the sex of the patient that  
21 impinge upon the effects of drugs, the  
22 effects of time, the effects of hormones  
23 that I -- I cannot incorrectly report the

1 sex of the patient when I'm talking about  
2 objective medical care.

3 Now, speaking with the patients  
4 themselves, I wouldn't do that. As we  
5 talked about earlier, I have a number of  
6 transgender patients, and I don't  
7 misgender them. We're talking here about  
8 something that's not within their hearing  
9 or I assume they -- I assume that they  
10 wouldn't be reading this. We're speaking  
11 as a professional to a professional  
12 review of this stuff, among other  
13 experts. So I think it's essential that  
14 we stick to the biological reality that  
15 -- that biological sex is immutable.

16 Q. In your expert report, you are  
17 misgendering several of the individual  
18 plaintiffs in this case; correct?

19 MR. KNEPPER: Objection, form.

20 A. I would say incorrect, because  
21 misgendering is something that's done to  
22 the person themselves or is something  
23 that they're going to read or hear or

1 see. And that's an abuse of the person's  
2 right to their name, and I don't do that  
3 to people. I don't misgender people.

4 Q. Well, in this report at least,  
5 you are referring to several of these  
6 plaintiffs, including a minor, in a way  
7 that does not align with their gender;  
8 right?

9 A. I would be --

10 MR. KNEPPER: Objection, form.

11 A. Again, I would be concerned to  
12 not do that if it was going to be  
13 something they were going to read or  
14 hear. But this expert testimony, in my  
15 understanding, is for the Court and for  
16 the other experts to review, in which  
17 case, I insist upon the -- the prevailing  
18 necessity of sticking to objective truths  
19 when talking about medical opinions,  
20 scientific opinions.

21 Again, I -- I'm not in the habit  
22 of -- of offending people or using names  
23 that they haven't chosen, because, again,



1 I treat transgender patients and I don't  
2 subject them to that kind of abuse. But  
3 when reviewing medical and biological  
4 realities like this, I have to insist  
5 upon it because medical care is not  
6 served by incorrectly naming biological  
7 realities and confusing people. I can  
8 give you an example if you like.

9 Q. That's all right.

10 A. Of a --

11 Q. That's all right.

12 A. Okay.

13 Q. You've used the phrase before,  
14 "You can't heal an interior wound with  
15 external surgery." Right?

16 A. Yes, I have.

17 Q. Do you remember giving a  
18 presentation at the Gospel of Life  
19 conference in Denver in 2018?

20 A. Yes.

21 Q. And that presentation was titled  
22 "Transgender Surgery & Christian  
23 Anthropology." Right?

1           A.     Yes.

2           Q.     All right. Let me introduce an  
3     exhibit. This will be Exhibit 33. Let  
4     me know when you have it.

5     (Exhibit 33 was marked for identification  
6     and is attached.)

7           A.     Okay. Yes, I have it.

8           Q.     Go to page 2.

9           A.     Okay.

10          Q.     These are slides you prepared;  
11     right?

12          A.     Yes.

13          Q.     On the bottom left corner,  
14     there's a red logo for Courage  
15     International. You see that?

16          A.     I do.

17          Q.     Why did you include that logo in  
18     this presentation?

19                 MR. KNEPPER: Objection, form,  
20     scope.

21          A.     This was a presentation for the  
22     Archdiocese of Denver, the Catholic  
23     Archdiocese of Denver, and it was to an

1 audience of pastors, teachers, school  
2 administrators, and so on. And I was  
3 there representing my position in the  
4 Catholic apostolate of courage, and so  
5 making a presentation to a church group,  
6 I wanted them to understand the resource  
7 so that they could investigate it  
8 themselves if they wanted to. So I put  
9 that up there for their benefit.

10 Q. Well, some of the topics you  
11 covered also included your views on what  
12 the scientific evidence on these issues  
13 is; right?

14 A. Yeah. The -- the talk is a  
15 combination of both the scientific  
16 evidence and the historic Catholic  
17 teachings on the nature of the human  
18 person.

19 Q. For example, go to page -- go to  
20 page 87, for example.

21 A. Okay. Let me hustle down there.  
22 Boy, no wonder people get bored when I  
23 give this talk. It's so long; right?

1       Let's see. 87. Here we are. Is that --  
2       let's see. This is -- I want to make  
3       sure I'm on the same page as you are.  
4       It's of the --

5           Q.     It's titled "The Swedish  
6       Study" --

7           A.     Yes.

8           Q.     -- at the top.

9           A.     Yes, yes.

10          Q.     And go to the next page.

11          A.     Okay. Yeah.

12          Q.     You cite from the abstract on  
13       that study; right?

14          A.     Yes. Well, I -- I'm not citing  
15       it. I'm showing them what this study  
16       looks like if they search for it online.

17          Q.     So part of the talk was your  
18       recitation of what you think the  
19       scientific evidence on these issues  
20       shows; right?

21               MR. KNEPPER: Objection, form,  
22       scope.

23          A.     Yeah, I was asked to talk on

1       this -- on -- on both subjects, as I said  
2       earlier, both the -- the teaching in  
3       human anthropology as well as the  
4       scientific evidence that's used to  
5       support these services of transgender  
6       medicine and surgery. That's right.

7           Q.     Courage International is an  
8       organization that offers support for  
9       persons who experience same-sex  
10      attraction; right?

11           A.     Yes.

12                   MR. KNEPPER:   Objection, form,  
13      scope.

14           Q.     Courage International says that  
15      people should not act on same sex  
16      attraction and should strive for chastity  
17      instead; right?

18                   MR. KNEPPER:   Objection, form,  
19      scope.

20           A.     Actually, it's broader than  
21      that. So, Courage addresses chastity as  
22      something that's required of everyone.  
23      But it -- it particularly addresses the

1 struggles that persons who experience  
2 same-sex attraction experience in trying  
3 to maintain the same chastity that all of  
4 us are called to. So it's not an  
5 exceptional case; it's a particular  
6 apostolate to a particular group of  
7 people.

8 Q. There's a chapter of Courage  
9 International in Birmingham, Alabama;  
10 right?

11 A. That's correct.

12 MR. KNEPPER: Objection, form,  
13 scope.

14 Q. And their website lists you as  
15 the main contact for that chapter; right?

16 A. I'm not only the contact, I'm  
17 the chaplain for that chapter.

18 Q. Okay. Go to page 3 of this  
19 presentation.

20 A. Okay.

21 Q. Let me know when you get there.

22 A. Okay. Two, three. Yes. The  
23 Challenge?

1 Q. It's titled "The Challenge"?

2 A. Yeah.

3 Q. The first bullet says, "'Male  
4 and female He created them.'" Right?

5 A. Right.

6 Q. That's a quote from Genesis;  
7 right?

8 A. Correct.

9 Q. The capitalized "He" refers to  
10 God; right?

11 A. Yes.

12 Q. And this bullet reflects the  
13 church's position that God has created  
14 each individual as either a man or a  
15 woman; right?

16 A. Well, actually, so this -- these  
17 slides serve as jumping-off points for a  
18 discussion that I have at each slide. In  
19 this case, the point of the discussion  
20 was to disabuse the audience of the idea  
21 that they can rely on scripture when  
22 addressing this problem because the  
23 majority of the people that are seeking

1 to serve do not speak in Biblical  
2 language. So the point of this slide is  
3 to -- is to encourage them to understand  
4 that they have to learn a new language in  
5 order to be able to speak effectively to  
6 people suffering from gender discordance  
7 and to speak to their families on this  
8 same issue. That's what this slide is  
9 about. It's not a -- it's not a  
10 declaration about what God has said.  
11 It's a -- it's an explanation of the  
12 problem they're going to have if they're  
13 going to seek to serve people who  
14 experience same-sex -- I'm sorry, who  
15 experience cross-sex identification.

16 Q. All right. You say, "'Male and  
17 female He created them' has been replaced  
18 by a confusion of exceptional cases."  
19 Right?

20 A. Yes.

21 Q. And by the phrase "confusion of  
22 exceptional cases," one of the things  
23 you're referring to are patients with



1 gender dysphoria; right?

2 MR. KNEPPER: Objection, form,  
3 scope.

4 A. Right. I'm referring to the --  
5 the recently growing list of exceptional  
6 cases that is enumerated in the -- the  
7 acronyms of -- of this topic, LGBTQ add a  
8 plus and so on, which can be very  
9 confusing to people who are trying to  
10 help. And so I'm acknowledging that the  
11 -- the likelihood that they may be  
12 confused by those terms, and I'm also  
13 acknowledging the sources of those  
14 confusing terms. And the point of the  
15 slide, again, is to help them understand  
16 there's a language they need to learn and  
17 to not be daunted by the confusion that  
18 they may experience when they first look  
19 into this topic. Yeah. That's what this  
20 is.

21 Q. Go to slide 11. It's titled  
22 "Human Nature."

23 A. So slide 11, Human Nature, yes.

1       Okay.

2           Q.     So the first two bullets say,  
3       "Why must we consider first the nature of  
4       the human person?" Then it says,  
5       "Defines the 'end' of medical and  
6       surgical care."

7           A.     Yes.

8           Q.     What does it mean that it  
9       "defines the 'end' of medical and  
10      surgical care"?

11                  MR. KNEPPER:  Objection, form,  
12      scope.

13          A.     Okay.  So that's a -- that's a  
14      term that dates back to Aristotelian  
15      philosophy.  And what it has to do is  
16      what is the purpose or what is the  
17      ultimate arc of a particular thing.  So  
18      the "end" meaning what are you seeking to  
19      accomplish, what is the final goal of  
20      that -- of that medical or surgical  
21      treatment.

22                  So -- and the examples I use are  
23      you have to have an understanding, for

1       example, of normal blood pressure in  
2       order to know when to treat it and why  
3       normalizing blood pressure is important.  
4       Or we have to know that, you know, the  
5       human person has two legs, and if he has  
6       a poverty of legs, he has a poverty of  
7       human flourishing. And so in the one  
8       case, I might be treating with blood  
9       pressure medicine, and in the other case,  
10      I might be fitting him for a prosthesis.  
11      But the point is we have an objective  
12      understanding of the nature of the human  
13      person, which defines the goals of  
14      treatment, whether you're talking about  
15      orthopedics or transgender medicine.

16           Q.     Yeah. You think this concept  
17      also applies to the concept of treatment  
18      for gender dysphoria; right?

19           A.     It does. Yes, it does.

20                   MR. KNEPPER: Objection, form,  
21      scope.

22           Q.     All right. Go to slide 23.

23           A.     Okay. Okay.

1           Q.     The top left says, "Shaping the  
2     Conversation, & Grooming a Generation."

3           A.     Right.

4           Q.     You see that?

5           A.     Right.

6           Q.     What do you mean by "grooming a  
7     generation"?

8           A.     Grooming is a -- is a process by  
9     which ideas are introduced that make  
10    subsequent actions possible, so that's  
11    what -- that's what grooming is, yeah.

12          Q.     Grooming is sometimes used to  
13    refer to preparing to -- strike that.

14                 Grooming is sometimes used as  
15    preparing children for sexual abuse.  
16    Isn't that true?

17          A.     That's one of the --

18                 MR. KNEPPER:   Objection, form,  
19    scope.

20          A.     That's one of the uses of  
21    grooming, yeah, but it's not exclusive  
22    use of grooming.   Yeah.   And I discuss  
23    this in this -- in this slide.   Yes, I

1 do.

2 Q. And you think that discussing  
3 gender identity issues with children  
4 means sexualizing them; right?

5 A. Yes, I do. Absolutely, I do.

6 MR. KNEPPER: Objection, form,  
7 scope.

8 Q. And you think that discussing  
9 gender identity issues with children  
10 means grooming them for potential later  
11 sexual abuse; right?

12 MR. KNEPPER: Objection, form,  
13 scope.

14 A. No. No. What we're talking  
15 about here is grooming them for -- for  
16 future -- what's the word I would want to  
17 choose carefully? It's preparing them  
18 for these interventions is what it does.  
19 It lays the groundwork for it by  
20 sexualizing their thoughts in a way  
21 that's -- is not consonant with their  
22 best interest. That's what this slide is  
23 about, so --

1           Q.     Let me introduce another  
2     exhibit.

3           A.     Okay.

4           Q.     This will be Exhibit 34.  
5     (Exhibit 34 was marked for identification  
6     and is attached.)

7           A.     Could I back up to that last  
8     one?  Would that be all right?

9           Q.     Sure.

10          A.     Before we -- before we press on.  
11     One of the things I'm just recalling, the  
12     -- the -- the urgency of having that  
13     particular slide there is that when  
14     people take care of transgender persons,  
15     children in particular, we always -- but  
16     including adults.  But -- but children  
17     and adults, one always has to be on the  
18     lookout for signs of sexual abuse because  
19     it's a very -- it's a very commonly  
20     reported comorbidity in persons who  
21     experience these self-identifications.  
22     It's not uncommon to discover that  
23     they've suffered some form of abuse that

1        may be sexual but not necessarily sexual.  
2        And so this is -- one of the things I  
3        talk about in that slide is -- is for the  
4        people who are care providers,  
5        counselors, school administrators, to be  
6        alert to that possibility.

7                    So I'm sorry, we were going to  
8        move on to the next one.

9            Q.     Do you have the next exhibit?

10          A.     And that is Exhibit 34?

11          Q.     Yeah.

12          A.     Okay.

13          Q.     All right. This is a printout  
14        from LifeSite, and the title is "Plastic  
15        surgeon: Sex-change operation 'utterly  
16        unacceptable' and a form of 'child  
17        abuse.'" Right?

18          A.     Yes.

19          Q.     And it says, "Dr. Patrick  
20        Lappert, a Catholic deacon in Alabama,  
21        says changing a person's sex is a lie and  
22        also a moral violation for a physician."  
23        Right?

1 A. Yes.

2 Q. And you hold those views --

3 A. I do.

4 Q. -- correct?

5 A. I do.

6 MR. KNEPPER: Objection, form,  
7 scope.

8 Q. Go to page 2.

9 A. Okay.

10 Q. This was published in September  
11 2019; right?

12 A. Yes.

13 Q. This is reporting on you  
14 appearing on a broadcast of something  
15 called the "Relevant Radio's Trending  
16 With Timmerie."

17 A. Yes.

18 Q. Right?

19 A. Yes.

20 Q. You made that appearance; right?

21 A. On the radio, yes.

22 Q. Okay. Look -- look to the fifth  
23 paragraph on page 2.



1           A.     Okay.

2           Q.     It says, "He called it 'utterly  
3 unacceptable' on moral grounds for a  
4 plastic surgeon, because it disregards  
5 the surgeon's call to balance respect for  
6 both form and function of the body in his  
7 or her work."

8           A.     Right.

9           Q.     Right?

10          A.     Yes, sir.

11          Q.     You don't deny saying that;  
12 right?

13          A.     Right. You should understand,  
14 though, that the use of the term "moral  
15 grounds" here is strictly from the  
16 standpoint of my training as a plastic  
17 surgeon. I'm not using this as a  
18 platform for a religious discussion.  
19 Speaking -- I'm speaking about form and  
20 function, which are both very crucial to  
21 an understanding of what plastic surgery  
22 means.

23                     And again, that speaks to the

1 end of plastic surgery, which is -- when  
2 you're speaking about reconstructive  
3 surgery, it's the restoration of form and  
4 function. And these operations lack  
5 moral basis precisely because they  
6 destroy essential human functions for the  
7 sake of achieving a cosmetic result,  
8 which is morally unacceptable. And I say  
9 that without reference to any religious  
10 teaching. This is strictly my training  
11 as a plastic surgeon, morally  
12 unacceptable. And from the first moments  
13 of my training as a reconstructive  
14 surgeon, that was drilled into me, that  
15 if you're planning a reconstructive  
16 operation and it involves the movement of  
17 tissue on the patient's body, you never  
18 do something that's going to compromise  
19 or destroy an essential human function.

20 You may challenge that function  
21 a little bit, as you do, for example, in  
22 a radial forearm flap, the same flap  
23 that's used to recon- -- to construct a

1 phalloplasty. I've used that flap many  
2 times to reconstruct head and neck cancer  
3 defects, the same neurotized vascular  
4 flap. And I would never dream of using  
5 that flap, for example, if I was going to  
6 compromise hand function. So it obliges  
7 me to be careful, to make sure that when  
8 I raise the flap, I don't harm the blood  
9 supply to the hand. That's an example of  
10 that.

11 In the example of transgender  
12 surgery, by definition, you're destroying  
13 fertility for life, which is an immoral  
14 act in the eyes of plastic surgery as I  
15 learned it through 30-plus years of  
16 training.

17 Q. I understand. Let me just ask  
18 you about the next two paragraphs --

19 A. Okay.

20 Q. -- of this article.

21 A. Okay.

22 Q. Then it says: "Regarding  
23 children, Lappert said, sexualizing them

1 at a young age with these ideas is  
2 grooming them for later abuse. 'It's  
3 atrocious,' he said. 'And no one even  
4 knows how that's going to play out.  
5 There's no body of scientific evidence to  
6 even support the safety of doing that to  
7 children. But it's being done.'" Right?

8 MR. KNEPPER: Objection, form,  
9 scope.

10 A. Okay. So, let's go through  
11 that. So in this case -- we talked about  
12 multiple uses of the word "grooming." In  
13 this case, the abuse that they're -- it's  
14 grooming them for is the abuse we just  
15 finished discussing, what I consider to  
16 be the abuse of transgender medicine and  
17 surgery and what it does to the life of  
18 that child. So that's the abuse I'm  
19 referring to here. I'm not speaking  
20 about this in terms of sexual abuse, I'm  
21 speaking about in terms of  
22 medical/surgical abuse of a child. So if  
23 you get a child -- if you sexualize a

1 child's thinking and encourage them to  
2 believe, for example, if -- if -- if I --  
3 and I don't want to take up your  
4 remaining time, but we can go into it in  
5 more detail if you wish. But the point  
6 I'm making here is this is grooming them  
7 for medical and surgical abuse.

8 Q. Okay.

9 MR. TISHYEVICH: We can go off  
10 the record.

11 THE VIDEOGRAPHER: This is the  
12 end of Media Unit 6. We are off the  
13 record at 5:07 p.m.

14 (Break taken.)

15 THE VIDEOGRAPHER: This is the  
16 beginning of Media Unit No. 7. We are on  
17 the record at 5:14 p.m.

18 Q. (By Mr. Tishyevich) Doctor,  
19 that's all the questions I have for you  
20 today. Thanks for your time.

21 A. Thank you. This was my first  
22 ever deposition, and you were very kind  
23 to me. Thank you for that.

1 Q. Okay.

2 MR. TISHYEVICH: All right.

3 Mr. Knepper?

4 MR. KNEPPER: Yeah, I'm ready to  
5 go. I'm sorry. I actually had you  
6 turned down, because when I put you on  
7 mute, I could still hear Lane and Andrew.  
8 I thought I saw their lips moving.

9 THE COURT REPORTER: Yeah, he  
10 said he was finished asking questions.

11 MR. KNEPPER: Oh, I'm sorry. I  
12 didn't hear that. I'm sorry, Dmitriy. I  
13 apologize. I had -- you know, Lane  
14 and -- and Andrew were talking to one  
15 another, and so I was -- I had to turn  
16 down my speaker.

17 So I guess why don't we -- why  
18 don't we take a -- I've got 4:15. Why  
19 don't we take a 15-minute break, and then  
20 I'll see if I have anything on redirect,  
21 and we'll come back at I guess it would  
22 be 6:30 your time, Dmitriy?

23 MR. TISHYEVICH: Yeah.

1 MR. KNEPPER: Okay.

2 MR. TISHYEVICH: Sounds good.

3 THE VIDEOGRAPHER: We are off  
4 the record at 5:15.

5 (Break taken.)

6 THE VIDEOGRAPHER: We are back  
7 on the record at 5:29 p.m.

8

9 EXAMINATION BY MR. KNEPPER:

10 Q. Dr. Lappert, I wanted to ask you  
11 a couple of questions about your CV and  
12 your biography.

13 A. Okay.

14 Q. On your biography, you identify  
15 yourself as the Specialty Leader for  
16 Plastic and Reconstructive Surgery, the  
17 Office of the Surgeon General - United  
18 States Navy, from 1997 to 2002. Could  
19 you describe what that position involved?

20 A. Yeah. So I advised the Surgeon  
21 General, first of all, with regard to the  
22 selection of physicians for advanced  
23 training in plastic surgery. I also

1       advised the Office of the Surgeon General  
2       on policy matters pertaining to the  
3       movement of patients and the availability  
4       of services in the various treatment  
5       facilities. I also advised him on policy  
6       relating to coverage of particular  
7       medical problems versus sending them out  
8       into the community for care or declining  
9       care.

10               So part of it was resource  
11       management, part of it was personnel  
12       management, and part of it was financial  
13       management. And all the time, it  
14       required to review the state of the  
15       literature regarding reconstructive  
16       surgery for combat-injured and as well as  
17       medically retired personnel and other  
18       retired people.

19               Q.     And I -- I note that also in  
20       your resumé is that from 1996 to 2002,  
21       you were the Chairman of the Department  
22       of Plastic and Reconstructive Surgery at  
23       Naval Hospital Portsmouth. Could you



1 describe that -- that facility and its  
2 role within the United States military?

3 A. Okay. Well, that -- as  
4 department head, I was -- I had a five --  
5 five staff plastic surgeons working for  
6 me. I had I think seventeen hospital  
7 corpsmen working for me. And we provided  
8 services, reconstructive surgical  
9 services on a referral basis from --  
10 essentially from the eastern  
11 Mediterranean all the way to Appalachia  
12 and from North Carolina -- I'm sorry,  
13 from -- from Maryland all the way down to  
14 Florida. So all persons requiring  
15 reconstructive surgery, including  
16 combat-injured or other, would be  
17 referred to us, people with congenital  
18 deformities, peop- -- you know, pediatric  
19 patients and -- and adults. And this was  
20 in a -- in the facility which at the time  
21 was the largest medical treatment  
22 facility in -- I think in the world,  
23 certainly in -- in the American purview.

1 I also -- I also established and  
2 ran congenital craniofacial deformity  
3 treatment. We ran a limb salvage  
4 treatment that involved a great deal of  
5 microvascular reconstructive surgery for  
6 wounds, cancer, that sort of thing. We  
7 also established the -- the wound care  
8 center for that facility, and that --  
9 again, we served that large catchment  
10 area with advanced wound care services.

11 Q. Dr. Lappert, you served as a --  
12 as a plastic and reconstructive surgeon  
13 for the United States Navy. Is that  
14 correct?

15 A. Correct.

16 Q. And you also served as a plastic  
17 and reconstructive surgeon in private  
18 practice. Is that correct?

19 A. Correct.

20 Q. Could you describe the -- or  
21 contrast or describe the similarities and  
22 differences in those two practices.

23 A. Certainly. Well, so both

1 practices involved both reconstructive  
2 surgery and aesthetic cosmetic surgery.  
3 But the difference is that in the  
4 military, because of the nature of the  
5 requirements, the experience level grows  
6 much more rapidly in the military than it  
7 does in the civilian world. So within  
8 the first couple of years of my practice  
9 as a reconstructive surgeon in the Navy,  
10 I was doing the most advanced  
11 reconstructive procedures, such as the  
12 mi- -- the neurotized microvascular flap  
13 operations that are often used, for  
14 example, in the phalloplasties of  
15 transgender surgery, or the perineal  
16 vaginal reconstruction for cancer, same  
17 operations that are used in the  
18 vaginoplasty for transgender  
19 self-identified persons. So a very  
20 advanced complexity.

21 In fact, when I sat for my  
22 boards, my oral boards, we had to present  
23 ten selected cases that the board

1       selected, and both of my examiners were  
2       startled at the level of complexity for a  
3       second-year person out of training, doing  
4       craniofacial surgery, free flap  
5       operations, massive limb salvage surgery.  
6       So that's the distinct difference, what  
7       you get in civilian versus what you get  
8       in the military. But both of them  
9       involved reconstructive as well as  
10      aesthetic cosmetic surgery.

11       Q.     Sure. Now earlier, you were  
12      asked about whether you had performed  
13      certain procedures in the context of  
14      transgender surgery. Is that correct?

15       A.     Yes, sir.

16       Q.     And your answer was that you had  
17      not. Is that correct?

18       A.     That's correct.

19       Q.     Have you done those procedures  
20      in the context of your practice of  
21      plastic surgery?

22       A.     I have.

23       Q.     Could you describe that --

1       those -- those circumstances.

2           A.     Well, as an example, a -- a very  
3       memorable case, a patient with what's  
4       called Fournier's gangrene, where  
5       essentially, they had a massive  
6       uncontrollable infection of the perineum  
7       that destroyed the scrotum, destroyed  
8       major portions of the penis, required  
9       what amounts to a reconstructive  
10      phalloplasty/scrotoplasty to reconstitute  
11      them after a long period of wound care.  
12      But the -- the operations to reconstruct  
13      the urethra is the same operation that's  
14      used to construct the urethra in a  
15      phalloplasty or construct the urethra in  
16      a metoidioplasty, same operations  
17      involving local flaps, mucosal grafts,  
18      tubularized flap operations. All of  
19      those are the same. Just the indication  
20      for the surgery is reconstructive rather  
21      than the surgeries for transgender.

22                Same thing with the  
23      vaginoplasty. Again, often --

1 oftentimes, reconstruction for radiation  
2 injuries secondary to management of  
3 vagineal -- vaginal perineal malignancies  
4 that require removal of large areas of  
5 soft tissue, again reconstruction of the  
6 -- the perineum, the external genitalia,  
7 the vaginal introitus, the vaginal canal,  
8 same operations using flaps, grafts to  
9 reconstruct as are used in the  
10 transgender surgery world.

11 Q. So, do you feel that your  
12 professional experience and  
13 qualifications allow you to comment on  
14 the -- the medical operations involved in  
15 surgery for a transgender individual?

16 A. Yes. I'm -- I'm very familiar  
17 with all of those operations.

18 Q. And -- and you've performed  
19 those operations?

20 A. Yes, I have.

21 Q. Okay. Just not in the context  
22 of gender transition?

23 A. That's correct.

1           Q.     Okay.  There was a -- there was  
2     a brief question, and -- and we didn't  
3     get back to it, about one of the articles  
4     on your CV on breast reconstruction.  Is  
5     that -- is that correct?

6           A.     Right.  Yeah, that's one of my  
7     listed articles.  That's right.

8           Q.     Great.  Did you want to -- did  
9     you want to say more about that article?

10          A.     Yeah.  So, that's -- was really  
11     my entrance into the breast  
12     reconstruction world.  That actually  
13     started when I was still a general  
14     surgeon and I was collaborating with a  
15     plastic surgeon, and we examined the  
16     surgical planning for mastectomy in the  
17     setting of breast cancer or other causes  
18     and -- and the surgeon's role in  
19     designing those operations to get the  
20     best possible outcome.  And it was  
21     actually a seminal article, up until  
22     recently was the most quoted article in  
23     the literature on breast reconstruction.

1 And that was actually the first article  
2 that spoke about conservation surgery in  
3 surgical planning for the treatment of  
4 breast malignancies or other breast  
5 problems.

6 Q. Dr. Lappert, you were asked  
7 questions about the policy or position  
8 statements of several professional  
9 organizations. Do you recall those  
10 questions?

11 A. I do.

12 Q. Did those exhibits or any of the  
13 questions change your opinion that  
14 affirmative hormonal treatment and  
15 surgery remains unproven and  
16 experimental?

17 A. It has not changed my opinion.

18 Q. You were asked questions about  
19 the evidence supporting the provision of  
20 hormonal therapy and surgical  
21 interventions for the treatment of gender  
22 dysphoria. Is that correct?

23 A. Yes.



1           Q.     Were any of the questions or any  
2     of the studies that were presented to  
3     you, did they change your opinion that  
4     the existing medical evidence supporting  
5     those interventions is of very low  
6     quality and has methodological defects?

7           A.     That did not change my opinion  
8     about those, no.

9           Q.     And just to clarify, what is  
10    your opinion about the -- about the  
11    current state of the evidence supporting  
12    hormonal therapy for treatment of gender  
13    dysphoria?

14          A.     My opinion is that all of these  
15    published studies that are used to  
16    support or to justify the use of puberty  
17    blockade, cross-sex hormones, or  
18    transgender -- gender-affirming surgery  
19    are of the lowest quality scientific  
20    evidence and are not sufficient to  
21    support care and interventions that have  
22    such far-reaching and lifelong effects on  
23    the patient.

1           Q.     Are your opinions on that -- on  
2     that issue in this case based on anything  
3     other than your review of the scientific  
4     and medical literature and your training  
5     as a -- as a physician?

6           A.     No, they're not.

7           Q.     Dr. Lappert, you were asked  
8     about off-label use of Botox for certain  
9     muscle -- muscle groups. Is that  
10    correct?

11          A.     Yes, I was.

12          Q.     And you -- and you described --  
13    and you stated that you've actually used  
14    Botox off label for treatment of those  
15    muscle groups before that was approved by  
16    the FDA. Is that correct?

17          A.     That's correct.

18          Q.     But you have also said that you  
19    believe that it is significant and -- and  
20    relevant to this case that the use of  
21    hormone and puberty blockers for  
22    treatment of gender dysphoria is  
23    off-label. Is that correct?

1           A.     Yes.

2           Q.     Could you disting- --  
3           distinguish between why you hold the view  
4           that off-label uses of some  
5           pharmaceuticals is acceptable by a -- by  
6           a physician and when you consider that to  
7           be unacceptable by a physician?

8           A.     Right. So, the off-label use of  
9           medications when there's a low risk to  
10          the patient or that the -- the possible  
11          adverse effect may be brief and that a  
12          favorable result is likely where risk is  
13          low, then that's justifiable to go off  
14          label with medications. But when you're  
15          -- when you're talking about significant  
16          risk to the patient and irreversible  
17          changes, that the off-label use places a  
18          tremendous burden on the practitioner to  
19          -- to have scientific evidence to support  
20          his decision to do that. And to not have  
21          sufficient evidence when doing that is a  
22          -- is a -- is a great difficulty in terms  
23          of consent and in terms of just general

1 medical/surgical decision-making.

2 So the distinction is the  
3 risk/benefit equation. How much risk are  
4 you placing the patient under, is it  
5 irreversible, and is the benefit so great  
6 that it's worth taking the risk.

7 Q. Sure. Just to follow up, and  
8 these are going to be my final questions,  
9 is it your view that there are no -- and  
10 does it continue to be your view that  
11 there are no -- currently no competent --  
12 competently conducted long-term,  
13 peer-reviewed, reliable, and valid  
14 research studies documenting the number  
15 or percentage of patients who receive  
16 gender-affirming medical interventions  
17 who are helped by such procedures?

18 A. It's still my position that --  
19 that the medical literature does not  
20 support those interventions of medical  
21 and surgical treatment for  
22 self-identified transgender persons.

23 Q. Is it still your view that there

1 are no published, reliable, and valid  
2 research studies that document a valid or  
3 reliable biological, medical, surgical,  
4 radiological, psychological, or other  
5 objective assessment of a -- of a  
6 patient's gender identity or gender  
7 dysphoria?

8 A. Yes. It's still my position  
9 that there are no tests that will confirm  
10 or refute the diagnosis of transgender, a  
11 diagnosis made by the patient. There's  
12 no way to test for that.

13 Q. All right. Is it still your  
14 view, after the evidence and the  
15 questions that you've been presented,  
16 that an unknown percentage of patients  
17 who present with gender dysphoria also  
18 suffer from mental illnesses that  
19 complicate and may distort their  
20 judgments and perceptions of gender  
21 identity?

22 A. Yes. The -- the world  
23 literature demonstrates a consistent and

1 significant level of comorbidities,  
2 including severe anxiety, major  
3 depression, self-harm. The patient is  
4 very likely to be on the autism spectrum.  
5 Suicidal ideation. And -- and the world  
6 literature supports that. So -- and  
7 those are -- those are serious issues,  
8 not only in terms of decision-making, but  
9 even on the question of consent and  
10 competence for consent.

11 Q. Just one -- one more thing I  
12 wanted to follow up with. Your testimony  
13 -- we didn't cover this, but I want to  
14 make sure that it's still your view that  
15 medical treatments may differ  
16 significantly by sex according to your  
17 chromosomal assessment but not based on  
18 your gender identity and that  
19 misinforming physicians of a patient's  
20 biological sex could have deleterious  
21 effects on treatment for medical  
22 conditions?

23 A. Yes, that's correct. And when

1 we discuss the issue of misgendering,  
2 that's what we were talking about. We  
3 were talking about placing the patient at  
4 risk. If you're having a -- a discussion  
5 or conversation about medical  
6 decision-making, you have to distinguish  
7 between biological male and female  
8 because you run -- there -- there are  
9 illnesses that predominate in females  
10 that don't exist in males; there are  
11 conditions that affect males that do not  
12 affect females, and you have to know that  
13 if you're going to offer care. But  
14 again, that hasn't been changed by -- by  
15 what I've seen or heard here today.  
16 That's still -- is still the case.

17 Q. Okay. And it's still your view  
18 that the use of hormones and surgery to  
19 treat gender dysphoria is not supported  
20 by the relevant scientific communities as  
21 discerned by your literature review and  
22 your training as a physician in  
23 reconstructive and plastic surgery?

1           A.     Yes.

2                   MR. KNEPPER:   Those are my  
3           questions.   I don't think I have anything  
4           else.   Did you have follow-ups you  
5           wanted, Dmitriy?

6                   MR. TISHYEVICH:   Very, very  
7           briefly.

8                   MR. KNEPPER:   Okay.

9

10           EXAMINATION BY MR. TISHYEVICH:

11           Q.     Doctor, you were just asked  
12           about your views on why it's okay to use  
13           Botox off-label but you have a different  
14           view of puberty blockers.   Do you recall  
15           that?

16           A.     I do.

17           Q.     And one of your considerations  
18           is the risk/benefit profile of Botox;  
19           right?

20           A.     Right.

21           Q.     Do you know what a black box  
22           warning is, Doctor?

23           A.     Yes.



1           Q.     It's the strongest warning that  
2     the FDA can require; right?

3           A.     That's -- that's right.

4           Q.     And that warning is typically  
5     only used if studies indicate that the  
6     drug carries a significant risk of  
7     serious or even life-threatening adverse  
8     effects; right?

9           A.     Yes.

10          Q.     Do you know that Botox has a  
11     black box warning?

12          A.     Yes, I do.

13          Q.     It's for distant spread of toxin  
14     effect; right?

15          A.     Yes.

16          Q.     And the use of Botox has -- has  
17     resulted in reports of life-threatening  
18     injuries and death; right?

19          A.     I'm even familiar with the case  
20     reports that reported that. Yes, sir.

21          Q.     Okay. That's all I've got for  
22     you.

23                 MR. KNEPPER: Okay. Thank you,

1 Dr. Lappert.

2 THE WITNESS: Thank you.

3 MR. KNEPPER: We're finished  
4 with your testimony.

5 Thank you, Dimitry. Thank you,  
6 Lane. Thank you, Andrew.

7 We can go off the record.

8 THE VIDEOGRAPHER: This is the  
9 end of Media Unit No. 7. We are off the  
10 record at 5:47 p.m. Thursday, September  
11 30th, 2021, and this concludes today's  
12 testimony given by Dr. Patrick Lappert.

13  
14 END OF DEPOSITION

15 ( 5 : 4 7 p . m . )  
16  
17  
18  
19  
20  
21  
22  
23

## C E R T I F I C A T E

STATE OF ALABAMA )

COUNTY OF JEFFERSON )

I hereby certify that the above and foregoing proceeding was taken down by me by stenographic means, and that the content herein was produced in transcript form by computer aid under my supervision, and that the foregoing represents, to the best of my ability, a true and correct transcript of the proceedings occurring on said date at said time.

I further certify that I am neither of counsel nor of kin to the parties to the action; nor am I in anywise interested in the result of said case.

/s/ Lane C. Butler

LANE C. BUTLER, RPR, CRR, CCR

CCR# 418 -- Expires 9/30/22

Commissioner, State of Alabama

My Commission Expires: 2/11/25

1 John G. Knepper, Esquire

2 john@knepperllc.com

3 October 13, 2021

4 RE: Kadel, Et Al v. Folwell

5 9/30/2021, Patrick Lappert, M.D. (#4814384)

6 The above-referenced transcript is available for  
7 review.

8 Within the applicable timeframe, the witness should  
9 read the testimony to verify its accuracy. If there are  
10 any changes, the witness should note those with the  
11 reason, on the attached Errata Sheet.

12 The witness should sign the Acknowledgment of  
13 Deponent and Errata and return to the deposing attorney.  
14 Copies should be sent to all counsel, and to Veritext at  
15 erratas-cs@veritext.com

16  
17 Return completed errata within 30 days from  
18 receipt of transcript.

19 If the witness fails to do so within the time  
20 allotted, the transcript may be used as if signed.

21  
22 Yours,

23 Veritext Legal Solutions  
24  
25

Kadel, Et Al v. Folwell

Patrick Lappert, M.D. (#4814384)

E R R A T A S H E E T

PAGE\_\_\_\_\_ LINE\_\_\_\_\_ CHANGE\_\_\_\_\_

\_\_\_\_\_

REASON\_\_\_\_\_

PAGE\_\_\_\_\_ LINE\_\_\_\_\_ CHANGE\_\_\_\_\_

\_\_\_\_\_

REASON\_\_\_\_\_

PAGE\_\_\_\_\_ LINE\_\_\_\_\_ CHANGE\_\_\_\_\_

\_\_\_\_\_

REASON\_\_\_\_\_

PAGE\_\_\_\_\_ LINE\_\_\_\_\_ CHANGE\_\_\_\_\_

\_\_\_\_\_

REASON\_\_\_\_\_

PAGE\_\_\_\_\_ LINE\_\_\_\_\_ CHANGE\_\_\_\_\_

\_\_\_\_\_

REASON\_\_\_\_\_

PAGE\_\_\_\_\_ LINE\_\_\_\_\_ CHANGE\_\_\_\_\_

\_\_\_\_\_

REASON\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Patrick Lappert, M.D.

Date

1 Kadel, Et Al v. Folwell

2 Patrick Lappert, M.D. (#4814384)

3 ACKNOWLEDGEMENT OF DEPONENT

4 I, Patrick Lappert, M.D., do hereby declare that I  
5 have read the foregoing transcript, I have made any  
6 corrections, additions, or changes I deemed necessary as  
7 noted above to be appended hereto, and that the same is  
8 a true, correct and complete transcript of the testimony  
9 given by me.

10  
11 \_\_\_\_\_  
12 Patrick Lappert, M.D.

\_\_\_\_\_ Date

13 \*If notary is required

14 SUBSCRIBED AND SWORN TO BEFORE ME THIS

15 \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

16  
17  
18 \_\_\_\_\_  
19 NOTARY PUBLIC  
20  
21  
22  
23  
24  
25

<b>&amp;</b>	<b>11-2</b> 63:16	<b>19.1</b> 390:1,5	<b>2.1</b> 302:21
<b>&amp;</b> 2:7 3:11 10:15 265:16 450:22 461:2	<b>116</b> 5:5	<b>1920s</b> 72:17	<b>2.7</b> 258:11
	<b>11:06</b> 166:17	<b>1972</b> 342:1,8	<b>2/11/25</b> 492:23
<b>0</b>	<b>11:16</b> 166:21	<b>1972-2015</b> 6:19	<b>20</b> 6:17 339:16,18 339:21 340:2,7 372:14 495:15
<b>0.3</b> 303:3 344:18 354:15	<b>12</b> 4:13 5:13 7:20 230:12,14 411:9	340:10	<b>2000</b> 380:10
<b>0.6</b> 344:17 354:16	<b>120</b> 2:20	<b>1979</b> 182:22	<b>2001</b> 380:12
<b>08/02/2021</b> 4:17	<b>127</b> 5:7	<b>1982</b> 227:12,17 228:19	<b>2002</b> 31:17,20 32:3 32:5 136:22 137:2 137:23 139:16 240:13,17 472:18 473:20
<b>1</b>	<b>12:30</b> 254:16	<b>1987</b> 134:12	<b>2005</b> 139:11,17
<b>1</b> 4:13 9:18 12:3,6 22:14,15 25:23 31:9 34:11 43:8 79:3 173:9 224:16 257:14,20 279:20 288:14 294:4 301:11,13,21 302:7,9,17,22 303:13 320:9 338:8 352:6 357:16 383:14 411:16 435:2,9	<b>12th</b> 427:12	<b>1990</b> 106:19	<b>2006</b> 140:18
	<b>13</b> 5:16 232:22,23 279:20 493:3	<b>1991</b> 106:18,19	<b>2007</b> 184:11,12
	<b>13.6</b> 304:12	<b>1992</b> 31:12	<b>2008</b> 23:8 30:11 300:11 302:13 303:2
	<b>14</b> 5:20 239:14,16 350:17 351:3 352:12,14 355:1,1 355:2	<b>1993</b> 136:11	<b>2009</b> 200:14
	<b>14.4</b> 357:11	<b>1994</b> 5:12 224:14 226:20,22	<b>2010</b> 139:8,13
	<b>15</b> 6:1 7:20 119:18 138:18 256:13,15 298:19 299:9 411:10 471:19	<b>1995</b> 132:22	<b>2011</b> 185:17 186:4 383:1,5 389:15
	<b>158</b> 2:14	<b>1996</b> 131:11 473:20	<b>2012</b> 183:4 185:16
	<b>16</b> 6:4 56:15 263:8 263:10 359:22 366:6	<b>1997</b> 23:5 30:10 129:6 472:18	<b>2013</b> 189:23 300:11 302:14 303:2
	<b>16,000</b> 360:19 364:23 365:11,15 366:2	<b>1998</b> 129:8 233:4	<b>2014</b> 85:8 202:14 257:3,14,14 380:9
	<b>17</b> 6:6 57:1,17 299:13,15 397:14 397:16	<b>19th</b> 2:20	<b>2015</b> 342:1,8,21 343:4
	<b>171</b> 5:8	<b>1:19</b> 1:7 10:2	<b>2016</b> 265:3 378:22 380:17 439:14
	<b>1720</b> 3:6	<b>1:21</b> 254:20	<b>2017</b> 6:20 8:3 84:8 84:11 89:18 93:6 98:6 101:18 171:16 196:8,18 197:18,22 198:2 198:21 199:13,17 200:2,4,21 264:17 266:6 267:19
	<b>18</b> 5:12 6:11 42:6 58:1 224:14 257:4 257:5 325:23 326:2 399:13	<b>2</b> 4:14 27:9,14 28:16 64:4 110:4 166:16 225:2 231:2 242:13 264:17 265:3 286:4 288:14,22 294:4 295:11 302:5 303:22,23 304:11 306:13 307:13 384:9,16 405:11 415:6 430:21 435:12 451:8 465:8,23	
	<b>18th</b> 430:17	<b>2,361</b> 341:22	
	<b>19</b> 6:16 339:20 340:2 401:6	<b>2,773,770</b> 257:21	

356:1 368:8 <b>2017-10-02</b> 6:5 <b>2018</b> 6:17 23:16,20 25:18 297:7 300:11 302:14,21 304:13,21 307:16 307:22 450:19 <b>2019</b> 6:6 25:2 100:13 148:22 149:1 256:19 299:19 440:9,11 440:12 441:15 465:11 <b>2020</b> 7:12,23 25:11 139:4,8 141:13,17 142:5 148:20 149:1 377:21 379:1,4 393:23 394:16 410:11 414:10 <b>2021</b> 1:21 5:5 7:6 9:10,17 25:10 38:5,11,16 55:17 108:15 109:3 110:6 115:23 359:18 377:13 379:6 380:18 381:10 382:4 410:22 424:8 427:12 430:17 435:2 491:11 493:3 <b>21</b> 6:20 38:11 320:11 322:16 355:17,18 380:11 413:6 <b>22</b> 5:12 7:1 359:14 361:4,11 <b>223</b> 5:11 <b>23</b> 7:5 129:11,15 130:18 375:14,16	397:6,12,13 460:22 <b>230</b> 5:13 <b>232</b> 5:16 <b>239</b> 5:20 <b>24</b> 7:7 388:18,20 399:13 <b>25</b> 7:12 108:15 171:16 347:10 394:7,9 401:6 404:23 <b>256</b> 6:1 <b>25th</b> 109:2 115:2 <b>26</b> 7:15 396:19,20 <b>26.3</b> 308:2 <b>263</b> 6:4 <b>27</b> 4:14 7:17 411:2 411:4 <b>27101</b> 3:13 <b>272</b> 1:7 10:2 <b>28</b> 7:23 414:20,22 <b>28.1</b> 257:21 258:12 <b>29</b> 8:2 35:11 419:15,17 <b>299</b> 6:6 <b>2:16</b> 320:3 <b>2:24</b> 320:7 <b>2nd</b> 38:5 <b>3</b> <b>3</b> 4:15 29:8 30:12 34:7 41:10,12,12 41:16 42:5 64:14 111:7 128:17 166:20 219:12 248:13 254:15 264:10 266:6 267:19 289:2,7,9 289:17,22 290:15 290:17 293:22,23 294:11 295:16 305:2 308:5 312:6	363:14 428:8 455:18 <b>3.2</b> 307:20 <b>3.8</b> 307:20 <b>3/2021</b> 377:13 <b>30</b> 1:21 8:4 344:8 426:22 427:1 443:7 468:15 493:17 <b>30030</b> 2:15 <b>30th</b> 9:9,17 491:11 <b>31</b> 8:6 257:14 430:7,9 <b>32</b> 8:9 434:7,10 <b>326</b> 6:11 <b>33</b> 8:12 451:3,5 <b>339</b> 6:17 <b>34</b> 4:15 8:14 463:4 463:5 464:10 <b>35</b> 298:16,17 402:16 <b>355</b> 6:20 <b>361</b> 7:1 <b>37</b> 4:16 <b>375</b> 7:5 <b>38</b> 36:1 <b>388</b> 7:7 <b>394</b> 7:12 <b>396</b> 7:15 <b>3:25</b> 388:8 <b>3:36</b> 388:12 <b>4</b> <b>4</b> 4:16 37:23 73:19 73:19 79:7 124:7 128:22 143:17 158:15 171:21,22 193:19 194:2 219:9 227:9 254:19 304:17 305:1,4 320:2 323:18 347:19	350:13 364:13 370:15 380:11 401:21 <b>4,432</b> 341:21 <b>4/5</b> 370:13 <b>40</b> 367:8 373:13 <b>41.7</b> 304:22 <b>411</b> 7:17 <b>414</b> 7:23 <b>418</b> 492:21 <b>419</b> 8:2 <b>427</b> 8:4 <b>430</b> 8:6 <b>434</b> 8:9 <b>45</b> 258:18 <b>45.5</b> 258:6 <b>451</b> 8:12 <b>46</b> 394:13 407:8 410:10 421:17,18 <b>463</b> 8:14 <b>472</b> 4:5 <b>48</b> 445:19 <b>4814384</b> 493:5 494:2 495:2 <b>489</b> 4:7 <b>4:07</b> 417:12 <b>4:15</b> 471:18 <b>4:20</b> 417:15 <b>5</b> <b>5</b> 4:18 35:1 43:10 55:9,12 59:14 73:7,13,16,17,20 124:1 189:18,20 189:23 190:12,17 191:8,14,19 192:1 192:9,22 193:15 194:2 219:2,18 255:10 283:20 284:8,12,21 285:13,22 301:12 301:14,21 305:2,5
--	--	---	--



320:6 323:18 327:6 332:17 344:13 363:15 364:1 370:14,15 383:10,12 388:7 <b>50</b> 255:10 298:1 351:21 369:8 <b>51</b> 446:2 <b>53</b> 445:11 <b>53.9</b> 258:7 <b>54</b> 258:18 419:20 419:21 421:7,13 445:2,11,13 <b>54.2</b> 258:7 <b>55</b> 4:18 <b>59</b> 5:11 <b>590</b> 3:6 <b>5:07</b> 470:13 <b>5:14</b> 470:17 <b>5:15</b> 472:4 <b>5:29</b> 472:7 <b>5:47</b> 491:10,15	<b>7</b> <b>7</b> 5:2 7:16 38:21 108:7 115:6 183:2 183:9 184:5,8,18 185:4 187:3,9,13 187:19 188:1,7,16 327:7 330:10 342:22 351:3 357:16 378:5 391:13 396:15 397:4 398:15 399:3 401:1 470:16 491:9 <b>7,000</b> 345:2 <b>7/19/11</b> 382:16 <b>70/30</b> 8:2 <b>73</b> 356:21 357:3 358:8 <b>74.7</b> 344:16 <b>779,270</b> 257:21	<b>9</b> <b>9</b> 5:7 127:16,17 158:16 405:2 437:5 <b>9/30/2021</b> 493:5 <b>9/30/22</b> 492:21 <b>90</b> 161:19 351:21 <b>900</b> 358:7 <b>90s</b> 100:21 161:12 <b>91</b> 31:14 273:21 <b>92</b> 31:14,14 69:17 101:13,16 <b>93</b> 101:14 102:22 <b>94</b> 69:17,18 <b>95</b> 101:7 342:15 <b>97</b> 102:6 262:19 <b>98</b> 129:20 <b>9:33</b> 79:4 <b>9:44</b> 79:8	<b>absence</b> 242:18 243:9 247:20 309:6 <b>absolute</b> 245:15 <b>absolutely</b> 43:19 60:19 61:12 114:12 267:22 315:6 353:11 462:5 <b>abstract</b> 240:22 328:18 341:17 356:8 411:16 453:12 <b>abundance</b> 293:21 <b>abuse</b> 8:17 70:17 120:13 314:19 449:1 450:2 461:15 462:11 463:18,23 464:17 469:2,13,14,16,18 469:20,22 470:7 <b>academy</b> 5:20 239:23 <b>acceptable</b> 313:18 484:5 <b>acceptance</b> 351:15 <b>accepted</b> 43:17 60:23 117:14 373:17,22 374:4 374:16 375:1,6 391:11 402:18 <b>access</b> 102:2 113:9 297:7,9 362:8 <b>accessible</b> 74:8,9 <b>accidentally</b> 256:1 <b>accomplish</b> 300:15 459:19 <b>account</b> 51:13 307:20 308:2 362:11
<b>6</b> <b>6</b> 4:20 40:23 41:14 62:19 172:2,3 349:16,19,23 356:21 357:4 388:11 470:12 <b>6,000</b> 345:2 <b>6,793</b> 341:21 342:6 343:11 350:17 <b>6,800</b> 345:1 <b>60</b> 17:10,12 359:22 369:8 372:11 <b>60,000</b> 359:18 360:18 <b>600</b> 3:12 <b>62</b> 4:20 <b>63</b> 35:12 <b>6:30</b> 471:22	<b>8</b> <b>8</b> 5:5 116:2 174:3 185:22 188:21,23 189:10 378:15 383:11 405:3 <b>80</b> 142:1 161:8 <b>80s</b> 230:8 292:15 <b>81</b> 422:12 <b>82001</b> 3:7 <b>83.8</b> 344:17 <b>87</b> 129:7 273:20 452:20 453:1 <b>884</b> 302:1 <b>889</b> 356:20 <b>89</b> 422:11 <b>8:30</b> 9:8 <b>8:31</b> 9:16	<b>a</b> <b>a.m.</b> 9:8,16 79:4,8 115:11,14 166:17 166:21 <b>abandon</b> 122:18 <b>abdominal</b> 121:23 <b>abdominoplasties</b> 142:20 <b>ability</b> 413:12 492:10 <b>able</b> 11:15 66:18 174:13,17 274:12 277:9 310:20 457:5 <b>abplasticsurgery...</b> 4:14 <b>abps</b> 27:22 28:8,19 28:23 29:12,23 30:10,13,15 31:3 <b>abreast</b> 69:12	

<b>accuracy</b> 493:9 <b>accurately</b> 28:18 28:23 <b>accuse</b> 127:13 <b>achieve</b> 66:15 287:7 334:8 <b>achieving</b> 467:7 <b>acknowledge</b> 230:1 327:9 413:17 <b>acknowledgement</b> 495:3 <b>acknowledges</b> 253:23 <b>acknowledging</b> 458:10,13 <b>acknowledgment</b> 493:12 <b>acne</b> 140:2 145:14 145:22 146:14 152:21 153:1 <b>acneiform</b> 145:13 <b>acronyms</b> 458:7 <b>act</b> 285:22 454:15 468:14 <b>acted</b> 329:4 <b>acting</b> 9:3 <b>action</b> 1:7 10:1 172:15 207:6 224:21 372:22 492:16 <b>actions</b> 461:10 <b>active</b> 24:23 26:5 26:20 100:16 137:11 140:8 171:19 322:21 <b>actively</b> 54:22 <b>activity</b> 265:11 267:19 <b>actual</b> 50:20 168:22 276:7	372:8 373:7 432:16 <b>acute</b> 134:13 135:10 <b>adamant</b> 71:12 <b>add</b> 62:11 398:20 458:7 <b>added</b> 283:21 <b>addition</b> 78:5 <b>additional</b> 13:14 215:22 265:7 <b>additionally</b> 243:2 <b>additions</b> 495:6 <b>address</b> 352:12 366:19 400:19 <b>addressed</b> 363:5 <b>addresses</b> 400:10 400:20 454:21,23 <b>addressing</b> 244:22 384:4,5 456:22 <b>adequately</b> 368:5 <b>adf</b> 79:11,15 80:21 80:22,23 81:5 82:17 83:3,11 84:4 98:7 <b>adf's</b> 81:11 <b>adjusting</b> 392:4 <b>adjustments</b> 212:20 <b>administration</b> 95:18,19 224:18 224:20 253:4 263:14 <b>administrative</b> 257:12 <b>administrator</b> 11:1 <b>administrators</b> 452:2 464:5 <b>admissions</b> 313:15	<b>admit</b> 112:9 <b>admits</b> 373:4,5 <b>admitting</b> 24:10 24:14 <b>adolescence</b> 161:8 205:3 319:11 <b>adolescent</b> 368:12 369:9,22 401:21 401:23 402:12,17 403:8,17,20 404:6 404:16 <b>adolescent's</b> 403:2 <b>adolescents</b> 36:19 51:5 157:19 158:9 161:1 162:14 238:15 239:6 241:6 258:23 399:16,20,23 400:12,21 401:13 402:4 428:16 429:1 <b>adopt</b> 49:3 <b>adopted</b> 114:9 310:22 <b>adopting</b> 51:13 <b>adrenal</b> 436:22 <b>adult</b> 368:12 369:9 369:22 <b>adulthood</b> 161:11 <b>adults</b> 157:23 158:5 259:7 463:16,17 474:19 <b>advanced</b> 472:22 475:10 476:10,20 <b>advancement</b> 310:13 <b>adverse</b> 202:19 334:21 484:11 490:7 <b>advice</b> 77:6 160:22 161:3	<b>advise</b> 210:3 <b>advised</b> 183:19,23 197:8 472:20 473:1,5 <b>advising</b> 204:19 214:15 <b>advisory</b> 378:17 380:15 <b>advocacy</b> 113:17 116:9 117:22 <b>advocate</b> 113:8 <b>advocates</b> 105:12 <b>aesthetic</b> 66:11 67:14 68:4,6,7 335:4,4 476:2 477:10 <b>aesthetically</b> 144:11,12 <b>aetna</b> 8:4 425:7,8 425:10,17,22 426:8,14 427:5,18 428:13,21 429:7 429:15 <b>aetna's</b> 428:1,5 <b>affairs</b> 263:23 <b>affect</b> 121:10 488:11,12 <b>affiliated</b> 59:8 96:6 <b>affiliations</b> 10:11 <b>affirmation</b> 5:3 43:14 51:4 109:18 110:8 149:10 151:15 373:19 376:13 379:20 382:23 384:22 387:2 395:16 <b>affirmative</b> 481:14 <b>affirming</b> 8:4 35:5 36:18,22 39:4 40:4 41:7,18 44:1
--	--	--	---

51:23 54:10 57:12 63:14 77:18 78:19 107:12,20 111:6 111:18 112:21 114:9 115:19 117:15 126:10 127:4 130:3 131:16 132:18 133:16 134:3,17 137:4,10,18 151:13 164:15 168:12,17,17 175:20 177:22 375:7 390:1,15 391:2 424:9 425:17 426:14 427:5,18 428:1,7 429:8 433:19 482:18 485:16 <b>afternoon</b> 97:17 <b>age</b> 242:19,22 249:6 257:4,5 319:10 346:4,5,8 347:9,11 402:1 469:1 <b>agencies</b> 30:17 224:10 <b>agency</b> 221:3 224:17,19 229:12 <b>agents</b> 201:2 203:16 204:17 211:10 212:14 213:18 406:13 <b>ago</b> 15:2,16,20 24:3,15,23 44:14 99:21,23 100:1 103:18 123:1 129:11 130:18 170:9,10 196:6 202:7,11,14 206:16 225:10	247:21 290:19 301:19 325:10 <b>agonist</b> 317:22 <b>agonists</b> 201:8 <b>agree</b> 22:6 36:8 42:18 111:17 112:20 113:3,4,5 128:11 135:13 179:2,6 221:1 229:11 249:11 250:11 252:12 296:17 314:23 315:1,6 316:7 317:16,23,23 318:5 321:2,22,23 340:18 371:5,9 393:2 407:5 408:6 <b>agreed</b> 265:23 <b>agreement</b> 248:23 <b>ahead</b> 126:6 227:5 281:2,14 327:20 327:21 <b>aid</b> 492:8 <b>aim</b> 300:5 <b>aimed</b> 68:6 <b>al</b> 1:9,14 9:21,22 493:4 494:1 495:1 <b>alabama</b> 4:20,23 9:3,7 10:5 24:18 62:5,10,23 63:2,5 63:11,18 76:4,6 109:23 110:15,22 117:7 138:12,14 455:9 464:20 492:2,22 <b>alarm</b> 71:15 <b>alcohol</b> 333:21 <b>alert</b> 464:6 <b>align</b> 111:10 447:10 449:7	<b>allergan</b> 263:21 264:7,9 270:19 <b>alliance</b> 79:11 <b>allotted</b> 493:20 <b>allow</b> 32:18 243:1 428:6 479:13 <b>allowed</b> 179:16 180:7 229:20 <b>allows</b> 222:15 256:2 <b>alphabetically</b> 422:3 <b>altering</b> 244:19 290:2,17 311:5 <b>alternative</b> 250:2 250:14 252:11 <b>altogether</b> 251:3,5 <b>ama</b> 47:5,7,14 48:5 <b>ambiguous</b> 436:7 436:15 <b>ambulatory</b> 258:7 <b>amend</b> 18:19 19:3 <b>amended</b> 265:21 <b>amendment</b> 264:2 <b>amer</b> 26:11 <b>america</b> 123:21 <b>american</b> 5:9,20 26:13,16 27:13 30:8 32:9,10,17 43:1,2 44:18 45:2 45:14,15 46:1,7,23 47:8 48:10,15,18 49:6 72:3 89:14 89:19 99:16 100:5 100:18 102:20 108:11 123:23 124:12 128:12,13 169:7 171:12 185:14 190:5 239:1,23 248:5	282:4 283:8 300:17 313:2 474:23 <b>amid</b> 109:14 <b>amount</b> 169:19 <b>amounted</b> 304:21 <b>amounts</b> 402:16 478:9 <b>amputating</b> 289:21 <b>amsterdam</b> 6:17 326:7 340:9 <b>analogues</b> 431:14 <b>analysis</b> 86:13,14 276:3 302:2 307:19 410:11 <b>andre</b> 86:6 <b>andrew</b> 3:20 10:5 471:7,14 491:6 <b>androgen</b> 146:18 <b>androgens</b> 431:13 431:14 <b>anecdotal</b> 218:23 219:1 244:14 245:20 246:7 270:16,16 279:23 280:6,15,20 281:4 281:8,10,21,23 282:17 323:22 362:21 363:16 <b>anecdotes</b> 343:13 <b>anesthesia</b> 142:22 <b>angle</b> 132:17 <b>animal</b> 135:11 <b>animate</b> 266:16 <b>anorexic</b> 74:23 <b>answer</b> 18:19 19:4 83:1 110:21 124:17 125:23 126:5,8,19,21 127:1 150:20
--	---	--	---

164:7,11 181:4 186:16 215:4 251:1 269:12 274:11 286:16 294:1,8 324:8 374:22 409:18 426:2 477:16 <b>answered</b> 126:14 426:4 <b>answering</b> 261:17 <b>answers</b> 4:18 55:14 104:19 <b>antacids</b> 122:6 <b>anthropology</b> 442:6,12,23 443:4 443:11 450:23 454:3 <b>anti</b> 431:14 <b>antibiotics</b> 122:6 <b>anticipated</b> 80:13 186:18 <b>anxiety</b> 154:10 155:6 165:16 405:19 487:2 <b>anxious</b> 160:19 <b>anybody</b> 205:9 <b>anywise</b> 492:17 <b>apa</b> 49:2 190:8 191:18 192:19 194:11 239:4,20 240:15 242:1 243:8,15 248:2 250:12,19 251:12 251:19 253:15,20 <b>apa's</b> 239:9 <b>apart</b> 189:3 260:8 276:14 331:4 <b>apologies</b> 18:23 <b>apologize</b> 434:13 471:13	<b>apostolate</b> 452:4 455:6 <b>appalachia</b> 474:11 <b>apparent</b> 317:4 318:3 <b>apparently</b> 39:13 40:22 43:20 56:1 117:9 306:8 439:22 <b>appear</b> 201:11 303:17 395:5 423:21 <b>appearance</b> 10:11 60:6 61:6,10 71:13 144:13 154:18 238:21 265:9 465:20 <b>appearing</b> 465:14 <b>appears</b> 39:19 240:20 259:3 264:19 376:20 378:4 428:6 <b>appended</b> 495:7 <b>applicable</b> 493:8 <b>application</b> 205:13 205:16 218:15 219:10,11,15 234:11 235:7,12 237:10 244:11,13 247:9,23 252:19 265:2,7,20 266:21 267:6 270:15 310:9 <b>applied</b> 148:13 206:10 291:21 300:19 311:4,22 333:9 <b>applies</b> 460:17 <b>apply</b> 225:23 236:3 276:12 316:8 436:6	<b>applying</b> 245:4 247:15 318:15 <b>appointment</b> 207:12 <b>appreciation</b> 56:20 <b>approach</b> 249:13 <b>approaches</b> 105:23 228:9 <b>approaching</b> 83:21 219:21 307:12 <b>appropriate</b> 26:3 26:7 40:5 41:19 44:3 61:11 216:21 228:7 231:13 232:1 246:14 251:20 335:23 406:4 <b>approval</b> 6:5 236:3 243:9 263:17 265:6,16 266:17 267:8 269:10 334:7 <b>approved</b> 5:14 63:12 216:9,15 225:13,16 226:16 230:22 231:5,18 233:21 243:2 248:1 253:4,5 257:4 262:9,15,23 265:21 266:4 270:21 332:1 333:12 334:9 483:15 <b>approves</b> 231:9 261:2 <b>approving</b> 261:3 <b>approximately</b> 9:8 <b>april</b> 109:10 435:2	<b>apt</b> 20:3 <b>arc</b> 459:17 <b>archdiocese</b> 451:22,23 <b>area</b> 173:13 178:5 178:20 200:17 201:21 203:18 205:5 287:4 307:8 319:20 363:1,19 475:10 <b>areas</b> 104:1 210:11 221:11 311:13 479:4 <b>aristotelian</b> 459:14 <b>arizona</b> 62:14,14 80:1 93:3 <b>arkansas</b> 33:6,10 36:16 37:4 38:5 39:11 51:23 52:11 52:22 54:9 61:17 63:7 72:19 99:7 109:22 117:6 <b>arrived</b> 44:9,9 <b>article</b> 20:18 62:22 67:5 134:20 135:14 186:4 222:12 283:16 298:17 301:1 307:4 323:6,19 324:20 325:7 327:10 328:22 331:12 332:9 345:15 360:6,23 361:14 364:13 368:7 369:16 370:14 371:13,16 372:20 380:16,17 396:11 410:21 468:20 480:9,21 480:22 481:1
--	--	---	---

<b>articles</b> 12:21 21:7 74:12 129:3 222:10 274:1 297:10 298:2 306:21 336:8 377:19,21 382:2 412:23 440:20 480:3,7 <b>aside</b> 92:13 132:16 181:22 <b>asked</b> 73:18,21 79:19 91:7 99:2 122:23 126:14,15 152:1 155:5 180:2 183:21 292:18 318:9 336:9 453:23 477:12 481:6,18 483:7 489:11 <b>asking</b> 97:4 104:8 134:22 144:20 155:1 180:1 198:16 205:8 266:20 269:15 278:8,11 286:17 288:9,16 321:8 346:21 471:10 <b>aspect</b> 275:12 <b>aspects</b> 92:10 <b>asps</b> 5:2,5 101:10 101:15 102:8,10 102:17,23 103:6 103:21 105:10,11 106:1,20 107:12 111:5,8,16 112:7 112:13,20 113:7 113:16,18,19 114:8,14 115:1,5 115:17,23 116:8 169:10,18,22 170:8,13,23	171:19 174:18 176:9,14 177:9 179:4 180:8,15,18 180:21 181:9 222:9 284:5 296:5 297:12 301:19 306:5 <b>asps's</b> 117:4 <b>assert</b> 28:1 <b>assessment</b> 486:5 487:17 <b>assessments</b> 406:1 <b>assigned</b> 341:22 341:22 442:13,22 446:17 <b>assistance</b> 59:3 <b>assisted</b> 279:9 <b>associated</b> 265:10 267:18 438:11 <b>association</b> 40:3 40:17 43:2 45:14 46:23 49:7 182:9 190:6 239:1 380:13 428:17 <b>associations</b> 51:10 <b>assume</b> 155:7 169:21 208:19 362:16 381:16 382:8 433:16 448:9,9 <b>assuming</b> 409:13 <b>asthma</b> 220:15 <b>atrocious</b> 469:3 <b>attached</b> 8:20 12:7 27:10 34:8 38:1 55:10 62:20 108:8 116:3 127:18 171:8 223:19 230:15 233:1 239:17 256:16 263:11 299:16	326:3 339:19 355:19 361:12 375:17 388:21 394:10 396:21 411:5 414:23 419:18 427:2 430:10 434:11 451:6 463:6 493:11 <b>attaches</b> 70:23 <b>attempting</b> 110:7 386:18 <b>attempts</b> 116:20 <b>attended</b> 94:15,15 <b>attending</b> 133:6 <b>attends</b> 218:1 <b>attention</b> 89:11 109:14 <b>attitude</b> 222:13 <b>attorney</b> 91:19 92:6 493:13 <b>attraction</b> 454:10 454:16 455:2 <b>audience</b> 90:5 452:1 456:20 <b>augmentation</b> 142:10 <b>august</b> 25:10 38:5 141:13 <b>author</b> 133:2,5,7 340:14 359:18 361:18 365:10,14 366:3 <b>author's</b> 365:18 389:4 <b>authority</b> 261:3 <b>authors</b> 191:7 328:16 342:5 415:9 <b>autism</b> 487:4	<b>autologous</b> 142:8 142:9 299:7 <b>automatically</b> 395:23 <b>availability</b> 473:3 <b>available</b> 99:4 160:18 177:1 183:1 185:18 196:21 248:20 249:4,14 250:3,14 250:22 251:14 252:6,14 329:9 381:21 415:17 416:4,8 431:4 441:12 493:6 <b>avenue</b> 2:8,14 3:6 <b>average</b> 345:5,18 346:2 353:19 357:10,21 <b>avoid</b> 338:3,4 <b>avoided</b> 165:19 <b>aware</b> 17:14,23 19:12,13,14 20:17 37:8,16 42:1,15,21 43:6 54:7 78:11 127:12 149:9 170:13 171:3 181:9 182:20 193:19 201:3 211:8 233:5,7 267:5,6 352:23 353:3,8 367:20 370:7,17 376:6 425:10 <b>awkward</b> 325:21
<b>b</b>			
<b>b</b> 4:10 20:23 33:2 58:2 <b>back</b> 14:14 18:23 19:3 21:12 26:12 30:12 31:9 43:7			



53:20 72:16 73:1 100:21 101:7 106:18 115:13 119:16 143:10,16 148:15 157:4 158:13,15 166:1 200:21 202:13 207:8 216:5 248:8 252:16,17 264:20 266:19 279:19 292:5,11,15 293:14 319:18 320:9 323:3 326:6 344:23 346:1 359:8 367:6 373:11 380:10 396:12 397:16 404:22 407:7 417:14 420:5 421:6,18 459:14 463:7 471:21 472:6 480:3 <b>backbone</b> 308:10 <b>background</b> 378:6 378:11 380:3 <b>backpedal</b> 417:2 <b>backwards</b> 131:10 <b>bad</b> 92:11 <b>baker</b> 3:20 10:6 <b>balance</b> 466:5 <b>ballpark</b> 297:23 299:9 303:11 <b>ballparking</b> 262:20 298:15 <b>ban</b> 37:11 54:9 57:11 58:16 63:6 76:4,7,22 109:22 109:23,23 117:6,7 117:7 <b>bans</b> 36:16 52:5,23 54:23 61:20,22	76:16 <b>base</b> 120:7 233:23 281:21,22 398:9 399:9 <b>based</b> 71:22 117:21 124:3 140:12,13,13 161:4 177:7 178:1 185:10 220:3 228:19 246:2 249:1,20 250:7 292:12 305:12 331:14 355:14 378:12 405:23 432:16 436:11 438:23 441:8 443:5 444:14 483:2 487:17 <b>baseline</b> 392:5 412:20 <b>basically</b> 21:7 35:8 46:4 124:2 159:1 159:13,17 286:18 311:15 316:21 329:15 349:12 360:12 363:17 <b>basing</b> 119:21 <b>basis</b> 45:21 49:12 69:8 81:19 216:19 216:22 217:12 218:23 220:1,3 229:21 234:18 236:5,14 237:5 238:3,14 246:16 251:22 258:14,23 268:18 269:21 381:4,5 393:6 406:3 467:5 474:9 <b>battle</b> 77:23 <b>bcbs</b> 7:5	<b>bear</b> 388:17 <b>becoming</b> 19:19 20:11 <b>beginning</b> 79:7 91:15 166:20 245:12,13 246:13 247:1 284:14 308:17,23 309:3 320:6 329:21 383:18 386:18 388:11 403:16 445:18 470:16 <b>begins</b> 218:23 220:5 245:19 246:6 270:15 276:3 308:18 309:2 <b>behavior</b> 118:5 <b>behavioral</b> 77:22 <b>believe</b> 34:2 86:7 86:15 96:7 97:9 140:17 148:21 151:19 208:1 291:9 294:5 322:17 413:21 446:17,21 470:2 483:19 <b>believes</b> 111:9 112:13 <b>bell</b> 3:11 <b>belldavispitt.com</b> 3:14 <b>bells</b> 71:15 <b>beneficial</b> 150:12 <b>benefit</b> 70:23 82:22 206:12,20 206:23 222:21 223:4 241:12 248:21 285:20 291:10 310:6 311:10 330:8	331:9 385:11 387:20 413:4 414:2,3 420:18 423:1,6 431:4,18 435:19 437:8 452:9 485:3,5 489:18 <b>benefits</b> 8:3 204:21 207:19 208:14 214:16 215:1,7 223:1,2 235:15 260:4 293:18 386:1 420:12 438:13,15 438:22,23 <b>benign</b> 144:10 220:19 <b>benjamin</b> 380:12 <b>best</b> 97:5 122:14 124:20 125:19 248:20 253:9,14 381:17 382:9 416:4,8 462:22 480:20 492:10 <b>better</b> 71:14 119:12 289:16 290:3 343:5 372:6 381:21 <b>beyond</b> 69:11 125:11 210:3 219:18 246:20,20 247:16,21 313:12 314:11,12 337:13 337:15 352:2 <b>bias</b> 392:3 <b>biblical</b> 457:1 <b>big</b> 185:17 365:23 379:11 <b>bigger</b> 176:22 <b>bill</b> 4:20 62:23 63:12,20 64:2,11
--	---	---	--

<b>billroth</b> 123:11	<b>blocker</b> 201:3	30:9,10 31:7,11,23	119:21 128:17
<b>binary</b> 348:4	<b>blockers</b> 36:21	32:3,9,10,17,19,20	168:8 171:15
349:2 351:14,16	84:23 161:2,6	100:6,7,16,23	231:4 240:6
<b>biography</b> 472:12	163:12 203:21	101:2 102:5 128:7	242:16 256:3
472:14	204:21 205:2	128:12,13 234:13	316:12 322:16
<b>biologic</b> 443:12	207:20 208:15	235:20 476:23	326:11,14 350:6
<b>biological</b> 383:23	211:22 213:6	<b>boards</b> 476:22,22	373:15 382:11
443:20 446:22	374:5,9,12 396:1	<b>bodies</b> 30:16,16	405:12,13 422:14
447:2,17 448:14	483:21 489:14	47:9 66:15,22	428:10 437:8
448:15 450:3,6	<b>blocking</b> 63:13	111:11	440:4 451:13
486:3 487:20	81:23 162:16	<b>body</b> 67:19,23	<b>botulinum</b> 263:4
488:7	164:4 166:8 201:2	68:22 69:4,20	<b>box</b> 300:2 489:21
<b>biologics</b> 5:18	201:19 203:15	70:7,11 73:6,23	490:11
233:15 265:1,6	204:17 207:13	74:14,22 75:1,10	<b>boy</b> 452:22
<b>biology</b> 444:9	211:10 212:14	142:12 154:5,7	<b>boys</b> 165:13 369:8
<b>birmingham</b>	213:18 316:16,20	218:4 319:5,9	<b>brains</b> 404:10
455:9	317:21 318:2,11	363:8,9 466:6	<b>brandt</b> 4:15,16
<b>birth</b> 341:22,22	406:13,23 428:22	467:17 469:5	33:2,16,23 34:19
383:23 442:13,22	<b>blog</b> 408:8,17	<b>boilerplate</b> 384:14	36:10,15 42:17
446:18	409:5	<b>bold</b> 27:17 231:5	43:4 51:21 88:16
<b>bit</b> 93:12 97:2	<b>blogs</b> 408:11	422:8 430:23	99:7
99:15 101:20	409:20	<b>bones</b> 130:9	<b>branström</b> 276:17
442:5 467:21	<b>blood</b> 211:11	<b>book</b> 72:12	276:21
<b>black</b> 350:5 387:5	212:2,18 213:17	<b>booklet</b> 8:3 420:12	<b>break</b> 79:5 115:12
489:21 490:11	460:1,3,8 468:8	<b>bored</b> 452:22	115:16 143:23
<b>blanche</b> 104:21	<b>blue</b> 375:23 376:1	<b>borelli</b> 2:12	166:18 254:17
<b>blanket</b> 236:9	376:6,7 380:23,23	<b>bother</b> 179:7	319:22 320:4
<b>blind</b> 271:16	381:8,8 382:1,1,21	250:17	322:8 346:5 388:9
309:20,22 315:4	382:22 383:7,7,7,7	<b>botox</b> 6:4 139:21	390:6 417:13
315:16 317:17	429:14,15	140:19 141:1	470:14 471:19
319:14	<b>bluecross</b> 375:20	206:15 229:10	472:5
<b>blinded</b> 268:20	379:15,18 424:7	261:20 262:1,5,9	<b>breast</b> 44:15,23
271:12,19,21	425:5	262:21 264:8	142:10,19 147:15
273:18 309:19	<b>blueshield</b> 375:20	266:4,17 267:14	149:3 220:16,20
318:10	379:15,19 424:7	267:16 268:3,18	222:7 290:21
<b>blockade</b> 161:16	425:5	269:19 271:3	291:5,11,14,16,19
162:19 165:9	<b>board</b> 22:20 23:4	483:8,14 489:13	292:9,22 293:18
219:17 238:19	23:10,13,15,20	489:18 490:10,16	294:9,13 299:4,6
247:1,9 260:7	25:4,13,17 26:1,13	<b>bottom</b> 28:16	480:4,11,17,23
416:14 482:17	26:17,19 27:13	41:14 56:19 57:3	481:4,4
	28:10 29:12 30:8	57:17,19 64:7,8	

<b>breasts</b> 287:17,18 290:8 <b>brief</b> 480:2 484:11 <b>briefe</b> 96:21 <b>briefly</b> 489:7 <b>bring</b> 185:15 250:16 <b>bringing</b> 83:11 <b>brings</b> 250:15 <b>britain</b> 53:19 248:3 260:12 <b>broad</b> 131:22 290:10 <b>broadcast</b> 465:14 <b>broaden</b> 235:12 <b>broadened</b> 267:5 268:14 <b>broad</b> 454:20 <b>broadly</b> 88:14,18 152:5 <b>brow</b> 130:16 266:16 <b>brown</b> 216:7 280:5 368:18 377:19 395:6 <b>brown's</b> 18:22 <b>bucks</b> 379:12 <b>built</b> 95:13 <b>bulk</b> 124:14 291:9 <b>bullet</b> 28:22 29:8 116:19 117:1 432:2 435:8 456:3 456:12 <b>bulletin</b> 225:11 227:12 <b>bullets</b> 431:8 459:2 <b>bunch</b> 366:20 377:21 378:16 379:1 435:8	<b>burden</b> 235:13 484:18 <b>business</b> 125:17 385:13,22,23 438:9 439:3,21 <b>butler</b> 9:1 10:8 492:19,20 <b>bylaws</b> 101:6 <b>c</b> <b>c</b> 2:1 9:1 16:16 256:19 277:14 322:18 360:10 414:15,15 445:6 446:13 492:1,1,19 492:20 <b>calamitous</b> 346:23 <b>calendar</b> 14:15 <b>california</b> 103:19 272:16 <b>call</b> 49:14 98:23 182:19 267:2 271:3 284:17 343:12 360:19 363:7 365:6 366:8 366:12 381:18 432:21 433:3 436:10 466:5 <b>called</b> 12:18 79:11 99:1 102:3 120:8 138:11 143:4 186:10 388:1 407:12 455:4 465:15 466:2 478:4 <b>calling</b> 60:21 76:15 363:17 <b>camera</b> 255:23 256:7 <b>campos</b> 7:1 360:7 <b>canal</b> 479:7	<b>cancer</b> 142:14,14 143:1 178:19 289:14 299:5 468:2 475:6 476:16 480:17 <b>cancers</b> 143:5,6 144:14,15 <b>capacity</b> 183:20 184:1 197:9 404:7 404:10 <b>capital</b> 182:14 279:23 373:16 <b>capitalized</b> 456:9 <b>capsules</b> 222:8 <b>care</b> 7:15 40:4 41:7,18 53:8 54:2 63:14 72:23 77:18 109:13,18 113:10 113:20 116:7 122:11,14 124:23 132:8 138:1 139:3 150:17 151:13 152:11,12 154:23 157:4 165:18 182:16,19 183:2,9 184:5 186:10,11 189:11 196:14 199:7 213:2,11 223:6,8 258:4 272:23 351:11 363:19 394:22 395:16 396:15 397:4 398:15 399:3 401:1 424:17 444:5,6 448:2 450:5 459:6 459:10 463:14 464:4 473:8,9 475:7,10 478:11 482:21 488:13	<b>cared</b> 347:12 444:2 <b>career</b> 28:18 95:22 129:2 137:16 <b>careful</b> 359:7 406:3 468:7 <b>carefully</b> 202:13 251:11 363:18 462:17 <b>caregivers</b> 403:4 <b>caretakers</b> 402:2 402:23 403:10 404:17 <b>carey</b> 3:6 <b>carmichael</b> 7:17 35:18 410:22 <b>carolina</b> 1:2 3:13 10:1,20,23 11:1 375:20 376:8 379:16,19 420:14 424:8 425:6 474:12 <b>carries</b> 490:6 <b>carrying</b> 109:15 <b>carte</b> 104:21 <b>case</b> 11:20 12:11 16:6,17 17:2,15 18:1 22:10 33:1,5 33:8,14,16,23 34:17,19 35:9,22 36:10,12,15 37:4,9 37:11 39:12,16,22 42:17 43:4 45:22 46:16,20 48:17 51:21 53:18 57:22 58:6,12 72:19 77:19 88:16,16 98:19 99:7 114:7 118:12 122:12,17 170:19,22 180:7 189:5 196:23
---	---	--	--



204:11 206:21 209:1,10 217:1,1,5 217:5 219:16 220:1,4 221:16 238:16,18 243:22 246:7,9 249:16 252:18 259:16 260:17 270:10 278:21,23 279:3,6 279:17 280:19 281:9 282:20 283:11,20 284:7 284:12 285:22 286:19,19,21,22 287:11 290:9,9 293:18 304:18 306:13 308:2,9,13 308:19,20,21 309:9 310:11,20 311:15 312:2,18 314:6,9 322:16 323:11,12 328:9 329:16 335:14,18 336:13 339:8 343:6,11 355:5 364:2,4 387:18 406:3,3 410:6 417:19,21 448:18 449:17 455:5 456:19 460:8,9 469:11,13 478:3 483:2,20 488:16 490:19 492:18 <b>cases</b> 40:12 92:23 124:8 143:12 145:20 209:7 211:15 236:11 271:13 281:7 283:13 310:5 354:19 369:8 457:18,22 458:6	476:23 <b>catchment</b> 475:9 <b>categorically</b> 292:7 294:6 406:12,17 <b>categories</b> 144:6 290:10 431:9 <b>categorized</b> 219:2 <b>category</b> 66:22 106:3 122:9 146:3 267:4 270:23 279:6 312:10,16 316:6 327:16 329:18 372:13 385:5 <b>catholic</b> 64:19 65:2 451:22 452:4 452:16 464:20 <b>causality</b> 413:15 <b>cause</b> 9:11 154:18 210:10 369:21 373:7 <b>caused</b> 81:23 121:21 150:10 276:21 344:22 <b>causes</b> 480:17 <b>caution</b> 245:1,2 311:8 <b>caveat</b> 391:23 <b>cb</b> 445:20 <b>ccr</b> 492:20,21 <b>cecilia</b> 186:5 329:22 389:7 <b>center</b> 96:5 298:20 298:23 299:3 328:9 343:3 475:8 <b>central</b> 9:9 <b>certain</b> 62:14 86:2 146:23 206:8 209:7 228:7 258:3 261:5 310:14	376:22 386:22 407:2 477:13 483:8 <b>certainly</b> 26:15 27:3 31:5 40:14 102:14,19 105:19 137:3 152:11 153:2 176:23 247:13 283:6 284:18 286:9 289:14 310:11 313:3 314:3 329:20 342:23 343:5,19 355:9 385:22 474:23 475:23 <b>certificate</b> 23:10 23:16,20,23 25:4 32:20 <b>certification</b> 23:4 24:7 26:5,20 27:18 28:1,4,12,19 29:1,10,11,12 30:14 31:8,12,16 100:8,17 <b>certifications</b> 23:2 <b>certified</b> 22:21 25:13,17 26:1,19 28:3,10 30:8,10 31:23 32:3,19 100:6 101:2 102:5 128:8 <b>certify</b> 9:4 492:4 492:14 <b>cessation</b> 365:17 <b>chairman</b> 95:9,11 473:21 <b>challenge</b> 36:16 83:12 455:23 456:1 467:20	<b>change</b> 8:14 60:3 186:2 194:1,21 260:3 271:15,22 309:18 372:11 382:3 412:19 464:15 481:13 482:3,7 494:4,7,10 494:13,16,19 <b>changed</b> 107:15 110:21 122:22 123:2,18 186:6 247:7,8,10 380:21 380:22 443:20 446:18,23 447:3 481:17 488:14 <b>changes</b> 81:22 290:3 311:5 413:13 484:17 493:10 495:6 <b>changing</b> 67:23 71:12 119:22 125:1,20 259:20 359:4 464:21 <b>chaplain</b> 455:17 <b>chapter</b> 455:8,15 455:17 <b>character</b> 372:1 <b>characteristic</b> 339:4 416:21 <b>characteristics</b> 165:15 243:18 350:14 <b>characterizations</b> 380:11 <b>characterize</b> 81:10 82:17 118:22 132:5 385:18,20 <b>characterized</b> 68:2 74:6 235:15 336:4
---	--	--	--

<b>characterizes</b> 124:1 <b>chart</b> 343:1 344:1 <b>charts</b> 418:1 <b>chastity</b> 454:16,21 455:3 <b>check</b> 212:19 246:3 <b>cherry</b> 3:12 <b>chest</b> 167:19 178:4 <b>cheyenne</b> 3:7 <b>chief</b> 121:19 262:12 306:10,12 <b>child</b> 8:17 82:6 161:5 165:5 166:6 209:10 238:20 309:19 317:6,15 405:15 464:16 469:18,22,23 <b>child's</b> 470:1 <b>childhood</b> 394:23 397:10,18 398:12 398:17 <b>children</b> 5:23 76:10 77:19 94:7 157:19 158:9,18 159:4,9,12 160:19 160:23 162:13 163:6,8,11,17,19 205:19 238:15 239:5 240:3,11,17 241:5 243:5 258:22 259:7,10 262:15 318:12 395:10,22 397:20 397:23 398:17 399:21 400:2,5,18 400:20 401:3 404:4,6 406:20 461:15 462:3,9 463:15,16 468:23	469:7 <b>childrens</b> 241:5 <b>chimed</b> 46:4 <b>choose</b> 432:20 438:8 462:17 <b>choosing</b> 303:18 436:10 <b>chosen</b> 449:23 <b>christian</b> 442:6,11 442:23 443:3,10 443:11 450:22 <b>chromosomal</b> 487:17 <b>chronological</b> 15:15 <b>church</b> 452:5 <b>church's</b> 456:13 <b>cigna</b> 8:6 429:16 429:19 430:12 <b>cigna's</b> 431:18 432:7 <b>circle</b> 20:15 216:5 <b>circles</b> 283:6 <b>circumstance</b> 237:11 <b>circumstances</b> 210:8 216:20 228:8 251:7 285:18 407:2 424:3 478:1 <b>citation</b> 297:13 <b>cite</b> 13:9 108:18 109:5 238:6 322:16 377:18 389:22 399:8 407:11 410:21 414:9 415:4 453:12 <b>cited</b> 13:15 325:7 343:7 360:6 378:2 382:2 389:17	440:9,19 <b>cites</b> 227:11 327:6 335:14 <b>citing</b> 361:15 410:10 453:14 <b>civil</b> 1:7 9:5 10:1 <b>civilian</b> 476:7 477:7 <b>claim</b> 29:11 45:16 276:6 352:16 392:23 <b>clarifications</b> 364:16 <b>clarify</b> 482:9 <b>clarity</b> 300:22 <b>classification</b> 384:6 <b>classified</b> 348:9 349:4 384:7 <b>classifies</b> 232:13 <b>classify</b> 385:7 <b>clearance</b> 206:18 <b>cleared</b> 205:12 235:23 <b>clearer</b> 73:20 <b>clearly</b> 82:20 150:13 152:22 244:14 288:1 312:13 362:2 <b>clin</b> 400:16 <b>clinic</b> 138:1,4,17 139:3,20 140:6,13 152:12 342:1,7,14 345:3 <b>clinical</b> 73:9 120:10 229:6 235:22 236:15,17 236:19,21 237:3 237:22 243:4,11 245:10,20 246:11 246:17 247:20	249:3,13,18 250:3 250:21 251:13,23 252:6,9,10,13 269:4 291:8 292:19,23 364:8 364:10 398:16,21 400:4,16 412:1 422:23 440:4 441:6 <b>clinician</b> 245:23 <b>clinics</b> 138:6 400:1 <b>closed</b> 185:9 187:5 195:13 <b>closer</b> 289:8 <b>clue</b> 324:3,4 <b>cme</b> 69:22 <b>cochrane</b> 7:23 35:17 414:10 415:2,19 416:11 <b>code</b> 5:8 169:11,14 169:22 170:8,13 170:23 171:12 173:12 174:19 176:9 179:4,8 180:8,15,18,21 181:7,9,16 195:5,8 224:8 <b>cognitive</b> 77:21 <b>cohen</b> 380:17 <b>cohort</b> 6:18 7:10 7:20 249:23 250:1 250:8 257:11 270:8 277:23 278:2,5,8,10,19 279:14 281:17 289:11 291:12 292:13,18 298:10 298:13,23 299:4 304:1 305:8 312:1 323:9 340:9 345:19 411:9
--	--	---	---

412:4 415:13 <b>cohorts</b> 298:20 <b>coincidental</b> 19:16 <b>collaborating</b> 480:14 <b>colleagues</b> 287:3 <b>collected</b> 124:8 <b>collection</b> 328:10 329:16 355:6 407:22 408:1 <b>collections</b> 246:8,9 <b>colloquially</b> 168:8 316:12 <b>column</b> 224:16 225:4 242:15 248:16 252:21 307:15 326:17 350:23 391:20 <b>columns</b> 302:13 <b>combat</b> 473:16 474:16 <b>combination</b> 452:15 <b>come</b> 45:10 72:10 73:13,15 79:19 98:18 99:6 105:21 107:1 145:12 146:1 149:2 154:15 160:17 181:15 185:23 199:9 201:8 207:8 248:8 350:5 396:12 471:21 <b>comes</b> 270:18 275:11 297:13 340:7 <b>coming</b> 47:21 90:3 148:4 326:5 330:20 346:1 361:6 380:4	<b>commencing</b> 9:8 <b>commended</b> 303:20 305:23 <b>comment</b> 479:13 <b>comments</b> 187:17 191:18 199:11 224:22 <b>commercial</b> 434:19 <b>commission</b> 492:23 <b>commissioner</b> 492:22 <b>committee</b> 4:19 45:19 47:4 49:2 55:16 63:11,19,21 65:7,15 185:9,18 189:1 194:8,15,23 382:7 <b>committees</b> 45:8 46:11 <b>committing</b> 67:15 121:6 126:11,12 127:5 <b>common</b> 19:19 20:14 142:3,6,19 145:15 146:17,19 148:7 255:4,15 259:1,6,8,11 303:6 <b>commonly</b> 20:11 21:19,22 22:2 60:23 147:23 201:13 295:9,22 463:19 <b>communicated</b> 16:6 56:2 208:6 <b>communicating</b> 59:9 <b>communication</b> 56:11 77:1	<b>communities</b> 373:23 488:20 <b>community</b> 43:18 45:7 225:11 226:14 293:5 328:6 402:18,19 473:8 <b>comorbidities</b> 487:1 <b>comorbidity</b> 463:20 <b>companies</b> 291:23 292:14 385:4,21 437:1 <b>companion</b> 63:20 <b>company</b> 67:10 206:17 270:20 376:21 377:6 380:4 385:10 386:15 387:9,19 424:15 431:21 432:12 436:10 438:21 <b>comparable</b> 94:18 <b>comparative</b> 304:1 <b>comparator</b> 282:22 <b>compare</b> 250:8 354:9,19,21 <b>compared</b> 89:13 353:21 372:10 391:1,9 <b>comparing</b> 299:7 355:14 <b>competence</b> 487:10 <b>competent</b> 120:8 485:11 <b>competently</b> 485:12	<b>complaint</b> 12:19 292:4 <b>complete</b> 11:16 495:8 <b>completed</b> 265:19 493:17 <b>completely</b> 118:19 <b>completing</b> 398:10 <b>complex</b> 121:23 143:11 <b>complexity</b> 476:20 477:2 <b>compliance</b> 29:22 30:3 170:23 <b>complicate</b> 486:19 <b>complication</b> 244:18 329:5 334:16 336:17 <b>complications</b> 176:18 177:1,4 178:9,15 226:9 237:9,16 244:20 327:1 337:1,3 338:9,17 339:3,4,6 355:2 358:16 <b>complies</b> 180:14 <b>comply</b> 169:14 <b>components</b> 404:14 <b>comports</b> 31:2 <b>comprehensive</b> 342:18 <b>compromise</b> 467:18 468:6 <b>compromised</b> 119:8 <b>computer</b> 492:8 <b>conceal</b> 319:7 <b>concept</b> 460:16,17 <b>concern</b> 44:16 70:21 118:22
---	--	--	--

218:17 244:2,22 245:6 <b>concerned</b> 180:17 181:23 206:1 247:18,18 449:11 <b>concerning</b> 376:21 <b>concerns</b> 119:4 180:5 <b>conclude</b> 180:6 <b>concluded</b> 258:10 <b>concludes</b> 343:4 491:11 <b>concluding</b> 36:3 <b>conclusion</b> 38:11 357:14 393:11,17 <b>conclusions</b> 277:12 330:11,15 331:8 337:6 371:19 410:19 415:9 <b>condition</b> 72:22 114:2 122:5 150:16 151:9 157:7 194:12 205:14 211:1 217:19 218:8,14 220:20 231:19 249:15 291:22 292:10 422:21 <b>conditions</b> 66:4 74:18 75:9,15 144:16,18 145:13 154:2 155:13,15 157:10 210:9 215:14,14 252:4 318:15 436:18 487:22 488:11 <b>conduct</b> 211:7 320:15 <b>conducted</b> 185:4 187:2,12 198:7	275:5 485:12 <b>conducts</b> 119:14 <b>confect</b> 443:4 <b>conference</b> 8:12 69:23 79:17 81:15 92:15 103:22 104:4,16 222:12 450:19 <b>conferences</b> 69:9 103:15 106:22 107:7 188:5,11,14 192:6,7 200:1,2,8 <b>confidence</b> 345:22 <b>confident</b> 59:2 <b>confirm</b> 156:9 157:2 219:13 486:9 <b>confirmation</b> 116:21 <b>confirmed</b> 229:5 <b>conflating</b> 266:11 <b>conflicts</b> 199:5 <b>conformity</b> 400:13 <b>confused</b> 76:9 458:12 <b>confusing</b> 450:7 458:9,14 <b>confusion</b> 457:18 457:21 458:17 <b>congenital</b> 310:14 474:17 475:2 <b>connection</b> 61:22 <b>connor</b> 446:7 <b>consen</b> 49:13 <b>consensus</b> 41:3,22 41:23 42:13,14 44:8,11,20 45:5 46:7,12,12,17 47:12,14,21 48:5 48:16 49:3,14,14 50:10 112:17	<b>consent</b> 68:19 119:1,2,7 208:22 209:1,3 211:7 253:7 401:22 402:1,13,17,22 403:9,17 404:11 404:15,17 484:23 487:9,10 <b>consented</b> 402:3 403:4 <b>consenting</b> 314:10 359:7 <b>conservation</b> 481:2 <b>conservative</b> 284:16 285:6 <b>consider</b> 13:19 60:16 92:22 102:10 150:15 151:22 152:10 161:20 181:20 182:5 203:17 247:14 266:14,22 289:23 329:3 362:15 423:7 459:3 469:15 484:6 <b>considerable</b> 109:14 169:4,19 213:10 371:17 <b>consideration</b> 38:9 406:4 424:20 <b>considerations</b> 437:9 489:17 <b>considered</b> 232:17 253:6 254:2,5 267:11 281:8 283:4,6 285:14 286:5 288:11 289:6 316:1,2 381:9 382:1	384:23 387:3,14 408:12 424:10 436:19 441:22 442:2 <b>considering</b> 61:19 63:6 106:7 161:1 166:7,8 314:4 <b>considers</b> 113:19 425:17 426:14 427:18 428:13 429:7 433:18 435:22 437:21 <b>consist</b> 297:17 298:13 305:7 390:14 <b>consisted</b> 304:13 390:18 <b>consistent</b> 114:3 128:11 222:2 303:15 335:3 486:23 <b>consonant</b> 112:16 346:11 462:21 <b>consort</b> 277:13,20 <b>construct</b> 338:23 467:23 478:14,15 <b>constructed</b> 323:2 <b>consultant</b> 378:17 <b>consultation</b> 162:5 166:9 208:2 <b>consultations</b> 140:1 158:22 159:23 160:9 163:4 <b>consulted</b> 144:6 158:17 163:20 164:19 187:9 <b>consummately</b> 287:20 <b>contact</b> 297:11 455:15,16
---	--	---	--

<b>contacted</b> 58:23 98:20,22 99:13	390:10,13,18 412:8	<b>corporate</b> 7:5 376:12	198:8,10 200:4,6 200:15,18,22,23
<b>contagion</b> 367:17 368:1 369:18 370:10,20 371:6 373:3	<b>controlled</b> 268:20 269:4 270:2,19 271:2 272:19 273:7 274:21 275:16 286:4 291:7 292:23 293:10,20 298:3 305:8 412:1 415:13	<b>corporation</b> 263:21	204:4,5,7 207:14 208:7 213:20 214:12,13,18,19 215:2 216:15,16 216:22 221:4,8 226:17 239:10,12 241:17 242:3 246:17 252:1 262:3 264:15 267:19 269:6 270:4,5,5,9 272:10 272:11 273:9 274:2,3,5,6 278:2 278:5 288:23 293:7 294:19 295:11 296:5,6,9 303:4,5 307:22 316:6,14 317:1 319:3,15 340:5 357:22 362:9 365:2 370:11,21 375:22 379:17 384:20 390:16,17 392:20 393:13 398:18 406:14 407:14 412:9 417:22 418:4,13 418:22 419:2,3,8,9 419:12,13 421:1 430:3 442:14 446:1 448:18 455:11 456:8 465:4 475:14,15 475:18,19 477:14 477:17,18 479:23 480:5 481:22 483:10,16,17,23 487:23 492:11 495:8
<b>contained</b> 215:11 442:23	<b>controls</b> 279:8 304:4 392:3	<b>corpsmen</b> 474:7	
<b>containing</b> 257:12	<b>controversial</b> 324:6 363:19 369:12 373:9 398:6	<b>correct</b> 11:21 12:11 23:5,6,8,9 23:11,12,17,18 24:22 25:14,15,18 25:19,22 28:12 29:23 30:4 31:13 31:21,23 32:1,4 33:3,7 34:1 36:19 36:23 48:3 52:2 63:7 65:4 75:12 75:23 76:1,4 109:6 112:22 114:12 128:14 129:9,10,16,17 130:4 132:19 133:17 136:23 137:1,6,8,12,15,19 137:20 138:2 149:5 150:6,23 152:7 153:7,8,12 153:16,19,22 158:8,12 163:1,3 167:5,6,11,12 168:9,10,14,19 174:22 175:6,8,11 175:15,18,22 176:17 178:22 183:2,3,13 184:1,5 184:6,19 187:3 188:8,11,18 189:18,21 190:1 190:10,19 191:5,8 191:9,14,16,20,22 192:2,4 193:10,13 197:4,7,10,11,14 197:15,19 198:3,4	
<b>contains</b> 12:9 13:17	<b>controversy</b> 44:14 125:3,6 222:6 363:21 410:3 412:16 413:23		
<b>contemplate</b> 403:7	<b>conversation</b> 14:6 15:3,22 48:20 56:13 87:12 92:1 165:19,20 330:23 461:2 488:5		
<b>content</b> 492:7	<b>conversations</b> 12:14,22 14:10 87:15 104:16 120:3 287:2		
<b>contest</b> 77:17	<b>conversely</b> 424:1		
<b>context</b> 258:18 477:13,20 479:21	<b>convey</b> 88:11 163:10		
<b>continue</b> 113:7 439:22 485:10	<b>convincing</b> 252:16		
<b>continued</b> 98:6 237:18 247:19,20 261:9	<b>coordination</b> 317:12		
<b>continuing</b> 100:7	<b>copies</b> 15:6 493:14		
<b>contouring</b> 142:12	<b>copy</b> 88:7 127:22		
<b>contradictory</b> 114:1	<b>core</b> 116:13		
<b>contraindicated</b> 241:21 242:10	<b>corner</b> 171:15 263:13 451:13		
<b>contraindications</b> 406:7			
<b>contrary</b> 39:11,14 39:20 40:10 42:9 118:11,19 395:5			
<b>contrast</b> 475:21			
<b>contributed</b> 56:21 191:7			
<b>control</b> 52:8,10 270:11 271:8 278:21,23 279:3,6 279:17 280:8 302:17 307:20 309:6 316:6 390:2			

<b>corrected</b> 392:4	455:8	<b>cranial</b> 133:13	214:16 219:17
<b>correcting</b> 346:22	<b>course</b> 16:4,5,17	<b>craniofacial</b>	238:19 247:2,10
<b>correction</b> 372:18	18:20 71:15 73:2	309:12,16 310:19	260:7 318:6,20
<b>corrections</b> 495:6	75:1 92:1 99:18	475:2 477:4	319:14 370:1
<b>correctly</b> 288:18	146:23 165:2	<b>create</b> 60:6	375:23 376:6
<b>corresponded</b>	295:1	<b>created</b> 226:12	380:23 381:8
77:5	<b>court</b> 1:1 9:1,23	456:4,13 457:17	382:1,21 383:7,7
<b>correspondence</b>	10:8,12 16:11	<b>credentialing</b>	404:2 416:13
56:6	33:6 38:9 39:10	30:16	417:5 429:15
<b>corrugator</b> 263:3	43:4 53:20 182:13	<b>credentials</b> 172:12	437:14,22 457:15
266:12,17,18,23	260:11 325:13,16	<b>credible</b> 123:3	482:17
267:9	325:20 350:3,9	280:16	<b>crow</b> 268:5,7,8
<b>cosmetic</b> 6:4 45:1	389:13 414:15	<b>credits</b> 69:23	<b>crow's</b> 141:4
71:3 262:16 263:4	426:1,6 449:15	<b>crestwood</b> 24:17	262:5 268:10,11
267:15 296:20	471:9	<b>cretella</b> 94:23	<b>crr</b> 492:20
331:2 386:16	<b>courts</b> 54:1	<b>crime</b> 244:9	<b>crucial</b> 466:20
423:3,22 425:3	<b>cover</b> 215:6	<b>criminal</b> 109:17	<b>cs</b> 493:15
467:7 476:2	379:21 385:10	<b>criminalize</b> 4:21	<b>ct</b> 446:11
477:10	386:15,15,17	63:1 110:7 116:20	<b>culpable</b> 127:11
<b>counsel</b> 9:20 10:10	387:20 420:22,23	<b>criminally</b> 52:11	<b>cultural</b> 447:7,8
12:15,23 99:13	423:22 426:9	<b>criteria</b> 70:6,13	<b>cure</b> 422:21
492:15 493:14	432:14,16,20,23	71:4,8 72:9 73:22	<b>curing</b> 291:17
<b>counseling</b> 157:15	433:1,4 437:3,4	275:18 277:14,20	<b>current</b> 28:11
157:18,18,23	439:6 487:13	292:12 300:19	32:20 50:8 51:1
158:5 159:17	<b>coverage</b> 8:6	333:9 351:8	79:21 99:19
<b>counselors</b> 464:5	376:21 385:6	356:23 377:4	196:13,17 296:19
<b>count</b> 42:5 351:2,3	386:4 424:16,18	385:1 386:22	392:7 398:8 399:9
<b>counted</b> 348:17	430:13,21 437:13	387:10,11 401:9	439:20 482:11
<b>counterfeit</b> 60:6	473:6	401:15 427:20	<b>currently</b> 24:10
61:6,9 338:23	<b>covered</b> 377:2,3	428:18 429:2	25:13 31:22 32:23
<b>country</b> 104:1	385:23 421:10,22	435:9,15	43:15 61:18
324:22 433:14	422:18 423:15,18	<b>critical</b> 213:2,11	137:23 139:21
<b>county</b> 492:3	424:2 432:19	272:23	189:11 321:6
<b>couple</b> 14:13 15:1	435:18 436:19	<b>criticism</b> 352:3	367:12 371:7
15:16 63:8 93:23	438:12,14,22,22	<b>criticisms</b> 371:13	415:16 416:3
146:2 196:5,12	452:11	<b>criticize</b> 216:7	485:11
301:23 394:3	<b>covering</b> 385:14	<b>criticizing</b> 49:19	<b>cursor</b> 350:4
398:5 472:11	<b>covers</b> 435:21	183:10 359:11	<b>cv</b> 1:7 10:2 30:5,7
476:8	437:12	<b>cross</b> 36:22 82:1	127:20,21,22
<b>courage</b> 451:14	<b>coveted</b> 121:18	94:1 161:10 164:9	135:23 136:15
452:4 454:7,14,21		213:7,22 214:11	472:11 480:4



<b>d</b>	<b>dawning</b> 433:22	217:1,5 248:19	<b>defense</b> 2:13,19
<b>d</b> 4:1 20:23 33:2	<b>day</b> 9:9 104:5	285:22 286:19	<b>definable</b> 71:18
203:4 322:18,18	153:23,23 189:17	330:19 356:3	<b>define</b> 240:9
389:13	189:17 353:17	357:5 380:8 403:2	386:18 424:15
<b>dale</b> 1:14 10:21	495:15	404:11 444:12	438:8
<b>damage</b> 119:22	<b>days</b> 18:22 493:17	484:20 485:1	<b>defined</b> 173:12
<b>danger</b> 132:7	<b>de</b> 2:14 194:11,22	487:8 488:6	257:3 287:9
<b>dash</b> 360:9 446:12	195:7 242:5,9	<b>decisional</b> 357:15	390:11 423:11,14
<b>data</b> 86:12,13,13	359:19 360:20	357:22	431:21 438:11,20
161:23 212:8	<b>deacon</b> 64:19 65:2	<b>decisions</b> 208:16	<b>defines</b> 173:22
219:13 243:5,12	464:20	328:21	459:5,9 460:13
257:13 272:23	<b>deal</b> 475:4	<b>deck</b> 88:4,7	<b>definitely</b> 71:23
273:2 275:2 276:4	<b>dealing</b> 76:14	<b>declaration</b> 4:15	87:10 143:10
276:13,20 277:2	218:14 244:17	22:17 33:23 34:12	248:8 330:2,2
277:11 279:10	313:23	35:2,12 36:2	333:17 438:10
280:1,6,15 281:4	<b>dear</b> 264:22	457:10	<b>definition</b> 45:17
312:21 329:9	<b>death</b> 311:3	<b>declare</b> 283:15	174:3,7,16 218:19
344:6 352:19	490:18	495:4	288:17 422:11,15
361:22 371:18,20	<b>debate</b> 389:6	<b>declared</b> 53:22	423:16,21 428:5
381:5,21 406:18	<b>decade</b> 219:21	<b>declares</b> 436:6	436:12,13 438:7
406:22 407:22	225:10	<b>declined</b> 100:7	439:2 468:12
408:1 416:22	<b>decades</b> 229:18,18	226:20 305:3	<b>definitions</b> 423:12
417:3	312:5	<b>declining</b> 226:5	424:14,16 437:2
<b>database</b> 7:23	<b>decatur</b> 2:15 9:7	473:8	443:3
257:12	10:5 64:10 138:14	<b>dee</b> 10:23	<b>definitive</b> 157:4
<b>date</b> 9:4 93:7	138:22 139:11	<b>deemed</b> 253:8	219:8 249:5
108:21,22 185:21	140:11 160:14	422:6 495:6	251:15,15 283:23
186:8 190:3 196:7	<b>december</b> 257:14	<b>deems</b> 253:12	344:4 362:23
265:22 268:13	265:2	<b>deeper</b> 358:2	363:3,22
430:17 435:1	<b>deceptive</b> 172:13	<b>deeply</b> 358:21	<b>deformities</b>
492:12 494:24	172:19	<b>defect</b> 71:6 290:14	310:15 474:18
495:12	<b>decide</b> 23:19 100:2	<b>defective</b> 120:7	<b>deformity</b> 71:18
<b>dated</b> 38:5 55:16	221:6 284:12	<b>defects</b> 468:3	475:2
108:14 109:4,9	379:20	482:6	<b>degeneration</b>
224:13 265:2	<b>decided</b> 37:12	<b>defendant</b> 22:10	44:18
<b>dates</b> 459:14	49:2,13 146:22	<b>defendants</b> 1:15	<b>delayed</b> 133:11
<b>dating</b> 72:16	166:9 387:19	3:1 10:19 11:20	317:9
<b>daughter</b> 409:7	<b>deciding</b> 439:5	33:9,13,15	<b>deleterious</b> 487:20
<b>daunted</b> 458:17	<b>decision</b> 6:21 47:5	<b>defending</b> 11:2	<b>demand</b> 199:3
<b>davis</b> 3:11 273:12	53:23 121:11	79:11	312:17
	131:20 177:9		

<b>demanded</b> 313:21 <b>demands</b> 314:13 <b>demographic</b> 368:10,11 369:5 372:11 <b>demonstrate</b> 268:21 269:4 270:2 310:20 <b>demonstrated</b> 245:3 <b>demonstrates</b> 486:23 <b>demonstrating</b> 130:8 <b>denominator</b> 323:20 352:11 <b>denver</b> 8:12 450:19 451:22,23 <b>deny</b> 64:22 466:11 <b>department</b> 95:12 473:21 474:4 <b>depend</b> 286:8 <b>depending</b> 258:16 282:6,6,9 301:16 <b>depends</b> 321:7 <b>deponent</b> 493:13 495:3 <b>deposed</b> 14:19 17:16 18:2 <b>deposing</b> 493:13 <b>deposition</b> 1:19 9:19 10:3 11:3 12:16 13:13 14:23 15:8,11 17:19 18:5,6,12 19:2 181:8 470:22 491:14 <b>depressed</b> 154:15 <b>depression</b> 154:10 154:17,19 155:6 487:3	<b>derive</b> 176:13 177:8 <b>dermatologist</b> 143:3 <b>describe</b> 72:22 94:5 158:22 257:2 277:19 282:22 331:2 383:20 442:20 472:19 474:1 475:20,21 477:23 <b>described</b> 73:16 130:17 305:15 422:23 483:12 <b>description</b> 73:20 383:15 <b>descriptions</b> 29:13 <b>deserve</b> 444:4,4 <b>deserves</b> 150:17 <b>design</b> 274:8 276:2 276:4,19 277:18 309:7 319:13 391:23 413:10 <b>designed</b> 274:4 275:18 278:2,14 278:23 <b>designing</b> 275:11 480:19 <b>desire</b> 194:10,20 237:18 329:6 333:3 <b>desistance</b> 161:5 161:23 <b>desisting</b> 161:9 <b>despite</b> 309:9 406:21 <b>destroy</b> 119:23 467:6,19 <b>destroyed</b> 478:7,7 <b>destroying</b> 468:12	<b>destruction</b> 178:20 <b>detail</b> 65:18 84:1 470:5 <b>detailing</b> 432:22 <b>details</b> 37:18 82:11 90:9 160:16 163:17 210:18,21 409:11 <b>determine</b> 241:17 300:5 <b>determined</b> 423:12 <b>determining</b> 293:10 423:6 <b>detran</b> 366:5 <b>detrans</b> 364:19 <b>detransition</b> 7:2 367:1 <b>detransitioned</b> 322:11 <b>detransitioner</b> 86:18 87:3,4 151:4 <b>detransitioners</b> 320:21 324:9 364:22 <b>detransitioning</b> 147:16,19 149:2 151:7 365:13 366:2 <b>develop</b> 165:14 <b>developed</b> 165:15 188:16 189:12 190:5 193:15 200:13,21 382:18 <b>developing</b> 187:13 187:18 190:17 191:14,19 198:7 199:12 444:17	<b>development</b> 133:11 184:4 188:6 190:12 191:8 192:8,22 197:13,17 200:3 379:14 403:22 436:9,16,21 <b>developmental</b> 82:6 <b>developmentally</b> 317:8 <b>device</b> 234:11 <b>devices</b> 5:19 130:11 233:15 310:13 <b>devoted</b> 104:6 <b>dhejne</b> 7:7 186:5,5 329:22 389:6,7,7 389:10 390:23 <b>diag</b> 72:8 <b>diagnose</b> 69:3,20 73:22 153:6 154:1 155:6,14 157:10 195:4 <b>diagnosed</b> 156:2,8 205:14 330:17 405:15 <b>diagnoses</b> 155:20 194:14 <b>diagnosing</b> 66:3 73:5 74:14,17 75:9 155:12 <b>diagnosis</b> 22:3 68:2 155:23 156:9 156:11 157:2 194:21,22 313:14 329:4 366:15,17 373:10 383:19 385:8 386:19 422:20 432:17,18 486:10,11
--	--	---	---



<b>diagnostic</b> 70:6,12 71:8 72:8 194:16 195:5,8,8 282:8 301:20 377:3 406:4 <b>dialogues</b> 106:22 <b>differ</b> 392:2 487:15 <b>differed</b> 258:4 <b>difference</b> 94:8 135:14 322:9 365:23 387:13 476:3 477:6 <b>differences</b> 392:5 475:22 <b>different</b> 42:6 43:21 88:13 114:8 144:5 155:2 184:17 188:1,5 190:16,21 191:7 191:13 192:1,6 199:17 203:14 249:8 269:15 317:15 319:20 343:8 366:23 394:22 395:12 397:21 399:21 400:2 431:8,8 489:13 <b>difficult</b> 67:2 124:16 271:16 352:15 354:18 <b>difficulty</b> 44:7 47:23 91:2 92:2 102:18 104:10 105:4 112:6 484:22 <b>dig</b> 358:20 <b>dimitry</b> 491:5 <b>diocese</b> 64:20	<b>diplomates</b> 27:23 28:2,23 29:9 <b>direction</b> 165:9 <b>directly</b> 16:8,18 133:18 <b>director</b> 263:23 378:20 379:3,6 <b>disabuse</b> 456:20 <b>disagree</b> 234:21 308:13 <b>disagrees</b> 40:17 42:23 <b>disappeared</b> 96:10 <b>discerned</b> 488:21 <b>disciplinary</b> 172:14 <b>disclose</b> 280:5 <b>disclosed</b> 210:5 381:13,15 <b>disclosing</b> 14:5 216:8 <b>discomfort</b> 194:18 <b>discontent</b> 383:22 <b>discordance</b> 158:19 368:14 457:6 <b>discounted</b> 101:23 <b>discourage</b> 26:22 162:18,22 <b>discover</b> 463:22 <b>discovered</b> 67:12 229:2 <b>discovery</b> 308:19 <b>discrimination</b> 276:6 <b>discuss</b> 92:7 188:6 192:8 240:10 280:6 320:14 339:2 461:22 488:1	<b>discussed</b> 154:5 175:3 180:19 192:13 200:3,4 222:9 328:3 399:4 <b>discussing</b> 119:1 153:11 412:12 445:9,20 462:2,8 469:15 <b>discussion</b> 72:18 87:14 90:8,13,20 91:1 93:14 327:12 407:10 456:18,19 466:18 488:4 <b>disease</b> 156:3 231:19 422:22 <b>disorder</b> 67:19 68:1,23 69:4,21 70:7,12 73:6,23 74:15,22 75:11 154:6,8 193:20 242:20,22 <b>disorders</b> 192:18 192:21 436:8,15 436:21 <b>disparity</b> 89:18 <b>displaced</b> 131:6 <b>dispute</b> 358:22 <b>disregards</b> 466:4 <b>dissatisfaction</b> 337:12,17 338:4 <b>dissatisfied</b> 67:1 <b>distant</b> 490:13 <b>distinct</b> 281:15 477:6 <b>distinction</b> 275:8 432:12 485:2 <b>disting</b> 484:2 <b>distinguish</b> 398:22 438:21 484:3 488:6	<b>distinguishing</b> 437:3 <b>distort</b> 486:19 <b>distressed</b> 162:7 <b>district</b> 1:1,2 9:22 9:23 <b>disturbance</b> 70:15 <b>disturbances</b> 67:22 68:20 <b>disturbed</b> 120:3 <b>divergent</b> 398:7 <b>divided</b> 348:3 <b>djordjevic</b> 6:15 322:17 <b>dmitriy</b> 2:6 10:14 114:18 126:14 471:12,22 489:5 <b>doctor</b> 11:10 27:8 34:6 49:18 55:8 61:1,11 69:16 79:9 108:6 115:16 117:13 126:19 127:16 153:5 166:22 209:20 210:2 213:2 216:14 217:6 234:17 238:1 246:15 254:22 261:14 292:16 332:14 335:12 353:16 367:1 370:6 381:6 386:10 388:15 407:20 408:20 417:17 470:18 489:11,22 <b>doctorate</b> 86:16 <b>doctors</b> 26:18 32:12,18 36:17 51:22 52:12 53:23 78:18 81:6 118:3
--	---	---	---

118:16 121:6 122:18 155:11 156:5 214:21 215:20 217:11 219:23 220:2 226:15 236:23 244:15 251:14,20 <b>document</b> 13:23 26:23 27:2 50:20 55:12 108:14 112:7 114:23 115:4,22 174:11 184:22 185:15,19 185:20 186:9,11 186:12 189:2 223:21 233:3,9 245:22 248:12 264:19 275:20 284:6 301:18 305:18,19 327:3 330:11 332:10 335:1,7 341:1,6 350:4 363:23 375:12 376:11,18 376:21 379:8 380:19 384:12 400:9 401:6 402:9 408:4 413:1 419:23 420:8 440:21 445:15 486:2 <b>documented</b> 235:10 <b>documenting</b> 235:14 485:14 <b>documents</b> 12:18 187:6 233:6 380:6 380:7 <b>doing</b> 25:2 85:5 98:16 106:10,14 123:7 124:20	125:19 141:14 176:8 178:12 246:19 260:4 261:6,23 262:5 269:23 272:18 286:13 287:12 290:4,5 305:19 309:21 312:22 321:16 439:21 469:6 476:10 477:3 484:21 <b>dose</b> 145:3 <b>double</b> 268:20 271:12,19,21 318:10 319:14 <b>doubt</b> 439:15 <b>dozen</b> 94:18 146:13 147:11 <b>dr</b> 9:19 11:2 14:18 15:8 16:6,9,15,20 16:22 17:1,4,6 18:7,11,21 19:10 19:10 33:12,13,18 33:20 34:12 39:15 39:15,21,21 40:11 40:11 42:10,10,19 42:20 43:23,23 57:21 58:5,11 60:13 64:9 67:7 72:2 78:5,5,6 81:17 85:10,13,15 85:20 86:3,6 92:13 94:23 114:6 114:6 216:7,7 255:21 256:19 264:22 377:19,20 444:21 445:13 464:19 472:10 475:11 481:6 483:7 491:1,12	<b>drafting</b> 185:4 187:3,9 <b>drafts</b> 188:1 192:1 199:17 <b>dramatically</b> 322:20 <b>drastic</b> 289:20 <b>drawn</b> 392:10 <b>dreaded</b> 181:14,18 <b>dream</b> 468:4 <b>drill</b> 210:18 <b>drilled</b> 467:14 <b>drive</b> 285:21 444:11 <b>drives</b> 286:15 <b>drop</b> 320:19 321:4 321:21 <b>dropping</b> 24:3 <b>drs</b> 280:4 395:6 <b>drug</b> 201:11 202:21 205:11,16 205:17,19 207:13 209:23 210:5 216:14,21 218:6 219:11,15 220:19 221:7 224:17,20 225:10,12 227:11 228:9 231:5,10,11 231:18 234:10,17 234:19 235:12 236:4,13 237:5,10 238:2 241:3 246:15 247:15 253:4 257:3,20 258:14 259:19 260:20 261:12 263:14 314:19 318:15 338:5 490:6 <b>drug's</b> 242:21	<b>drugs</b> 5:15,18,22 119:5 162:16 201:3,19 203:15 206:10 209:20 216:19 217:12,15 218:15,19,23 219:6 220:2 221:3 221:5,13,18 222:2 222:16 226:15 229:1,20 230:22 233:14 238:14 239:5 240:2,17 241:7 244:4,8 245:5,8,16 248:1 251:3,21 252:19 255:4,6,11 258:22 259:22 260:1,17 260:21 261:9,13 318:11 406:20 447:21 <b>dsm</b> 72:12 73:7,13 73:16,17,19,20 74:1,6 189:15,18 189:20,23 190:12 190:17 191:8,14 191:19 192:1,9,22 193:15,19 194:2,2 380:11 <b>dtishyevich</b> 2:10 <b>duly</b> 11:6 <b>duration</b> 15:23 <b>dutch</b> 342:14 <b>duty</b> 76:8 154:19 386:3 <b>dysmorphic</b> 67:19 68:1,22 69:4,20 70:7,12 73:6,23 74:15,22 75:10 154:5,7 <b>dysphoria</b> 6:18 7:22 8:8,10 22:4
---	--	--	---

41:6,20 49:16 65:10 80:19 84:19 85:7 111:10 130:4 131:2,17 132:19 133:17 134:4,18 146:21 150:6,23 151:2,6 152:3,7 153:7,12 157:20 158:1,6,10 162:15 163:1 193:21 200:15 205:15 214:12,18,23 215:19 216:10 316:19 319:1,15 321:4 329:11 340:9 353:2,10,22 354:4 367:14,23 368:13 370:9,19 373:21 374:17 375:2,8 380:13 383:19,22 390:14 390:19 391:8 393:19 395:1,11 395:23 405:9 411:11 429:9,20 430:14 431:2 433:21 434:22 435:17 437:13 438:3,12 443:18 458:1 460:18 481:22 482:13 483:22 486:7,17 488:19 <b>dysphoric</b> 195:18 <b>dystonias</b> 262:14	340:15,15 360:9 389:13,13 414:15 425:7 445:6 446:12,13 492:1,1 494:3,3,3 <b>earlier</b> 46:9 57:8 76:12 78:4 110:1 112:19 152:1 154:5 169:6 180:19 181:17 189:14 204:15 215:5 216:17 232:9 261:20 267:13 270:14 290:18 300:20 301:11 303:11 324:15 345:11 347:3 352:1,9 354:12 363:9 380:21 421:3 424:6 448:5 454:2 477:11 <b>early</b> 97:16 205:2 228:18 285:4 319:11 328:10 394:23 397:9,17 398:11,17 <b>earns</b> 386:6 <b>ears</b> 105:20 <b>easier</b> 16:14 <b>eastern</b> 474:10 <b>eating</b> 332:12 <b>ectopic</b> 133:11 <b>ed</b> 76:3 <b>edgerton</b> 106:8 125:8 <b>editor</b> 135:16 136:9 <b>editors</b> 135:21 136:16	<b>eds</b> 76:15 <b>educate</b> 296:14 <b>education</b> 2:13,19 <b>educator</b> 87:7 <b>effect</b> 43:5 146:15 146:17 245:21 246:1 313:10 317:18 319:5 330:7 412:20 414:7 484:11 490:14 <b>effective</b> 41:4 116:7 265:21 268:22 270:3 284:13 285:14 346:22 430:17 435:1 <b>effectively</b> 457:5 <b>effectiveness</b> 269:5 392:10 <b>effects</b> 81:21,22 82:5 205:17,18 217:16 234:4 235:3,14 237:1 317:3 318:3 319:2 319:13 447:21,22 447:22 482:22 487:21 490:8 <b>efficacious</b> 291:17 <b>efficacy</b> 219:14 235:9 237:17 259:20 329:23 331:13 346:19 347:6 387:22 439:1 <b>efficient</b> 116:8 <b>efforts</b> 54:16 78:7 78:14 83:18 110:18 113:7 116:9	<b>eight</b> 45:23 313:11 337:13 <b>eighteen</b> 43:21 52:2 <b>eighty</b> 141:23 <b>either</b> 93:8 144:11 222:11 249:5 278:13,13 393:8 456:14 <b>electronic</b> 88:7 <b>element</b> 369:18 <b>elevated</b> 272:20 282:1 <b>eligible</b> 100:23 <b>emcee</b> 91:22 <b>emergencies</b> 436:22 <b>emery</b> 2:7 10:15 <b>emotional</b> 152:13 <b>emotionally</b> 119:8 <b>emphasized</b> 209:17 <b>employ</b> 420:16 <b>employees</b> 10:21 420:17 <b>enact</b> 76:7 <b>enactment</b> 57:11 <b>encapsulation</b> 220:17,21 <b>enclosed</b> 265:23 <b>encounters</b> 159:5 <b>encourage</b> 103:7 103:12 162:12,13 177:14 457:3 470:1 <b>encouraged</b> 95:6 165:21 <b>encouraging</b> 107:8 398:16 <b>endo</b> 195:16
<b>e</b>			
<b>e</b> 2:1,1 4:1,10 16:21,21 20:23 59:1,3,4 98:11,16 203:8,11 256:19 299:19 322:18			

<b>endocrine</b> 195:16 196:22 197:3,9,21 198:7,19 199:11 200:13,20 <b>endocrinol</b> 81:19 <b>endocrinologic</b> 81:19 <b>endocrinological</b> 81:21 156:2 <b>endocrinologist</b> 86:9 153:15 156:10 157:1 205:23 207:12 372:5 <b>endocrinologists</b> 149:19 198:16 203:22 204:1 207:18 208:13 277:1 418:20 <b>endocrinology</b> 81:18 204:3,7,10 213:1 <b>endocrinopathies</b> 162:21 213:9 <b>endoscopic</b> 129:22 130:8,17 <b>enforcement</b> 30:17 <b>enforcing</b> 37:11 <b>engaged</b> 83:11 <b>engine</b> 21:2,6 <b>england</b> 35:16 <b>enrolling</b> 237:3 <b>ensure</b> 116:6 <b>ensuring</b> 273:2 <b>enter</b> 153:1 176:19 <b>entered</b> 208:8 345:21 346:6,8 418:15 <b>entire</b> 46:14 95:22	<b>entirely</b> 104:6 <b>entitled</b> 240:2 <b>entrance</b> 480:11 <b>entry</b> 124:4 <b>enumerate</b> 209:7 <b>enumerated</b> 209:5 209:22 458:6 <b>equation</b> 206:12 222:22 485:3 <b>erectile</b> 333:2 <b>erections</b> 334:8 <b>errata</b> 493:11,13 493:17 <b>erratas</b> 493:15 <b>erroneous</b> 329:3 <b>error</b> 329:1,3 <b>erythromycin</b> 123:12 <b>esophagoplasty</b> 133:20 136:12 <b>esophagus</b> 133:23 <b>esq</b> 2:6,12,18 3:4 3:10 <b>esquire</b> 493:1 <b>essential</b> 275:22 448:13 467:6,19 <b>essentially</b> 44:21 112:2,9,12 146:15 161:13 165:21 271:17 282:23 380:19 395:15 474:10 478:5 <b>established</b> 311:12 475:1,7 <b>esthesia</b> 68:7 <b>estimate</b> 17:8,12 146:8 147:12 160:1 298:11 <b>estrogen</b> 214:2,21 215:18 318:23	<b>estrogens</b> 431:15 <b>et</b> 1:9,14 9:21,21 493:4 494:1 495:1 <b>ethical</b> 131:20 177:7,9 250:4 309:10 316:2 403:18 <b>ethically</b> 250:6 <b>ethics</b> 5:8 169:11 169:15,22 170:8 170:13 171:1,12 174:19 176:10,12 179:4,9 180:8,15 180:18,21 181:8,9 181:16,19 182:1,3 217:22 218:11 314:13 <b>europe</b> 123:5 <b>european</b> 89:12,14 89:20 124:13 247:3,22 250:10 313:4 <b>evaluate</b> 275:17 <b>evaluation</b> 72:7 275:16 <b>evening</b> 14:13,16 <b>event</b> 359:5 <b>events</b> 165:2 202:19 410:18 <b>everybody</b> 211:2 <b>evidence</b> 6:7 39:6 46:6 70:14,17,18 70:19 71:10 88:21 89:21 120:9 123:4 123:20,22 124:1 186:7 218:4 219:2 219:9,9,18 234:2 242:23 243:16,17 243:21,23 244:13 244:16 245:20 248:20 249:1,7	250:16 252:12,16 252:18 259:20 260:5,10 261:7 280:20 281:16,22 283:7,17,21 284:2 284:7,8,9,10,21 285:5 288:1,6,14 288:22 289:7,18 290:4 291:10 292:1 293:16,22 294:1,11 295:11 295:16 299:20 300:6,22,23 301:8 302:10,23 303:13 303:19,23 304:11 304:14,17 308:15 309:8 311:16 312:6,18 313:19 313:21,23 314:10 314:14,17 317:18 323:14,16 324:16 327:15 328:10 329:14 337:19 341:8 352:17 359:12 362:16,21 363:3,14 365:16 366:22 370:13 374:19 398:9 399:9 408:12 410:3,18 412:18 413:23 414:3,3 415:16 416:4,8,9 439:1,19 440:4 441:6,8,12 444:15 447:16 452:12,16 453:19 454:4 469:5 481:19 482:4,11,20 484:19,21 486:14 <b>evidencing</b> 145:12
--	--	--	--

<b>evident</b> 89:17 271:23 310:6 404:3 <b>evolution</b> 82:13 181:18 <b>exact</b> 196:6 259:12 268:13 <b>exactly</b> 15:2,17,18 15:20 42:14 56:12 77:3 114:4 156:22 324:5 371:1,3 400:22 408:10 <b>examination</b> 4:3 9:11 11:9 70:16 119:12,13 312:13 363:1 447:18 472:9 489:10 <b>examinations</b> 406:5 <b>examine</b> 165:22 251:10 344:5 <b>examined</b> 11:7 312:12 358:13 480:15 <b>examiners</b> 477:1 <b>examining</b> 71:16 <b>example</b> 44:13 45:13 71:9 77:20 81:17,23 83:22 103:17 104:3,20 121:15 130:15 136:8 140:14 155:18 156:1,14 156:23 178:4 205:10,11 206:15 206:23 207:23 220:15,18 226:10 229:9 270:13 271:18 276:16 281:6 283:11 284:5 287:13	292:1 310:12,23 312:2 316:8 322:9 328:8,10 331:11 331:16 334:9 336:6,8 343:16 344:1 351:13 360:13 368:8 412:18 436:9 437:1 439:9,10,12 450:8 452:19,20 460:1 467:21 468:5,9,11 470:2 476:14 478:2 <b>examples</b> 142:3 331:6 336:2 459:22 <b>exception</b> 154:4 165:7 315:21 <b>exceptional</b> 455:5 457:18,22 458:5 <b>exchanges</b> 98:11 <b>exclude</b> 236:18 <b>excludes</b> 425:1 <b>exclusive</b> 461:21 <b>excuse</b> 279:17 <b>executed</b> 229:5 <b>executive</b> 10:23 317:13 403:21 404:9 <b>exemption</b> 234:12 <b>exercise</b> 295:2 <b>exhaustive</b> 210:15 381:7 <b>exhibit</b> 6:11 <b>exhibit</b> 4:13,14,15 4:16,18,20 5:2,5,7 5:8,11,13,16,20 6:1,4,6,16,16,17 6:20 7:1,5,7,12,15 7:17,23 8:2,4,6,9 8:12,14 12:3,6	22:15 27:6,9 34:5 34:7 37:22,23 43:8 55:7,9,12 62:17,19 108:5,7 114:15 115:6 116:2 127:15,16 127:17 170:11 171:5,7,11 223:15 223:16,18 230:12 230:12,14 232:21 232:23 239:14,16 255:19 256:13,15 263:7,8,10 279:20 299:12,13,15 308:6 320:9 325:23 326:2 339:14,14,16,18 339:20 355:17,18 361:4,11 375:14 375:16 388:14,18 388:20 394:7,7,9 396:9,18,20 404:23 411:2,4 414:20,22 417:8 419:15,15,17 426:21,22 427:1 430:7,9 434:7,7,10 451:3,3,5 463:2,4 463:5 464:9,10 <b>exhibits</b> 8:20 15:7 256:4 481:12 <b>exist</b> 219:18 488:10 <b>existing</b> 482:4 <b>exists</b> 410:3,4 <b>expect</b> 21:21 34:22 47:11 61:2 71:19 122:16 154:11 173:6 211:17 215:19 237:15 300:23	<b>expectation</b> 154:14 196:13 209:19 215:5,16 216:3 287:8 <b>expected</b> 206:13 209:9 287:20 <b>expend</b> 24:6 <b>expensive</b> 23:23 102:1 <b>exper</b> 281:11 <b>experience</b> 73:10 93:19 94:4 121:18 124:3 132:8 136:21 148:16 159:18 162:14 168:16,22 169:5 173:11,14,23 178:2,17 181:1,12 204:18,19 211:20 212:1,17 213:10 214:14 220:22 243:5,11 246:10 246:21 270:16,17 272:8 275:1 278:6 278:17 279:12 281:5,11,15,19 282:1 284:17 287:1,4 309:16 329:12 348:19 383:21 395:11 405:17 417:18 443:8 454:9 455:1 455:2 457:14,15 458:18 463:21 476:5 479:12 <b>experienced</b> 94:1 <b>experiences</b> 364:23 366:6 <b>experiencing</b> 158:19 162:3 344:20 348:18
---	---	--	--



<b>experiment</b> 271:8 <b>experimental</b> 35:6 43:15 112:22 113:2 117:16 120:5 161:16 217:22 218:11 232:10,14 253:15 254:6,11 288:17 289:6 294:2 295:5 423:2,9,17,22 424:2,22 425:2 481:16 <b>experimentation</b> 253:3 <b>experimenter</b> 272:1 <b>expert</b> 4:13 11:20 11:23 17:9 18:12 22:15 29:21 31:2 31:9 33:1,15,22 40:2,16 50:14 57:22 58:5,12 75:8 86:12 90:15 91:3,8,11,13 92:16 92:20,22 98:19 126:8 127:2 170:15,18 171:2 172:6,21 173:10 174:13,17,22 176:7,17 177:19 180:22 181:10 188:15 189:10 193:14 200:12,20 203:13,18 204:7 204:10 221:23 243:20 249:6 254:9 259:5,14 260:19 261:11 274:8 275:12 322:3 329:8 374:3 374:15,23 375:5	443:4 444:13,17 444:20 448:16 449:14 <b>expertise</b> 65:8,16 66:3 74:16 75:14 193:11 200:18 201:22 204:3,12 307:9 <b>experts</b> 18:1 22:10 33:14 38:19 187:8 198:12,14,20 199:9 203:19 205:5 409:19 448:13 449:16 <b>expired</b> 23:16 25:4 28:4 29:9 31:16 <b>expires</b> 492:21,23 <b>explain</b> 324:9 <b>explained</b> 100:8 <b>explanation</b> 159:14 369:5 457:11 <b>explanations</b> 355:4 <b>exploration</b> 215:9 <b>explored</b> 399:2 <b>exposito</b> 7:1 360:7 <b>express</b> 56:20 275:4 406:18 <b>expressing</b> 92:14 92:19 217:10,14 222:1 289:4 <b>expression</b> 397:23 <b>expulsion</b> 172:15 <b>extensive</b> 90:8 107:6 288:4 309:15 <b>extensively</b> 228:10 <b>extent</b> 51:12 127:9 155:22 209:14 211:15 218:21	<b>external</b> 310:12 450:15 479:6 <b>extra</b> 397:1 <b>extracted</b> 352:14 <b>extremely</b> 326:22 <b>extremities</b> 142:16 <b>eyes</b> 105:20 468:14 <b>f</b> <b>f</b> 174:5 203:8 446:11,13 492:1 <b>face</b> 71:20 131:1 142:9,15 143:7 256:8 289:13 310:14,18 <b>faces</b> 146:5 195:1 <b>facial</b> 130:9 145:13 146:1 147:5 152:9 166:23 167:3,7 175:4,9 290:14 <b>facilities</b> 473:5 <b>facility</b> 474:1,20 474:22 475:8 <b>fact</b> 40:15,19 44:2 46:15 54:21 59:2 68:18 114:13 118:2 137:9 161:18 166:3 179:13 181:15 222:18 228:8 237:19 250:16 260:11,22 299:11 314:16 319:7 328:22 339:9 344:5 380:6,23 391:11 402:7 433:15 439:15 476:21 <b>facto</b> 242:5,9	<b>factor</b> 368:9 <b>factors</b> 423:9 424:19 <b>factual</b> 37:15 128:4 <b>failed</b> 280:5 <b>fails</b> 493:19 <b>failure</b> 320:14,15 <b>fair</b> 34:15 74:18 78:16,21,21 114:5 136:17 148:1 149:4 160:4 162:16 168:11,15 189:12,13 193:16 193:18 203:16 215:23 <b>fairly</b> 22:8 59:2 75:2 90:20 91:1 131:21 159:6 259:1,8,11,18 435:4 <b>faith</b> 444:16 <b>fall</b> 252:16 <b>fallback</b> 53:12 <b>falling</b> 252:17 260:8 <b>falls</b> 260:23 261:2 <b>false</b> 172:13,19 <b>familiar</b> 50:8 76:10 79:10,14 127:9 178:8,9 203:1,2,6,10 211:15 212:6 213:4,8 255:7 341:2 479:16 490:19 <b>familiarity</b> 212:22 <b>families</b> 81:4 97:20 158:18 159:1,7 164:18 205:1,21 457:7
--	--	--	--

<b>family</b> 82:4 93:23 94:6 209:2 210:20 309:22 <b>famous</b> 85:22 <b>far</b> 22:7 144:8 178:12 185:6 247:15 313:16 381:3 482:22 <b>fastidious</b> 292:8 306:16 <b>fat</b> 44:15,22 142:8 142:9 <b>favor</b> 64:10 105:12 351:19 <b>favorable</b> 63:15 484:12 <b>fda</b> 5:13,16 6:4 80:17,20 205:12 206:18 207:2 216:8,15 218:5 220:7,12,22 221:2 221:12,17 222:4 222:12,15 223:9 225:6,10 226:1,13 226:16,20 227:11 227:17,21 228:18 229:19 230:2,8,19 231:8,9,22,23 232:12,13,16 233:4,5,8 234:16 235:11 240:15 243:2,9 245:22 253:5 257:4 261:1 262:8,23 263:21 266:4 269:11 270:21 483:16 490:2 <b>fda.gov</b> 230:18 <b>fear</b> 95:10 162:9 <b>feasible</b> 309:10	<b>february</b> 108:15 109:2 115:2 <b>federal</b> 5:11 9:5 33:5 221:2 224:1 224:3,8,9,10 <b>feel</b> 54:3 104:9 351:11 372:6 420:4,4 479:11 <b>feeling</b> 348:4 349:2 351:16 <b>feelings</b> 68:7,8 <b>feels</b> 114:14 194:19 <b>fees</b> 100:11 <b>feet</b> 141:4 262:5 268:10,11 <b>felt</b> 195:3 <b>female</b> 6:12 322:23 323:2 341:23 390:7,8 456:4 457:17 488:7 <b>females</b> 368:12 369:9,23 372:14 488:9,12 <b>feminization</b> 130:15 166:23 167:4 175:9 <b>fensolvil</b> 203:7 <b>fertility</b> 468:13 <b>fetal</b> 131:11,12 136:8 <b>fiduciary</b> 386:3 <b>field</b> 21:19 22:3 61:1 132:11 212:4 305:7 322:22 409:19 415:17 <b>fif</b> 332:18 <b>fifteen</b> 332:20 <b>fifth</b> 465:22	<b>fifty</b> 445:4,7 446:3 <b>figure</b> 272:7 324:11 364:4 <b>file</b> 396:23 <b>filed</b> 9:22 409:8 <b>final</b> 302:2 459:19 485:8 <b>finalized</b> 188:2 192:2 199:18 <b>finally</b> 134:11 147:14 227:3 419:4 <b>financial</b> 109:16 199:5 473:12 <b>find</b> 21:15,23 51:6 51:19 53:21 72:11 72:14 77:16,23 104:18 113:11 179:19,19 180:2 317:17 335:11 353:19 360:18 365:5,21 366:7 391:7 <b>finding</b> 39:10 91:3 311:9 354:15 <b>findings</b> 37:16 38:12 371:21 <b>fine</b> 19:4 97:5 384:16 <b>finish</b> 227:4 248:12 <b>finished</b> 469:15 471:10 491:3 <b>finland</b> 35:16 248:4 394:1,17 395:4 396:11 404:23 405:9 406:11 407:11 410:12,15,18,20 <b>finnish</b> 7:12 394:19	<b>fired</b> 95:16 <b>firm</b> 10:6 234:1 <b>firmly</b> 111:8 112:13 <b>first</b> 11:6 28:22 38:8 59:22 63:10 84:8,15 85:9 86:1 86:4 89:1 91:19 94:9 95:1 96:3 97:1 101:9 107:3 109:12 111:8 116:5 127:19 129:6 130:7,7 170:12 172:10 192:18 202:12 225:9 229:2 233:18 245:9 248:13 257:19 262:8 264:20,22 268:17 272:5 284:23 285:1 300:2 307:18 308:8,9 317:19 324:3,4 326:14 330:16 341:17 347:10 358:2,4,6 367:10 396:16 419:22 420:5 435:14 436:4 439:9 440:8 456:3 458:18 459:2,3 467:12 470:21 472:21 476:8 481:1 <b>firsthand</b> 49:20 51:9 193:14 204:19 214:14 <b>fistula</b> 336:18,19 338:10 <b>fistulas</b> 178:16 338:21
--	--	---	---

<b>fit</b> 77:4 270:22 279:6	<b>folder</b> 115:5	266:6,15,22 267:1	184:20 187:4,14
<b>fitting</b> 372:12 460:10	<b>follow</b> 7:7 28:17 143:15 146:22	267:17 268:21	187:20 188:12
<b>five</b> 51:3 122:4 123:1,5 138:21	161:11 164:17	<b>forgive</b> 293:2	190:18,23 191:4
139:10 143:19	208:20 209:12	325:18 332:12	191:10,15,21
160:2,3 184:12	313:8 327:18	<b>form</b> 8:16 21:14	192:3,10,23 193:9
196:16 202:11	331:16 336:5,10	21:20 22:5,12	193:17 198:9,23
281:7 313:8 333:9	337:22 339:21	26:6,21 28:13	199:15,21 200:5
336:15 337:18	345:5,9,18 346:3	29:7,15,19 30:1,22	200:10,16 204:14
345:19 352:2	346:13,16 347:9	31:4 32:14,21	204:22 206:7
391:17 425:11	347:14 352:13,18	34:20 36:13 37:5	207:16,21 208:18
431:8,10 446:4	352:20 485:7	39:18 40:21 41:21	211:13 212:5,21
474:4,5	487:12 489:4	42:12 47:6 48:7	215:3 216:1 217:3
<b>fixation</b> 129:23 130:11 310:13	<b>followed</b> 164:22 169:22 322:10,12	49:23 50:6 52:6	217:8 221:10
<b>flags</b> 71:21	<b>following</b> 9:12 38:12 321:17	52:14,19 53:1	222:5 226:19
<b>flap</b> 142:20 178:3 178:4,10,10,15,16	322:14 401:15	54:13 55:3 57:14	227:19 228:15
467:22,22 468:1,4	427:20 431:3	58:17 60:20 62:1	229:22 232:7
468:5,8 476:12	435:16	65:17 73:14 74:19	234:20 236:6
477:4 478:18	<b>follows</b> 11:7	76:18 77:13 78:8	237:6 238:4,9
<b>flaps</b> 143:1 299:7 338:16 339:5,5	<b>folwell</b> 1:14 9:21 10:21 493:4 494:1	78:20 81:8 83:6	239:11 240:19
478:17 479:8	495:1	83:15 88:17 89:3	242:4,12 243:13
<b>fleck</b> 446:7	<b>food</b> 221:5 224:17 224:19 263:14	90:17 91:16 92:17	245:11,17 251:4
<b>flip</b> 285:8	<b>footnote</b> 41:10,12 41:12,16 42:5,8	96:18 97:12,23	252:7,11,18
<b>flood</b> 123:3	227:9	98:8 99:8 102:12	253:18 259:2
<b>floor</b> 2:20	<b>footnotes</b> 327:6	103:10 107:22	266:9 267:21
<b>florida</b> 474:14	<b>forbidding</b> 44:22	110:3 111:20	269:1,7 270:6,12
<b>flourishing</b> 460:7	<b>force</b> 51:17	112:23 113:21	273:10 274:9
<b>fluid</b> 134:13 135:9	<b>forces</b> 398:2	114:11 117:3,10	275:14 281:1
<b>fluidity</b> 400:11	<b>forearm</b> 339:5 467:22	117:19 118:6,20	283:7 284:9
<b>fly</b> 358:5	<b>foregoing</b> 492:5,9 495:5	120:20 126:13	285:16 286:20
<b>focus</b> 5:2 65:5 116:8 137:21	<b>forehead</b> 130:10 130:12 131:7	127:7 128:15	288:15 293:13
172:9 174:15	140:22 262:1,10	135:18 136:18	294:20 295:12,18
<b>focused</b> 356:13	262:22 265:10	137:13 148:2	297:20 298:5,14
<b>focusing</b> 145:5		149:14,18 151:14	303:9 305:11
		154:3 155:16	307:6 311:18
		157:12 158:7,11	318:4 323:3 324:2
		162:17 163:2	333:15 342:20
		166:12 168:20	352:7 357:23
		173:5 175:1,7,12	359:2 362:19
		175:14,17,23	364:7 367:2 371:8
		176:11 179:5,18	374:8 376:10
		180:9,16 181:2,13	381:11 382:22



383:2 385:17 387:6,16 395:13 399:22 406:15 407:6 408:14 409:10,16,22 410:13 412:14 413:20 416:1,6 424:5,12,23 425:15,20 426:17 427:22 428:4 429:3,22 431:19 432:10 436:1 438:4,17 439:7 440:14,17 441:10 442:16 443:15,21 447:1,12 448:19 449:10 451:19 453:21 454:12,18 455:12 458:2 459:11 460:20 461:18 462:6,12 463:23 464:16 465:6 466:6,19 467:3 469:8 492:8 <b>formal</b> 69:10,19 383:19 <b>formality</b> 96:23 <b>formally</b> 75:5 <b>format</b> 87:13 93:17 <b>formed</b> 170:18 259:5 <b>former</b> 107:18 179:14 181:19 <b>forming</b> 196:23 221:15 232:11 239:3 <b>forms</b> 70:20 131:19 144:9 252:16	<b>formulated</b> 424:14 <b>forth</b> 435:8 <b>forty</b> 307:12 <b>forward</b> 105:21 415:22 <b>found</b> 53:18 122:5 344:8 359:19 416:15 <b>foundational</b> 93:14 <b>four</b> 14:9 58:14 73:12 97:2 103:17 202:11 299:2 336:15 364:14 391:17 401:18 431:10 445:4,7 <b>fournier's</b> 478:4 <b>fourth</b> 57:16,18,19 348:1 <b>fracture</b> 129:22 131:6 <b>francisco</b> 86:14 272:17 278:7 <b>frankly</b> 313:1 <b>free</b> 178:10 339:5 339:5 420:4,4 477:4 <b>freedom</b> 79:11 <b>frequency</b> 257:2 <b>friend</b> 67:7 <b>friends</b> 48:18 49:1 104:3 151:18 <b>front</b> 324:21 <b>frontal</b> 129:21 133:12 <b>frontalis</b> 265:10 266:14,18 267:10 267:18 <b>full</b> 4:23 11:12 51:17 63:2 83:17 94:16 97:15	100:23 101:2 102:4 113:9 308:8 325:7 347:5 391:20 435:14 445:12 <b>fuller</b> 159:14 <b>fully</b> 314:4 346:18 416:19 <b>function</b> 319:9 333:3,4 345:12 403:22 466:6,20 467:4,19,20 468:6 <b>functions</b> 47:7 119:23 317:13 467:6 <b>fund</b> 2:13,19 <b>further</b> 38:9 172:18 227:7 228:2 237:10 240:9 324:18 337:19 364:16 390:6 414:4,5 492:14 <b>future</b> 159:3,11 462:16	54:10 57:12 60:16 60:21 61:4 63:14 65:10 76:9 77:18 78:19 80:19 81:20 84:18 85:7 107:12 107:20 109:18 110:8 111:6,10,18 112:21 114:9 115:19 116:20 117:15 126:10 127:4 130:3,3 131:2,16,16 132:18,19 133:16 133:17 134:3,3,17 134:17 137:4,10 137:18 146:21 149:10 150:5,23 151:2,13 152:3,7 153:6,12 154:6,6 157:19 158:1,5,10 158:19 162:15 163:1 164:15 168:12,17 175:20 177:22 178:13 192:17,20 193:20 193:21 195:18,18 200:15 205:15 214:12,18,22 215:18 216:10 312:3 316:18 319:1,15 321:4 329:11 340:9 341:23 342:7,14 353:2,10,22 354:4 367:14,22 368:13 368:14 370:9,19 373:21 374:17 375:2,7,7 376:13 379:20 380:12 382:23 383:19,21 383:23 384:22
		<b>g</b>	
		<b>g</b> 3:4,5,10 16:16 299:19 493:1 <b>gained</b> 109:14 <b>gangrene</b> 478:4 <b>gary</b> 80:11 <b>gatherer</b> 279:11 <b>gathering</b> 272:23 <b>gears</b> 99:15 182:8 442:5 <b>gender</b> 5:3 6:18 7:2,22 8:4,7,10 22:4 35:5 36:18 36:22 39:4 40:4 41:6,7,18,20 44:1 49:16 51:4,23	

387:2 390:1,14,15 390:19 391:2,8 393:18 395:1,11 395:12,22 397:21 398:1,11,18 400:11 405:9,18 410:10,17 411:11 424:9 425:17 426:14 427:5,18 428:1,7 429:8,9,20 430:14 431:1 432:3,7 433:19,21 434:21 435:17 437:13 438:2,12 443:18 447:11 449:7 457:6 458:1 460:18 462:3,9 479:22 481:21 482:12,18 483:22 485:16 486:6,6,17 486:20 487:18 488:19 <b>genderreport</b> 407:19 408:17 <b>genderreport.ca.</b> 407:13 <b>general</b> 106:5 121:17 122:2 123:10 165:1 208:11 209:13,19 210:12 213:1 223:5 247:11 272:5 273:8 274:17,18 277:20 294:21 295:7,8 321:8,11,15 322:5 326:21 391:3,10 436:14 472:17,21 473:1 480:13 484:23	<b>generally</b> 43:16 92:20 117:14 136:4 163:15,16 211:2,6 213:7 215:19 219:7 231:10 233:4,7 238:18 284:22 323:21 334:1 373:16 374:4,16 374:23 375:6 408:11 <b>generated</b> 276:18 379:8 <b>generates</b> 46:11 <b>generating</b> 50:13 199:7 372:20 <b>generation</b> 461:2 461:7 <b>generic</b> 201:11 <b>genesis</b> 456:6 <b>genetic</b> 201:10 <b>genital</b> 178:5,20 <b>genitalia</b> 323:2 436:8,15 479:6 <b>genitals</b> 290:7 <b>georgia</b> 2:15 <b>germane</b> 13:20,22 51:3 238:10 277:17 <b>getting</b> 119:2 208:22 289:8 355:8 402:22 <b>girls</b> 409:8 <b>give</b> 11:16 68:19 82:14 88:22 104:21 111:21 121:14 123:12 142:3 150:19 157:4 160:23 161:6 215:20,22 273:13 312:14	339:14 340:22 383:13 384:10 403:8 445:8 450:8 452:23 <b>given</b> 13:6 34:21 53:22 54:5,5 85:1 122:2 165:11 176:3 177:15 185:20 196:16 209:9 217:18 220:13 291:11 305:2 314:7 319:4 319:12 322:2 371:4 401:22 418:16 436:23 491:12 495:9 <b>giving</b> 63:15,15 86:18 94:4 97:7 159:16 235:11 402:12 450:17 <b>glabellar</b> 267:2,3 <b>glasses</b> 41:11 <b>gleaned</b> 195:12 <b>gloss</b> 340:20 <b>glossary</b> 173:12,21 173:22 <b>glossed</b> 13:19 <b>gn</b> 431:14 <b>gnrh</b> 431:14 <b>go</b> 16:13 19:3 26:12 27:14 31:8 35:1,11 36:1,7 38:21 43:10 56:15 57:1 58:1 59:14 64:4,14 71:16 72:13 74:11,11 78:23 87:15 110:4 111:7 115:8 116:16 119:16,16 119:18 126:6 128:17 129:18	143:16,17 149:22 154:11 158:13 166:4 171:21 174:3 188:19 202:12 207:3 210:2 218:7 225:2 227:5 231:2 242:13 245:2 248:13 254:12 256:9 264:10,20 279:19,20 281:2 281:14 289:22 297:8 302:5 308:5 314:9 319:18 320:8,11 327:20 327:21 330:10 332:15 340:7 341:13 347:19 349:15 350:10 358:1 359:8,13 364:13 367:6,8 373:11 378:5,14 380:10 381:12 383:9 384:9,16 388:3 391:12 396:11 397:15 398:17 399:11 401:5 404:22 405:2 407:7,8 413:6 415:6 417:9 419:19 420:5 421:6,6 422:11 428:8 430:21 435:12 437:5 440:1,23 445:2,2 446:2,8 451:8 452:19,19 453:10 455:18 458:21 460:22 465:8 469:10 470:4,9 471:5 484:13
---	--	---	--

491:7 <b>goal</b> 206:13 459:19 <b>goals</b> 460:13 <b>god</b> 456:10,13 457:10 <b>goes</b> 36:4 266:19 303:10 424:20 <b>going</b> 9:16 15:14 17:12 27:5 31:1 37:4 46:11 55:6 73:1 102:9 121:11 123:14 125:23 131:10 156:17 180:2 185:23 218:7 219:20 223:14,15 230:11 232:21 239:14 256:13 261:4,15 262:16 263:7 271:15 283:10 287:5 289:22 291:16 298:7 299:9 306:11 313:9 315:12 316:21 317:2,7,8 317:11,12 319:1,6 319:20 325:23 328:9,14 353:5,6 353:16 361:3 364:10 375:13 379:21 383:12 385:10 386:5,7 387:20 388:14 396:8,10 397:13 403:8 414:16 415:20,21 420:22 423:7,18 426:21 426:22 430:6 434:7 448:23 449:12,13 457:12	457:13 464:7 467:18 468:5 469:4 485:8 488:13 <b>gold</b> 249:3 <b>gonadectomy</b> 344:13,19 345:7 345:16 <b>gonadotropin</b> 201:7,9 317:22 428:14 <b>gonzalez</b> 2:18 <b>good</b> 9:15 11:10 11:11 52:16 87:11 92:10 124:23 133:21 135:6,6,6 164:1 251:8 261:6 276:18 290:5 311:15 312:23 379:9 439:21 472:2 <b>gorney</b> 67:7 72:2 <b>gosh</b> 170:9 186:15 202:10 298:7 313:6 <b>gospel</b> 450:18 <b>gotten</b> 124:10 <b>government</b> 77:4 <b>grabs</b> 123:2 <b>grafting</b> 44:15,23 142:8,10 <b>grafts</b> 478:17 479:8 <b>grand</b> 67:8 <b>grasp</b> 403:21 <b>great</b> 53:19 56:9 89:16,18 104:5,10 105:3 106:9 161:20 177:12 244:2 248:3 260:12 286:12	287:12 290:6 389:5 475:4 480:8 484:22 485:5 <b>greater</b> 287:7,8 311:7 390:2 402:16 410:5 <b>greatest</b> 122:1 <b>greatly</b> 68:3 444:3 <b>griffin</b> 35:17 <b>grooming</b> 461:2,6 461:8,11,12,14,21 461:22 462:10,15 469:2,12,14 470:6 <b>grounds</b> 466:3,15 <b>groundwork</b> 462:19 <b>group</b> 45:11 88:12 192:18,21 193:3 242:19 249:6 271:8,9 309:6 322:21 367:15 368:19 390:3,10 390:13,18 412:8 452:5 455:6 <b>groups</b> 184:17 190:16,21 191:13 192:7 266:15 271:8 280:8 346:8 368:20 483:9,15 <b>grow</b> 121:14 <b>growing</b> 109:15,20 260:9 328:1 341:8 360:14 363:8,9 458:5 <b>grows</b> 476:5 <b>growths</b> 144:10 <b>guardians</b> 402:2 402:23 403:10 404:18 <b>guess</b> 12:18 69:5 74:21 83:19 93:16	127:20 152:8 160:15 176:16,21 226:3,7 264:1 279:8 288:9 297:22 298:7 301:2 303:20 331:23 379:9 471:17,21 <b>guessing</b> 98:3 142:1,18 298:19 <b>guidance</b> 28:8 29:22 31:3 32:8 128:12 227:16 233:3,5,9 238:7 282:3 394:20 398:21 <b>guide</b> 249:8 <b>guided</b> 248:19 <b>guideline</b> 186:12 186:14 <b>guidelines</b> 7:12 27:17 28:17 73:12 195:17 196:15,22 197:14,17 200:14 200:22 394:1 395:5,10,15,21 401:2 402:10 403:6 404:23 406:11,22 407:11 410:12,16 <b>guy</b> 125:8 <b>gynecomastecto...</b> 148:11
			<b>h</b>
			<b>h</b> 4:10 16:12,16,16 55:20 182:13 389:13 414:15 446:12 494:3 <b>habit</b> 449:21 <b>hair</b> 139:22 146:1 146:5 147:5

151:12 152:9,17 153:2 <b>half</b> 25:20 146:13 147:10 336:16 <b>halfway</b> 359:16 <b>hampshire</b> 111:1 <b>hand</b> 16:9 77:15 176:21 287:12 417:4 468:6,9 <b>handed</b> 269:10 <b>handle</b> 54:21 346:15 <b>happen</b> 220:2 259:15 358:14 <b>happened</b> 102:6 164:23 186:3 <b>happening</b> 60:4 61:5 <b>happens</b> 185:9 <b>happy</b> 333:8 <b>hard</b> 352:17 <b>hardware</b> 310:17 <b>harm</b> 67:4 70:18 162:9 223:7 290:6 313:13 314:19 333:21 334:10 347:2 413:4 468:8 487:3 <b>harms</b> 244:1,2 <b>harry</b> 380:12 <b>hazard</b> 297:22 390:4 <b>head</b> 109:8 131:5 279:5 468:2 474:4 <b>headed</b> 4:22 63:2 165:8 <b>header</b> 279:22 420:1 <b>heading</b> 434:2 <b>heal</b> 450:14	<b>health</b> 10:20 11:2 21:3 40:7 63:11 65:12 66:4 74:17 75:9,15,18,22 82:6 111:13 116:7 149:16 154:2,12 155:8,12,14 157:7 157:10 182:10,17 241:4 392:8 398:8 418:9 420:13 422:21 423:1 425:11 428:18 429:18 433:10,13 <b>healthcare</b> 7:4 8:9 57:12 80:18 149:12 153:21 231:10 376:3 434:9,18,18 <b>healthy</b> 120:1 289:21 392:2 <b>hear</b> 47:3 49:18 54:19 159:13 160:13 325:14 359:11 426:2 448:23 449:14 471:7,12 <b>heard</b> 14:20 17:17 37:6,13 50:15 63:19 73:12 85:2 96:9,14 98:13 102:22 160:11 230:6 233:10 269:12 425:7 442:5 488:15 <b>hearing</b> 38:11,16 38:19 63:20 65:14 71:15 162:8 447:13 448:8 <b>heart</b> 90:1 218:13 <b>heartache</b> 105:9 108:2	<b>heartbreaking</b> 95:21 <b>heartburn</b> 177:11 <b>heavily</b> 185:13 261:1 343:21 <b>held</b> 37:9 398:7 <b>help</b> 68:16 111:10 112:10 172:19 332:14 458:10,15 <b>helped</b> 485:17 <b>helpful</b> 83:2 308:14 355:7 <b>helping</b> 145:14 <b>hembree</b> 380:17 <b>hereto</b> 495:7 <b>hey</b> 333:8 <b>hhs</b> 224:18,20 <b>high</b> 88:10,22 116:13,16 117:4 145:3 158:23 161:17 166:4 206:20 218:10,16 222:21 223:3 258:18 312:11 314:5 359:6 420:21 <b>higher</b> 103:5 223:3,4 250:15 258:6 281:20 288:22 303:19 305:22 312:17 313:20,21 314:14 317:13 354:2,10 391:9 <b>highest</b> 415:16 <b>historic</b> 452:16 <b>historically</b> 72:1 <b>history</b> 70:15,17 220:14 226:10 247:16 324:15 368:13 427:9	<b>hold</b> 75:8 189:9 204:6 274:7 325:4 465:2 484:3 <b>holding</b> 252:8,10 <b>holland</b> 248:4 <b>home</b> 63:5 <b>honor</b> 447:16 <b>hope</b> 98:16 179:21 211:16 222:20,21 223:8 237:20 246:18 292:3 <b>hoped</b> 104:2 <b>hopefully</b> 246:2 <b>hoping</b> 124:23 <b>hopkins</b> 106:11 125:10 <b>hormonal</b> 416:22 431:12 481:14,20 482:12 <b>hormone</b> 84:23 159:20 164:4,9 201:7,10 212:19 212:23 214:3,7 317:22 319:10 345:7 374:16 375:1 376:13 379:21 384:22 387:3 400:5 416:13 424:9 425:18 426:15 428:14 433:19 437:14,17,23 483:21 <b>hormones</b> 36:22 82:1 213:7,22 214:11,17 216:9 219:17 238:19 247:2,10 260:7 316:16,20 317:4 318:2,7,20 319:4,8 319:14 373:20
---	--	--	---

394:21 401:10,14 404:2 416:13 417:5 428:22 447:22 482:17 488:18 <b>hospital</b> 24:11,14 24:16,17,21 95:18 140:12 142:17,21 262:17 473:23 474:6 <b>hospitals</b> 24:1,3 <b>hour</b> 15:5 16:1,2 87:20 319:21 <b>hours</b> 17:7,10,13 <b>house</b> 63:18 <b>hruz</b> 14:18 16:7,9 17:1 33:12,13 39:15,21 40:11 42:10,19 43:23 57:20,21 78:5 81:17 85:10 86:3 87:10 92:13 114:6 <b>hruz's</b> 15:8 <b>ht</b> 344:14 <b>huge</b> 147:13 287:18,19 <b>hugely</b> 286:12 <b>huh</b> 264:9 361:16 365:4 396:17 420:20 <b>human</b> 131:23 132:2,6,15 134:13 444:8 452:17 454:3 458:22,23 459:4 460:5,7,12 467:6,19 <b>hundreds</b> 121:1 <b>huntsville</b> 24:17 <b>hustle</b> 452:21 <b>hyperfunctioning</b> 156:8,12	<b>hyperhidrosis</b> 206:17 229:10 267:12 <b>hyperplasia</b> 436:23 <b>hypotheses</b> 372:23 <b>hypothesis</b> 372:20 372:21 <b>hypothesizing</b> 373:7 <b>hypothetical</b> 371:7,10 372:8	451:5 457:15 463:5 <b>identifications</b> 463:21 <b>identified</b> 145:1 145:21 318:11 344:19 348:10 349:5 356:21 369:1 374:10 428:16 429:1 476:19 485:22 <b>identify</b> 136:1 355:11 413:12 444:1 472:14 <b>identifying</b> 405:17 <b>identity</b> 154:6 192:17,20 193:20 341:23 342:7,14 398:1 462:3,9 486:6,21 487:18 <b>idiosyncratic</b> 22:8 <b>ignore</b> 415:21 <b>ignored</b> 348:11 349:7 <b>ii</b> 35:4 123:11 225:5 <b>illegal</b> 241:21 242:10 <b>illness</b> 384:7 422:22 <b>illnesses</b> 486:18 488:9 <b>imagine</b> 46:10 198:15 236:9 <b>immoral</b> 124:18 468:13 <b>immutable</b> 448:15 <b>impaired</b> 317:14 <b>imperative</b> 66:17 <b>impinge</b> 82:20 132:10 215:15	447:21 <b>impinges</b> 68:3 <b>implant</b> 148:8 220:17,20 222:8 <b>implants</b> 299:5 <b>implementation</b> 382:13 <b>implementing</b> 198:21 <b>implication</b> 254:2 <b>implications</b> 7:3 <b>imply</b> 28:2 241:20 242:3,5,7,8 <b>implying</b> 254:4 <b>importance</b> 248:21,23 <b>important</b> 93:20 162:1 213:3 241:3 247:12 353:14 392:6 399:7 400:11 460:3 <b>impossible</b> 319:6 <b>impression</b> 46:14 <b>improper</b> 206:5 216:18 241:21 242:9,21 <b>improve</b> 40:6 111:12 <b>improved</b> 6:9 300:7 <b>improvement</b> 66:16 265:8 266:5 <b>improvements</b> 295:20 <b>improving</b> 152:13 <b>inadequacy</b> 337:20 <b>inappropriate</b> 111:19 <b>incarceration</b> 313:14
	<b>i</b>		
	<b>idea</b> 48:4,14 49:12 52:17 159:12 177:13 188:9 192:12 255:13 269:3 307:7 379:18 380:1 381:10 402:16 425:16 426:13 433:18 456:20 <b>ideas</b> 461:9 469:1 <b>ideation</b> 487:5 <b>identification</b> 12:6 27:9 34:7 37:23 55:9 62:19 94:1 108:7 116:2 127:17 161:10 171:7 223:18 230:14 232:23 239:16 256:15 263:10 299:15 326:2 339:18 355:18 361:11 368:15 370:2 375:16 388:20 394:9 396:20 411:4 414:22 419:17 427:1 430:9 434:10		

<b>incisions</b> 134:7 <b>inclined</b> 294:23 <b>include</b> 38:12 144:9 209:3,4 215:10 331:3,7 358:9 363:2 412:15 415:12 431:2 436:22 451:17 <b>included</b> 72:17 107:9 210:13 225:16 267:3 302:2 327:22 452:11 <b>includes</b> 301:14,19 303:23 437:14 <b>including</b> 36:21 145:16 172:12,15 173:14 274:20 328:22 358:15 379:5 431:13 437:22 441:14 449:6 463:16 474:15 487:2 <b>inclusion</b> 243:1 356:22 <b>incongruent</b> 195:18 <b>inconsistent</b> 176:9 179:3 222:3 <b>incorrect</b> 46:5 150:16 448:20 <b>incorrectly</b> 447:23 450:6 <b>increase</b> 328:14 345:3 393:19 <b>increases</b> 328:13 392:17 393:1,12 405:19 <b>increasing</b> 328:6 355:10	<b>increasingly</b> 328:5 <b>incredible</b> 86:20 <b>incumbent</b> 68:10 <b>indicate</b> 490:5 <b>indicated</b> 112:5 <b>indicating</b> 267:1 268:10 <b>indication</b> 216:15 221:8 233:21 243:10 265:8 268:4 314:17 333:19,23 334:3 478:19 <b>indications</b> 226:16 228:21 334:5 335:2 351:17 406:5 <b>individual</b> 13:4 17:14 241:13 248:22 253:8,13 417:18 431:1 448:17 456:14 479:15 <b>individually</b> 36:8 188:20 <b>individuals</b> 41:5 41:19 436:7 <b>industry</b> 19:8 20:20 21:11 22:2 291:14 293:4,8 386:2 434:4 <b>infants</b> 241:4 <b>infection</b> 478:6 <b>infectious</b> 178:19 <b>infer</b> 199:1 413:15 <b>inferences</b> 392:9 <b>inferring</b> 237:8 <b>inflection</b> 122:20 185:17 <b>inform</b> 209:21	<b>informal</b> 164:20 <b>information</b> 55:15 57:9 58:15,20 74:10 77:6,7,10 123:6 194:10 241:7 249:5 251:16 280:16 296:19 324:1 380:20 381:17 382:14 418:14 <b>informative</b> 392:7 <b>informed</b> 68:19 119:2 209:1,2 225:11 233:23 235:1 401:22 402:12,22 403:9 404:11,15,16 <b>informs</b> 176:12 223:7,9 444:9 <b>inherent</b> 113:23 <b>initial</b> 156:11 235:4 <b>initially</b> 196:1 337:16 <b>initials</b> 446:10 <b>initiated</b> 406:2 407:1 <b>injectables</b> 140:1 <b>injection</b> 266:12 266:13 <b>injections</b> 140:23 261:20 262:1,5,22 <b>injured</b> 473:16 474:16 <b>injuries</b> 178:6 479:2 490:18 <b>injury</b> 422:22 <b>innovations</b> 229:4 <b>innovative</b> 294:22 <b>innovators</b> 295:6 295:14	<b>inpatient</b> 257:13 258:7 <b>input</b> 128:4 134:8 198:17 <b>insert</b> 202:2,6 206:3 209:6,9 210:14 215:11 <b>inserts</b> 210:16 <b>insist</b> 449:17 450:4 <b>insisted</b> 283:9 <b>instance</b> 244:10 <b>instances</b> 273:12 <b>institute</b> 21:3 53:20 260:13 <b>institution</b> 282:19 308:22 312:19 <b>institutional</b> 234:12 235:20 246:10,21 <b>instrument</b> 140:17 282:13 324:11 332:23 333:1,12 333:17 <b>instruments</b> 332:1 332:3 <b>insufficient</b> 339:1 398:9 399:9 <b>insurance</b> 291:13 291:23 292:14 376:20 385:4,6,9 385:21 386:2,6,14 387:9,19 423:13 424:15,18 425:11 429:18 431:21 432:11,19 434:4 436:10,12 437:1 438:21 <b>insurer</b> 376:3,8 420:22 425:7 433:10,14
--	--	--	--



<b>insurers</b> 385:12 425:12 439:4 <b>insuring</b> 438:9 <b>intake</b> 70:20 <b>integrity</b> 273:2 280:10 <b>intend</b> 12:10 226:2 <b>intended</b> 316:23 <b>intensifies</b> 5:4 <b>intent</b> 234:8 <b>intentional</b> 60:5 60:17,22 <b>interchange</b> 56:14 <b>intercourse</b> 333:4 <b>interest</b> 81:3 92:15 199:5 253:9,14 284:15 462:22 <b>interested</b> 82:18 122:10 492:17 <b>interesting</b> 125:8 335:11 337:9 338:6 351:6,18 416:10 436:2 <b>interestingly</b> 357:8 <b>interim</b> 4:19 55:16 <b>interior</b> 67:21 351:10 450:14 <b>internal</b> 130:10 279:8 439:2 <b>international</b> 451:15 454:7,14 455:9 <b>internet</b> 359:20 360:20 <b>interpret</b> 274:19 274:21 275:6 276:4 277:11 352:15 <b>interpretation</b> 212:23 276:14	<b>interpreted</b> 392:16 <b>interpreting</b> 212:7 276:13 <b>interval</b> 345:22 346:13 347:4,14 <b>intervention</b> 106:21 112:4 124:6 271:22 400:17 <b>interventions</b> 89:22 90:7 104:12 145:16 315:20 330:8 369:14 399:16 462:18 481:21 482:5,21 485:16,20 <b>intraabdominal</b> 315:21 <b>intracranial</b> 272:20 315:23 <b>intrathoracic</b> 315:22 <b>intrinsic</b> 442:14 443:12 <b>introduce</b> 27:5 37:21 55:6 62:16 95:20 108:4 114:15 127:14 170:11 171:5 223:14 230:11 255:19 263:6 299:12 325:4 375:13 388:14 394:6 396:8 411:2 414:16 417:7 426:21 434:6 451:2 463:1 <b>introduced</b> 110:9 310:12 461:9	<b>introducing</b> 414:19 <b>introduction</b> 184:22 240:5 326:12 328:19 334:23 <b>introductory</b> 87:16 91:14 403:13,14 <b>introitus</b> 479:7 <b>invalid</b> 319:16 <b>investigate</b> 221:16 452:7 <b>investigated</b> 118:4 118:16 120:12 235:17 <b>investigating</b> 306:1 <b>investigation</b> 118:23 119:11 235:5 279:5,9 <b>investigational</b> 5:17 218:20 232:10,14,17 233:14 234:10,11 234:19 241:22 242:3 423:2 425:2 <b>investigations</b> 229:6 <b>investigative</b> 235:6 <b>investigator</b> 272:10 273:3 274:15 278:5 279:3 309:20 315:4,17 <b>investigators</b> 273:1 276:23 <b>investors</b> 386:3 <b>invitation</b> 80:8	<b>invite</b> 84:15 <b>invited</b> 79:16,18 80:4 81:16 <b>involve</b> 149:15 336:9 <b>involved</b> 56:8 58:19 78:6,13 98:18 99:6 110:22 143:7 184:4,18 190:12,16 197:12 197:16,21 272:13 278:18 279:13 306:20,23 334:5 371:23 402:4 441:19 472:19 475:4 476:1 477:9 479:14 <b>involvement</b> 54:15 78:10 379:14 <b>involves</b> 36:15 51:21 271:7 274:12 467:16 <b>involving</b> 478:17 <b>ir</b> 235:23 <b>irb</b> 236:3 237:12 237:14,19,20 246:12 <b>irbs</b> 235:23 <b>irrelevant</b> 186:1 <b>irreversible</b> 119:6 287:15,17 484:16 485:5 <b>isolated</b> 129:21 351:12 <b>isolation</b> 70:19 71:11 <b>issue</b> 47:14 56:9 65:9 67:18 77:15 89:17 92:8 95:8 95:10 106:17 114:14 163:21
--	--	--	--

177:13 194:17 218:13 241:4 243:22 244:21 251:11 259:21,23 287:11 346:19 385:8,9 398:7 400:11 457:8 483:2 488:1 <b>issued</b> 264:16 <b>issues</b> 53:16 66:12 66:13 82:7,8,19 85:6 92:11 119:10 123:9 199:6 213:3 233:5 291:15 346:10 351:13 438:7 452:12 453:19 462:3,9 487:7 <b>italicized</b> 59:19 <b>items</b> 401:18 421:11 422:2 <b>iteration</b> 415:14 <b>iv</b> 172:4,5,6	296:17 297:1,3,17 298:12,17,22 300:10 302:22 303:6 304:13 305:14,20 306:3,4 306:22 307:1,11 307:22 331:12 364:3 <b>journals</b> 128:19 129:4 274:1 <b>judge</b> 37:9,15 38:4 179:12,21 180:2,4 231:12 <b>judge's</b> 42:4 <b>judgment</b> 241:16 295:3 <b>judgments</b> 486:20 <b>julie</b> 444:21,21 <b>july</b> 7:6 33:23 37:8 38:11,16 141:15 141:20 383:1,5 <b>jump</b> 285:4 <b>jumping</b> 456:17 <b>june</b> 55:16 <b>justice</b> 77:3 444:4 444:5 <b>justifiable</b> 484:13 <b>justifiably</b> 309:7 <b>justified</b> 294:5 314:4 <b>justify</b> 287:21 293:22 482:16	<b>kept</b> 37:3 <b>kettenis</b> 380:17 <b>kevin</b> 3:10 <b>key</b> 71:8 291:15 345:9 413:11 <b>kicks</b> 337:12 <b>kin</b> 492:15 <b>kind</b> 20:15 32:12 52:4 54:23 76:22 81:6 82:12 87:9 91:22 98:16 110:18 119:11 125:10 150:4 153:21 154:2 164:14 168:12 175:4,9,20 176:5 179:17 185:2 186:6 187:1,7,11 187:16 191:11,17 198:6,11,14 199:10 201:19 208:2 220:17 223:5 229:7 285:21 286:14 288:7 332:7 355:5 358:13,23 366:7 369:21 390:20 416:21 450:2 470:22 <b>kinds</b> 52:9 208:23 <b>kitchen</b> 131:4 <b>knepper</b> 3:4,5 4:5 10:17,18 14:3,23 15:4 21:14,20 22:5,12 26:6,21 28:13 29:7,15,19 30:1,22 31:4 32:14,21 34:20 36:13 37:2,5 39:18 40:21 41:21 42:12 44:5 47:6	47:16 48:7 49:23 50:6 51:15 52:6 52:14,19 53:1 54:13 55:3 57:14 58:17 60:20 62:1 65:17 73:14 74:19 76:18 77:13 78:8 78:20 80:2 81:8 83:6,15 88:17 89:3 90:17 91:16 92:17 96:18 97:12 97:23 98:8,20 99:8 102:12 103:10 107:22 110:3 111:20 112:23 113:21 114:11,18 115:9 117:3,10,18 118:6 118:20 120:20 126:3,6,13,20 127:7 128:15 135:18 136:18 137:13 148:2 149:14,18 151:14 154:3 155:16 157:12 158:7,11 162:17 163:2,14 166:12 168:20 173:5 175:1,7,12 175:14,17,23 176:11 179:5,10 179:18 180:9,16 181:2,13 184:20 187:4,14,20 188:12 190:18,23 191:4,10,15,21 192:3,10,23 193:6 193:9,17 198:9,23 199:15,21 200:5 200:10,16 204:14 204:22 206:7
<b>j</b>			
<b>j</b> 322:18,18 340:15 389:13 <b>january</b> 141:20 257:13 427:12 <b>jeff</b> 91:20,23 <b>jefferson</b> 492:3 <b>john</b> 3:4,5,8 10:17 493:1,2 <b>johns</b> 106:11 125:9 <b>join</b> 101:9 <b>joined</b> 101:11 <b>joint</b> 4:19 55:15 <b>jones</b> 10:23 <b>journal</b> 12:21 102:2 135:17 284:5 296:2,8,13	<b>june</b> 55:16 <b>justice</b> 77:3 444:4 444:5 <b>justifiable</b> 484:13 <b>justifiably</b> 309:7 <b>justified</b> 294:5 314:4 <b>justify</b> 287:21 293:22 482:16		
	<b>k</b>		
	<b>k</b> 256:19 445:6 446:13 <b>kadel</b> 1:9 9:21 12:23 493:4 494:1 495:1 <b>karolinska</b> 260:13 <b>keep</b> 69:12 88:4 332:7 378:23		



207:16,21 208:18	425:15,20 426:17	136:5 141:23	277:13 282:14
211:13 212:5,21	427:22 428:4	142:2 145:12,16	283:22 285:3
215:3 216:1 217:3	429:3,11,22	146:12 148:8	286:22 290:6
217:8 221:10	431:19 432:10	156:17 159:19	295:23 296:22
222:5 225:22	436:1 438:4,17	160:7,8,15 163:8	298:16 299:10,10
226:19 227:19	439:7 440:14,17	164:3,6,8,11,13	299:13 307:3
228:15 229:22	441:10 442:16	165:12 166:23	313:6 315:12
232:7 234:20	443:15,21 446:19	167:7,13 169:10	317:20 318:18
236:6 237:6 238:4	447:1,12 448:19	169:13,17 170:21	319:19 321:18
238:9 239:11	449:10 451:19	171:6 173:21	326:1 328:1
240:19 242:4,12	453:21 454:12,18	176:20 180:13,20	331:18 334:6
243:13 245:11,17	455:12 458:2	180:21 182:8,15	338:3 339:16
251:4 252:7	459:11 460:20	184:7,14,15,16	351:13 354:1,9
253:17 255:20,23	461:18 462:6,12	185:2 187:1,6,7,11	355:21 359:3
256:5,11 259:2	465:6 469:8 471:3	187:16,23 188:4	361:4,18 368:4,6
266:7,9 267:21	471:4,11 472:1,9	189:20 190:2,4,15	369:2 372:2
269:1,7 270:6,12	489:2,8 490:23	190:20 191:6,11	375:14,23 376:16
273:10 274:9	491:3 493:1	191:17,23 192:5	376:17,18,23
275:14 280:22	<b>knepperllc.com</b>	192:19 193:2,5,11	381:6,23 382:4
281:1 285:16	3:8 493:2	193:23 194:9	383:15 388:19
286:20 288:15	<b>knew</b> 259:6,7	195:16,20,23	391:6 394:8
293:13 294:20	<b>know</b> 12:4 14:18	196:3,6 197:20,23	395:17 396:19
295:12,18 297:19	15:17,18 19:20,21	198:1,5,11,18	399:1 400:23
298:5,14 303:9	19:22 20:5,13,14	199:10,16 200:7	405:4 408:16,19
305:11 307:6	20:22 26:11,13,16	201:12 202:2,12	408:21,22 409:2,4
308:1 311:18	27:7 33:20 34:5	202:15 203:20	409:5,11,17,17
318:4 324:2	38:18,20 43:3,6	205:15,17 207:17	411:2 414:20
333:15 340:2	47:13 50:2 51:11	208:5,12 211:8	418:11 419:1,11
342:20 352:7	55:7,20,22 56:10	213:22 214:20	420:18 426:23
357:23 359:2	61:18 62:7,17	220:11,11 221:20	429:16,19 430:2,7
362:3,19 364:7	65:21 68:10,15	221:23 222:18	433:6,7,15 434:15
367:2 371:8 374:8	70:9 78:9,12,15	223:6,16 224:1	436:14,20 439:15
376:10 381:11	83:17 84:14 88:3	226:3,21 230:6,13	440:6 441:21
383:2 385:17	93:16 96:1 98:10	232:9,15,18,22	447:4 451:4
387:6,16 395:13	99:16 100:9 102:6	235:19 238:23	455:21 460:2,4,4
399:22 406:15	104:13 107:11	239:9,15 249:23	471:13 474:18
407:6 408:14	108:5 111:11	254:22 255:4,9,15	488:12 489:21
409:10,16,22	114:16,20 119:11	256:13 259:4,8,11	490:10
410:13 412:14	120:17,22 121:3	262:8 263:8,19	<b>knowing</b> 104:13
413:20 416:1,6	124:20 125:8,16	268:3,12,13,14	205:10 322:13
424:5,12,23	127:15 131:8	271:4 276:10	354:6 367:4 382:5

442:1 <b>knowledge</b> 47:17 47:19 48:8,22 49:4,20 51:9 68:14 80:16 83:5 86:19 121:10 131:8,9 156:21 170:1 177:8 193:15 209:14,18 408:7 <b>known</b> 102:15 168:8 177:1 316:12 321:11 404:5 <b>knows</b> 185:22 188:22 189:3 205:18 469:4 <b>kwilliams</b> 3:14	242:9 243:1,18,22 243:23 244:4,8,11 244:23 245:2 246:4,16 247:9,12 247:19 250:17 251:22 253:2,13 255:3,5,12,16 256:20 257:2,20 258:3,5,13,14,17 258:23 259:9,18 259:21,23 260:2 260:15,22 261:4 262:23 263:4 267:11,23 268:2 268:18 269:9,21 270:3 483:8,14,23 484:4,8,14,17 489:13 <b>labeling</b> 209:23 210:3,6 215:21 225:16 233:21 241:8 242:19 243:3 265:16 266:1 <b>laboratory</b> 212:8 437:16 <b>labs</b> 212:2,7,18 <b>lack</b> 21:17 120:10 237:17 243:3 329:23 330:7,8 346:19 371:4 467:4 <b>lambda</b> 2:13,19 <b>lambdalegal.com</b> 2:16,22 <b>lane</b> 9:1 10:8 471:7,13 491:6 492:19,20 <b>language</b> 59:18 74:9 78:2 112:1,3 194:22 228:1	331:1 335:3,5 385:4 386:12,14 457:2,4 458:16 <b>lapper</b> 9:10 <b>lappert</b> 1:20 4:13 4:15 5:7 8:12 9:19 11:5,14 22:18 34:12 57:4 60:11 60:14 64:9 137:23 138:11,16 139:3,6 140:5 255:21 464:20 468:23 472:10 475:11 481:6 483:7 491:1 491:12 493:5 494:2,24 495:2,4 495:12 <b>lappert's</b> 11:3 <b>lapse</b> 99:21 100:3 <b>lapsed</b> 100:11 <b>large</b> 9:3 95:12 121:3 290:16 342:23 348:12 349:8,19 404:6 475:9 479:4 <b>larger</b> 287:21 352:11 396:23 <b>largest</b> 376:7 425:11 429:17 433:13 474:21 <b>laser</b> 139:22,23 142:11 145:19 146:2,4 147:4 151:11 152:9,17 153:2 <b>lasted</b> 97:11 <b>late</b> 394:23 <b>lately</b> 19:19 412:23 <b>latest</b> 183:1 196:21	<b>law</b> 3:5 30:17 36:16 51:22 52:5 53:13 242:23 <b>lawsuit</b> 409:9 <b>lawsuits</b> 83:12 <b>lay</b> 45:20 218:17 <b>lays</b> 462:19 <b>lcb</b> 1:7 10:2 <b>lead</b> 133:4,7 272:9 273:3 389:3 <b>leader</b> 472:15 <b>leaders</b> 72:3 <b>leading</b> 270:18 329:5 381:17 <b>leads</b> 246:11 324:18 <b>learn</b> 425:14 457:4 458:16 <b>learned</b> 122:15 125:18 284:23 468:15 <b>learning</b> 70:1 <b>leave</b> 396:10 <b>leaves</b> 395:15 <b>left</b> 137:22 171:15 242:15 248:16 252:21 349:20 451:13 461:1 <b>legal</b> 2:13,19 10:6 10:9 83:8,19 99:12 493:23 <b>legislation</b> 77:11 109:15,21,22 110:7 117:6 <b>legislative</b> 54:16 77:2 78:7 110:18 113:15,17 <b>legislators</b> 54:8 76:7 <b>legislature</b> 4:18 57:10 58:15,21
<b>l</b>			
<b>l</b> 2:12 16:21 203:8 203:8,11 356:2 446:13 <b>lab</b> 211:11 <b>label</b> 5:15,16,22 6:1 119:5 205:13 205:16 206:4,8,10 207:1,3 216:5,13 216:19,22 217:12 217:16 218:2,7,18 218:22 219:6,20 219:23 220:3,15 220:19 221:17 222:2,4,16 226:2,6 226:23 228:17,19 229:21 230:23 231:23 232:9,16 233:13 234:17 236:4,14 237:5 238:2,14 239:5 240:2,10,16 241:3 241:12,20 242:2,6			

59:8,13 <b>legislatures</b> 76:16 113:8 <b>legs</b> 460:5,6 <b>length</b> 345:8 346:16 347:13 352:13 <b>lengthy</b> 159:6 <b>leon</b> 2:14 <b>lesser</b> 252:15 267:3 <b>letter</b> 6:5 135:16 136:9 263:20 265:22 <b>letters</b> 27:17 135:21 136:1,16 279:23 373:16 <b>level</b> 56:11 88:10 88:22 124:1,4,7,11 158:23 219:2,9,12 219:18 250:15 281:21,23 282:1 282:11 283:17,20 284:3,6,8,12,21 285:13,22 286:3 286:14 288:6,14 288:14,21 289:2,7 289:9,17,22 290:15,17 293:16 293:22,23 294:3,4 294:4,10 295:11 295:16 300:17 302:10,17,22 303:13,22,23 304:5,11,17 305:1 305:2,2,4,4 306:13 310:6 312:6,6 313:21,23 323:13 323:15 329:14 337:12 362:21 363:3,14,15 364:1	370:13,13,14,15 414:6 416:9 420:21 439:11 476:5 477:2 487:1 <b>levels</b> 6:6 212:19 212:23 287:23 299:20 300:21,22 301:7,11,13 303:19 312:17 313:19 314:14 319:10 324:16 414:3 <b>levine</b> 16:20,23 17:5,6 19:10 33:19,20 39:15,22 40:12 42:10,20 43:23 58:2,5 78:5 85:13,16 114:7 <b>lgbtq</b> 458:7 <b>liability</b> 67:11 <b>library</b> 415:3 <b>license</b> 265:1 <b>licensed</b> 153:20 <b>licensing</b> 30:16 <b>lie</b> 464:21 <b>lies</b> 284:2 <b>life</b> 67:2 68:9 71:11,14 119:22 152:13 156:3 182:2 244:19 290:2,17 311:5 314:2,7 322:13 359:4 450:18 468:13 469:17 490:7,17 <b>lifelong</b> 482:22 <b>lifesite</b> 464:14 <b>lifesitenews.com</b> 8:18 <b>lifetime</b> 220:14 286:23	<b>light</b> 97:15 139:22 140:14 145:17 181:15 259:19 260:2 328:15 <b>likelihood</b> 161:7,9 161:17 458:11 <b>likes</b> 72:2 434:5 <b>liking</b> 104:23 105:2 <b>limb</b> 475:3 477:5 <b>limit</b> 172:19 <b>limitation</b> 173:14 <b>limitations</b> 342:11 391:16 412:12 413:7,11,18 <b>limited</b> 29:9 66:5,5 66:7 68:13 96:21 143:15 148:15 152:5 267:8,9 306:6 413:12 431:13 <b>line</b> 30:2 237:23 264:13 320:17 494:4,7,10,13,16 494:19 <b>lines</b> 143:19 158:16 166:2 265:10 266:6 267:18 268:5,7,8 <b>lipoplasty</b> 142:12 <b>lips</b> 471:8 <b>lisa</b> 368:7,17,17 370:14 371:12 <b>list</b> 41:16 62:11 110:11,16 111:3 116:10 136:4,15 172:22 210:15 224:3 381:7 421:10 422:2 458:5	<b>listed</b> 112:19 133:1 135:20 372:23 380:2,2 423:14 441:11 480:7 <b>listen</b> 292:17 353:17 <b>listening</b> 261:16 <b>lists</b> 42:6 128:23 455:14 <b>literature</b> 12:21 13:8 45:9 46:19 47:20 50:3,8,11,12 51:2,12,17,19 69:13 72:14,16 86:20,22 89:8,12 89:14,15,19,20 117:22 124:13,14 127:10,12 129:15 135:12 161:4 177:2,3,16 185:3 185:14 186:2 187:2 191:12 194:6 198:6 205:4 228:11,20 247:4 247:22 250:10 260:3 268:19 270:17 274:13,20 283:22,23 297:12 313:3,5 329:1 336:3 337:21 338:2 343:20 346:12 353:18 356:13 358:11 368:6 370:23 410:4,7 414:1 416:12 439:5,11 439:20 441:13 443:6,7 473:15 480:23 483:4 485:19 486:23
---	--	--	--

487:6 488:21 <b>litigation</b> 90:15 176:20 <b>little</b> 15:5 16:14 93:12 97:2 101:20 142:20,23 340:3 358:2 442:5 467:21 <b>littman</b> 369:16 371:12 372:18 <b>littman's</b> 368:7,17 370:14 <b>live</b> 38:15,19 277:8 <b>lives</b> 66:17 <b>living</b> 71:11 <b>llc</b> 3:5 <b>llp</b> 10:16 <b>load</b> 339:22 <b>lobbied</b> 54:22 <b>local</b> 30:15 64:20 142:20 178:10 478:17 <b>located</b> 10:4 138:13 <b>loe</b> 301:8 <b>logo</b> 101:3 451:14 451:17 <b>long</b> 7:7 15:3,21 41:16 85:5 87:20 88:4 89:10 90:20 91:1 97:10 101:5 102:8 124:11 138:3,16 164:22 202:14 206:15 249:20 291:12 292:12 311:22 312:11 313:10 314:15,16 332:8 345:14 352:18 353:17 397:22 398:10 399:10	404:7 452:23 478:11 485:12 <b>longer</b> 24:8 47:2 122:7 125:7 165:3 166:3 296:23 352:20 <b>longitudinal</b> 124:12 219:13 249:19 281:17 291:12 292:13 299:4 311:9 <b>longitudinally</b> 250:1 <b>longstanding</b> 230:2 <b>look</b> 14:15 17:11 22:14 27:20 28:15 30:12 34:4 38:23 40:1,23 41:1 43:7 57:16 64:6,16 110:4 111:5,22 113:6 119:20 125:10 136:7 152:9 159:11 173:8 174:2 223:11 232:11,20 239:4,13 240:5,22 242:15 248:16 250:6 252:20 256:3,4 257:7,17 275:21,23 276:1,7 297:13 307:13,15 309:5 311:23 312:21 313:11 314:14 317:7 322:15 323:19 326:17,17 330:11 337:10,14 344:8 344:11,23 345:20 347:4 356:7,17 360:3,23 363:17	383:6 391:19 394:13 396:5 405:11 411:1,15 422:10 428:10 429:6 430:22 439:5 440:18 458:18 465:22,22 <b>looked</b> 201:23 202:5 277:2 345:14 358:7 <b>looking</b> 106:6 107:3 110:15 160:20 173:20 176:15 202:13 219:12 249:22 282:10 284:1 301:2 311:8 313:5 337:3 344:6 345:19 347:7 356:9 363:21,22 364:3,9 379:1 445:16 <b>lookout</b> 463:18 <b>looks</b> 263:20 304:23 305:3 341:2 453:16 <b>lose</b> 170:5 <b>losing</b> 325:17 <b>loss</b> 178:15 287:17 348:12 349:7 <b>lost</b> 95:22 297:11 <b>lot</b> 24:3 36:9 56:6 56:7 96:12 104:4 105:9 108:2 143:3 143:11 144:7 148:7,10 165:11 252:4 298:21 346:12 351:21 380:21,22 412:11 <b>low</b> 120:9 206:19 218:8 219:5	222:14,17,21 270:15 285:5 287:23 288:6 295:21 310:8 327:1 329:13,14 381:19 482:5 484:9,13 <b>lower</b> 309:8 314:18,19,19 354:2 358:12 414:2 <b>lowest</b> 252:11,17 283:7 284:9 323:13,15 482:19 <b>lpa</b> 1:7 10:2 <b>luminaries</b> 310:19 <b>lump</b> 156:6 <b>lunch</b> 97:15 255:2 <b>lupron</b> 201:5,13 201:15 202:6 205:11 <b>m</b> <b>m</b> 16:16 20:23 360:10 422:5 445:6 <b>m.d.</b> 1:20 9:10 11:5 57:4 58:2,9 60:11 493:5 494:2 494:24 495:2,4,12 <b>madison</b> 138:12 138:18,19,21 139:7 140:10 <b>mail</b> 59:1,3,4 98:11,16 <b>main</b> 23:22 338:21 455:15 <b>maintain</b> 24:7 195:7 234:2 236:23 455:3 <b>maintained</b> 21:2
--	--	--	--

<b>maintaining</b> 23:23 24:9 <b>major</b> 40:2,16 95:11 210:22 215:10 478:8 487:2 <b>majority</b> 330:17 335:19 456:23 <b>maker</b> 131:3 <b>making</b> 6:21 45:16 53:23 121:11 131:20 177:9 236:8 248:19 250:12 261:18 275:9 356:3 357:5 360:21 380:8 381:9 382:3 398:15 444:12 452:5 470:6 485:1 487:8 488:6 <b>male</b> 6:12 148:15 322:23 323:3 341:22 348:13 349:9 390:7,8 456:3 457:16 488:7 <b>males</b> 488:10,11 <b>malignancies</b> 479:3 481:4 <b>malignancy</b> 144:10 <b>malignant</b> 44:17 <b>malleable</b> 336:19 <b>malpractice</b> 66:23 316:2 <b>man</b> 71:9 95:21 456:14 <b>man's</b> 71:20 <b>manage</b> 53:8 67:10 112:14 145:14,19	<b>manageable</b> 310:8 <b>management</b> 145:22 147:4 213:11 272:20 473:11,12,13 479:2 <b>managerial</b> 432:17 <b>managers</b> 54:2 <b>managing</b> 53:16 178:18,18,19 <b>mandate</b> 27:22 <b>mandatory</b> 173:3 <b>manipulated</b> 367:15 368:1 370:10,20 <b>manner</b> 234:8,23 <b>manufacturer</b> 264:7 <b>march</b> 377:13 379:6 380:18 381:9 424:8 <b>marginal</b> 267:10 <b>mark</b> 67:7 72:2 381:1 <b>marked</b> 4:12 12:6 27:9 34:7 37:23 55:9 62:19 108:7 116:2 127:17 171:7 223:18 230:14 232:23 239:16 256:15 263:10 299:15 326:2 339:18 355:18 361:11 375:16 388:20 394:9 396:20 411:4 414:22 419:17 427:1 430:9 434:10 451:5 463:5	<b>market</b> 229:1 267:7 <b>marketed</b> 5:18 221:7 233:14 234:7 <b>marketing</b> 225:13 <b>marks</b> 21:12 <b>maryland</b> 474:13 <b>masculine</b> 130:16 <b>masculinization</b> 167:8 175:5 <b>massive</b> 60:1 217:15 477:5 478:5 <b>mastectomy</b> 134:7 480:16 <b>match</b> 334:2 <b>matched</b> 378:16 <b>material</b> 131:13 <b>materials</b> 275:23 331:22 <b>matter</b> 9:21 10:19 16:9 34:22 88:19 96:13 105:3 117:21 208:12 <b>matters</b> 68:12 83:21 473:2 <b>matured</b> 249:22 317:12 <b>maxwell</b> 1:9 <b>mccaleb</b> 80:11 <b>mcdermott</b> 2:7 10:15 <b>mchugh</b> 16:15 19:11 58:9,11 78:6 85:20 <b>mchugh's</b> 18:8,11 <b>mckeown</b> 444:21 445:14 <b>md</b> 22:18	<b>mean</b> 66:8 88:19 92:19 179:23 217:18 225:20,23 230:6 236:14,16 242:21 251:8 266:18 336:22 355:1 358:21 459:8 461:6 <b>meaning</b> 122:10 122:13 403:14,15 432:13,15 459:18 <b>meaningless</b> 404:12 <b>means</b> 29:5,18 30:21 117:1 173:2 173:6 228:13 242:23 440:6 447:9 462:4,10 466:22 492:6 <b>meant</b> 50:23 <b>measure</b> 63:22 235:10 331:19 <b>measured</b> 328:23 334:12 <b>measures</b> 331:13 332:12 333:2 334:13 <b>measuring</b> 300:16 332:1 333:13,18 334:4 <b>mechanism</b> 195:2 372:22 <b>media</b> 9:18 79:3,7 166:16,20 254:15 254:19 320:2,6 367:16 368:21 373:1,2 388:7,11 470:12,16 491:9 <b>median</b> 347:9 <b>medic</b> 240:11 438:1
---	---	---	--

<b>medical</b> 5:19 7:5 8:6,9 13:3 39:5 40:2,16 41:3,17 42:6,16 43:22 45:14 46:23 52:1 54:2,10 64:23 65:8,15 86:13,19 86:21 104:14 112:8 114:1 115:18 122:5 128:19 129:4 144:16 159:15 161:18 194:14 208:9,21 215:14 223:6,8 225:11 226:14 228:10,20 231:19 233:15 234:2 248:3 271:21 272:19 274:20 280:10 296:7 327:14 342:6 363:19 369:13 373:20 376:12 378:20 379:3,5 380:16 384:7 385:5,8 386:13,19 402:1 402:19 406:5 410:7 418:16,23 419:10 421:3 422:16 424:16,17 430:13 432:17 434:19 436:13,14 436:17,17 438:23 444:11 447:15,18 448:2 449:19 450:3,5 459:5,9,20 469:22 470:7 473:7 474:21 479:14 482:4 483:4 485:1,16,19	485:20 486:3 487:15,21 488:5 <b>medically</b> 40:5,19 41:19 44:2 103:8 105:13 107:13,20 111:7,19 112:5 113:9,20 114:10 144:5 231:12 232:1 374:5,11,12 374:18 375:2,8 383:9 384:6,23 385:14 387:4,7,15 387:17 388:1 422:6,7,15 423:7 424:11 425:18 426:15 427:19 428:2,6,14,22 429:9,21 430:23 431:17,20 432:8 432:13,14,18,21 433:4,20 435:17 435:23 436:11,19 438:1,15,20 473:17 <b>medication</b> 6:1 235:8 256:20 258:5 <b>medications</b> 63:13 145:18 220:16 240:11 253:2 258:4 437:15 438:1 484:9,14 <b>medicine</b> 64:18 79:22 81:2 82:4 89:6 132:11 151:22 234:9 249:1 412:17 444:18 454:6 460:9,15 469:16 <b>medicines</b> 226:11	<b>mediterranean</b> 474:11 <b>meet</b> 14:7 95:6 163:7 387:9,11 417:20 428:16 429:1 <b>meeting</b> 84:15,17 84:21 85:10,11,14 85:18 86:1,5,6,8 89:1 90:14 91:6 91:10,15 93:3,10 93:21 94:9,15 95:1,2,3 96:2,16 97:1,8,11,20 98:4 103:18 222:9 <b>meetings</b> 14:13 80:1 84:1,3,6 98:5 102:9 153:4,10 165:10 188:5,10 192:6,13 200:1,8 418:7,13,15,19 419:2,6,12 <b>member</b> 45:2 46:22 48:11 49:8 65:7 99:19 100:4 101:12 169:17,18 171:19 190:8 296:23 <b>members</b> 48:18 93:23 102:14,15 103:7 105:18,21 169:13 170:14 171:1 172:11,21 173:9 180:22 181:10 189:4 190:21 193:2,7 194:15 296:14 297:3 365:1 <b>membership</b> 45:17,22 46:4,14 99:20 100:3,9,11	100:12,22 101:1,3 101:22 102:4 108:3 177:12 <b>memorable</b> 478:3 <b>memory</b> 56:9 332:8 400:8 <b>men</b> 67:9 214:6 <b>mental</b> 40:7 65:11 66:4 74:17 75:9 75:14,18,22 111:13 149:15 153:20 154:1,12 155:8,12,14 157:7 157:10 418:8 486:18 <b>mention</b> 66:23 68:18 118:9 335:23 412:10 <b>mentioned</b> 14:1 15:15 20:10 72:9 97:18 213:21 219:22 290:21 393:23 <b>mentioning</b> 335:17 <b>merely</b> 46:19 283:19 307:11 338:12 343:15 <b>merited</b> 293:7 <b>message</b> 163:11 <b>met</b> 14:2 17:1,6 85:15,19 94:23 95:1 96:1 292:11 356:22 385:2 386:23 401:15 427:20 435:15 <b>meta</b> 307:19 <b>metaanalyses</b> 302:18 <b>meter</b> 86:10
--	--	---	--



<b>methodo</b> 120:6	406:13	<b>modeled</b> 368:21	<b>morally</b> 467:8,11
<b>methodological</b> 482:6	<b>minus</b> 44:10	<b>modeling</b> 367:16 373:3	<b>morbidity</b> 393:20
<b>methodologically</b> 120:7	<b>minute</b> 27:7 115:8 210:21 272:4 397:1 471:19	<b>moderate</b> 265:9 266:5 267:17	<b>morbidity</b> 392:18 393:1
<b>methodology</b> 309:11 352:4	<b>misconduct</b> 118:5 118:17 120:12 121:7 126:12 127:6	<b>modern</b> 149:9	<b>morning</b> 9:15 11:10,11 97:15
<b>methods</b> 257:7 276:1 331:22 411:18	<b>misdiagnosed</b> 328:20	<b>modification</b> 71:10 75:2 130:11	<b>morph</b> 88:5
<b>metoidioplasty</b> 168:4 175:16 316:8 478:16	<b>misdiagnosis</b> 328:23 329:19	<b>modified</b> 134:7 236:10	<b>mortality</b> 334:20 392:18 393:2
<b>metric</b> 301:8,10 331:18	<b>misgender</b> 448:7 449:3	<b>modify</b> 66:14,22	<b>mother</b> 93:22
<b>metrics</b> 331:1	<b>misgendering</b> 447:5,9 448:17,21 488:1	<b>mohs</b> 143:4	<b>motivated</b> 398:2
<b>mi</b> 476:12	<b>misinforming</b> 487:19	<b>mol</b> 86:7	<b>motivators</b> 67:17
<b>microvascular</b> 178:2 475:5 476:12	<b>misinterpreted</b> 276:20 277:3	<b>moment</b> 91:12 111:22 264:3 273:14 340:22 384:10	<b>move</b> 186:21 194:21 319:20 347:15 370:4 464:8
<b>mid</b> 161:8 310:14	<b>mislead</b> 172:20	<b>moment's</b> 92:4	<b>moved</b> 256:1 262:17
<b>middle</b> 1:2 9:23 27:16 224:16	<b>misleading</b> 172:14 172:20	<b>momentarily</b> 339:23	<b>movement</b> 467:16 473:3
<b>midwest</b> 95:12	<b>misrepresentation</b> 60:1	<b>moments</b> 467:12	<b>movements</b> 317:11
<b>military</b> 136:22 137:2,5,11,17,22 474:2 476:4,6 477:8	<b>misrepresents</b> 30:14	<b>money</b> 24:6 386:6 386:8	<b>moving</b> 54:6 114:19 207:6 471:8
<b>milton</b> 106:8 125:7	<b>missing</b> 273:16 340:3 346:4	<b>monitor</b> 437:16	<b>mucocoele</b> 133:12 133:14,14
<b>mind</b> 184:23 439:14	<b>mississippi</b> 111:2	<b>monitored</b> 211:11 211:16,17,18 213:5,17	<b>mucosal</b> 478:17
<b>mine</b> 67:7 87:21	<b>missouri</b> 111:2	<b>monitoring</b> 211:20 217:23	<b>multidisciplinary</b> 149:11 150:4,14
<b>minimum</b> 245:15 401:15	<b>mistake</b> 128:10 138:20	<b>montana</b> 111:1	<b>multiple</b> 308:21 335:18 469:12
<b>minor</b> 407:1 445:20,22 449:6	<b>misunderstanding</b> 44:7 45:12	<b>month</b> 25:7 84:12 141:15	<b>murky</b> 97:2 101:20
<b>minors</b> 4:22 7:13 40:5 54:11 55:14 57:12 63:2,14 78:19 84:23 405:8	<b>misunderstood</b> 293:3	<b>monthly</b> 296:10	<b>muscle</b> 265:11 266:15,19 267:18 483:9,9,15
	<b>model</b> 135:11 439:3	<b>months</b> 110:6 141:22 166:1 325:10 351:21	<b>muscles</b> 263:3 266:13,14,15 267:1,1
		<b>moody</b> 38:4	
		<b>moral</b> 81:5,12,12 82:18,19,23 92:10 151:22 464:22 466:3,14 467:5	

<b>mute</b> 105:17 471:7 <b>mutilation</b> 60:5,17 60:22 <b>mwe.com</b> 2:10	<b>naval</b> 473:23 <b>navy</b> 130:20 139:19 472:18 475:13 476:9  <b>nc</b> 7:5 <b>near</b> 59:15 377:11 394:16 421:21 <b>nearly</b> 107:2 336:16 358:7 <b>nebraska</b> 138:15 <b>necessarily</b> 234:18 236:16,20 242:20 286:7 464:1 <b>necessary</b> 24:8 40:6,19 103:9 105:13 107:13,21 111:7 113:9,20 114:10 285:11 310:4 374:5,11,13 374:18 375:3,8 383:9 385:1,15 387:4,8,15,18 388:2 422:7,7,16 423:7 424:11 425:19 426:16 427:19 428:2,6,15 428:23 429:10,21 430:23 431:17,20 432:8,13,15,19,21 433:4,20 435:18 435:23 436:11,20 438:2,15,20 495:6 <b>necessities</b> 423:14 <b>necessity</b> 49:15 114:2 115:18 199:8 236:8,18 237:14 385:6 386:13 421:4 422:16 449:18 <b>neck</b> 156:6 292:5 292:11 468:2	<b>necrosis</b> 178:16 <b>need</b> 36:7 90:14 106:12 126:16,17 134:8 143:14 290:14 292:17 310:5 358:18,20 363:1 458:16 <b>needed</b> 142:22 143:14 195:3 212:20 414:5 <b>needs</b> 363:5 <b>neither</b> 253:2 404:9 409:23 492:15 <b>netherlands</b> 342:16 343:3 <b>network</b> 373:1 <b>networks</b> 368:20 369:20 371:23 <b>neurologic</b> 121:21 <b>neurophysiologi...</b> 317:10 <b>neurosurgical</b> 272:17 <b>neurotized</b> 468:3 476:12 <b>never</b> 16:18 17:6 45:1,4 91:11,12 148:6 149:2 150:3 150:22 151:1 152:2,6,20 153:3,9 157:17,22 167:3 167:10,16,23 168:3,7,11 169:1 170:1 176:1 178:21,23 182:3 183:15,17,19,21 183:23 197:5,8 201:15,17,18 204:16 207:11,15 214:10 233:11	272:9 273:23 274:4 278:1,4 284:23 306:23 310:3,3 402:18 418:3 447:3 467:17 468:4 <b>new</b> 2:9,9,21,21 105:20,22,23 111:1 228:23 234:10 235:7 262:17 284:20 289:15 295:1 296:14 368:9,11 369:8,21 382:18 394:19 419:14 457:4 <b>newer</b> 311:19,20 <b>nice</b> 237:23 <b>night</b> 15:4 <b>nine</b> 184:23 <b>nineteen</b> 32:6 <b>ninety</b> 262:18 <b>nobody's</b> 322:14 <b>node</b> 156:9,12 <b>non</b> 348:4 349:2 351:14,16 402:13 415:13 <b>noncontrolled</b> 416:3 <b>nonexperimental</b> 286:6 288:12,21 293:12 428:3 <b>nonresponsive</b> 186:22 <b>nonsatisfaction</b> 331:20 <b>nonsurgical</b> 144:7 <b>normal</b> 71:18 114:20 205:19 212:3 460:1
---	--	---	--



<b>normalizing</b> 460:3	431:12 448:5	117:18 118:6,20	286:20 288:15
<b>north</b> 1:2 3:12,13	485:14	120:20 126:13	293:13 294:20
9:23 10:19,22	<b>numbered</b> 171:23	127:7 128:15	295:12,18 297:19
11:1 375:20 376:8	<b>numbers</b> 259:12	135:18 136:18	298:5,14 303:9
379:15,19 420:14	303:15 328:11,13	137:13 148:2	305:11 307:6
424:8 425:5	342:23 368:4	149:14,18 151:14	308:1 311:18
474:12	<b>numerous</b> 229:14	154:3 155:16	318:4 324:2
<b>northwest</b> 62:8	<b>nyu</b> 306:11	157:12 158:7,11	333:15 342:20
<b>nose</b> 71:10,13	<b>o</b>	162:17 163:2,14	352:7 357:23
<b>notary</b> 9:2,3	<b>o</b> 203:4,8 277:14	166:12 173:5	359:2 362:3,19
495:13,19	277:14 322:18	175:1,7,12,14,17	364:7 371:8 374:8
<b>note</b> 303:16	356:2 360:9,9,10	175:23 176:11	376:10 381:11
351:18 358:3,6	414:15 445:6	179:5,10,18 180:9	383:2 385:17
392:6 473:19	446:12	180:16 181:2,13	387:6,16 395:13
493:10	<b>oath</b> 254:23	184:20 186:19	399:22 406:15
<b>noted</b> 56:21 120:9	<b>object</b> 44:5 119:4	187:4,14,20	407:6 408:14
371:14 495:7	253:17	188:12 190:18,23	409:10,16,22
<b>notice</b> 92:4 224:22	<b>objection</b> 21:14,20	191:4,10,15,21	410:13 412:14
<b>noticed</b> 338:7	22:5,12 26:6,21	192:3,10,23 193:6	413:20 416:1,6
<b>notices</b> 224:10	28:13 29:7,15,19	193:9,17 198:9,23	424:5,12,23
<b>notify</b> 30:15	30:1,22 31:4	199:15,21 200:5	425:20 426:3,17
<b>november</b> 5:12	32:14,21 36:13	200:10,16 204:14	428:4 429:3,11,22
25:9 224:14	37:2,5 39:18	204:22 206:7	431:19 432:10
<b>number</b> 6:16	40:21 41:21 42:12	207:16,21 208:18	436:1 438:4,17
17:11 61:18 103:3	47:6,16 48:7	211:13 212:5,21	439:7 440:14,17
120:22 121:2,3	49:23 50:6 51:15	215:3 216:1 217:3	441:10 442:16
125:17 147:13	52:6,14,19 53:1	217:8 222:5	443:15,21 446:19
160:4 164:2 173:9	54:13 55:3 57:14	225:22 226:19	447:1,12 448:19
184:22 197:23	58:17 62:1 65:17	227:19 228:15	449:10 451:19
213:4 241:7 246:8	65:20 73:14 74:19	229:22 232:7	453:21 454:12,18
255:8 283:7 285:7	76:18 77:13 78:8	234:20 236:6	455:12 458:2
320:18 321:3,10	78:20 80:2 81:8	237:6 238:4,9	459:11 460:20
321:20 322:4	81:12 83:6,15	239:11 240:19	461:18 462:6,12
328:7 330:2 331:4	88:17 89:3 90:17	242:4,12 243:13	465:6 469:8
331:5 352:11,16	91:16 92:17 96:18	244:6 245:11,17	<b>objections</b> 81:5,13
352:22 354:8,10	97:12,23 98:8	251:4 252:7 259:2	95:17 126:17,18
354:13 358:15	99:8 102:12	266:7 267:21	160:14
360:14 366:22	103:10 107:22	269:1,7 270:6,12	<b>objective</b> 81:13,22
367:5,13,22 370:8	110:3 111:20	273:10 274:9	82:8,19,22 257:1
375:10 377:19	112:23 113:21	275:14 280:22	331:8 334:13
401:21 405:11	114:11 117:3,10	281:1 285:16	336:6 409:14

436:16 444:14 447:16 448:2 449:18 460:11 486:5 <b>objectively</b> 71:17 436:7 <b>obligation</b> 288:2 <b>obliged</b> 447:16 <b>obliges</b> 468:6 <b>observable</b> 317:3 <b>observational</b> 258:6 411:20 413:14 414:6 <b>observations</b> 229:3 <b>obtain</b> 149:3 <b>obtainable</b> 309:11 <b>obtaining</b> 119:7 402:17 <b>obviate</b> 199:4 <b>obvious</b> 75:3 310:1 317:14,19 <b>obviously</b> 131:2 235:16 238:7 244:3 273:3 309:21 310:2 322:3 323:7 362:1 379:10,13 418:6 <b>occasion</b> 144:23 211:5 <b>occasions</b> 229:14 <b>occur</b> 136:3 <b>occurring</b> 335:16 492:12 <b>october</b> 264:17 266:6 267:19 493:3 <b>offending</b> 449:22 <b>offer</b> 12:10 65:16 66:11,21 72:4,5 176:18 177:19,20	181:5 205:22,23 208:23 488:13 <b>offered</b> 35:9 39:12 39:16 67:6 68:17 77:6 89:9,11 112:17 140:15 159:8 238:12,16 238:18,22 <b>offering</b> 34:17,18 36:10,11 39:22 40:12 42:11,20 88:15 107:6 114:7 118:12 122:14 123:10 130:14 140:20 150:11,15 154:23 159:17 176:7 179:2,9,17 180:7,22 181:10 204:9 285:23 322:3 398:21 447:15 <b>offers</b> 454:8 <b>office</b> 3:5 138:11 138:18,19,21,22 138:23 140:10,13 142:7,13 159:6 211:5 472:17 473:1 <b>official</b> 224:7 230:18 232:18 296:4 <b>oftentimes</b> 132:13 149:21 245:23 249:14 479:1 <b>ogonzalez</b> 2:22 <b>oh</b> 19:13 80:22 95:3 108:22,22 135:4 146:12 170:9 171:23 202:17,22 212:6 268:10 269:14,20	288:16 292:20 293:2 340:1 397:15 420:4 421:15 434:13 445:16 446:10 471:11 <b>ohio</b> 96:7 <b>okay</b> 12:8 14:5 16:3 17:23 18:17 19:6 21:17 22:14 26:10 27:5 31:1,6 31:10 36:1 37:20 38:3 39:2 43:7,9 43:11 56:18 57:2 62:12,17 63:10 64:5,15 78:16 80:15 93:2 97:6 98:5,21 99:15 102:7 108:9,9 109:11 111:4,22 114:15 116:18 119:17 126:22 133:19 135:4,13 136:20 143:13,18 143:19,23 144:21 145:7 146:14 147:3,14 149:9 151:3 154:9 155:3 165:6 166:6,13 170:17 171:6,9,11 173:2 174:2,4,10 174:12,16 179:23 185:2 189:6,14 197:2 199:10 201:1 202:8 203:7 207:10 212:15 213:15,21 215:17 220:10 221:2 223:11,13,15,20 225:3 230:10,16 231:3 233:12,18	239:13,18 240:7 241:1,11 242:14 242:17 248:9,11 248:15,17 252:23 254:7 256:5 257:18 259:13 261:18 264:11,21 269:14,17 272:6 273:23 277:19 278:16 279:19,21 279:21 285:10 288:16 289:2 294:15 295:23 299:17 302:5,6 303:22 304:8 307:14 308:5,7 315:9 316:17 318:6,19,21 320:10,12,17 323:6 325:3,15,21 325:22 326:4,4,5,8 326:19 330:12,15 332:9,11,16 335:13 339:12 340:6,8,22 341:11 344:10,23 345:3,3 347:16,21 349:10 349:14,21 350:15 350:20 353:12,15 354:11 355:17,20 355:22 359:8,10 359:23 360:2 361:2,3,9,13 364:14 367:6,7,9 372:17 373:12 375:12,13,18,19 377:9 378:5 383:12,12,18 384:9,13,17 386:8 388:5,16,18,22,23 389:11,14 391:21
--	---	---	---

393:22 394:5,11 394:15 396:7,14 396:22 397:2,3,7 397:15,16 399:5 399:11,12,14 400:15 401:5,7 404:20 405:1,6,13 405:13 408:5,5,16 410:21 411:6,6,7 414:18 415:1,2,7 415:10 419:14,16 419:21 420:7,10 420:10,17 421:2,8 421:19 422:13 423:4 425:4 426:6 426:12,22 427:3 428:8,9,11,21 429:14 430:5,11 430:11 433:2 434:14,16 435:7 435:13,21 437:6 440:1,2 441:1,1 442:4 445:7,17 446:5 450:12 451:7,9 452:21 453:11 455:18,20 455:22 459:1,13 460:23,23 463:3 464:12 465:9,22 466:1 468:19,21 469:10 470:8 471:1 472:1,13 474:3 479:21 480:1 488:17 489:8,12 490:21 490:23 <b>oklahoma</b> 111:1 <b>old</b> 7:20 67:8 342:22 344:6 380:11,19 381:5 411:10	<b>older</b> 196:18 <b>oldest</b> 134:11 <b>omar</b> 2:18 <b>once</b> 225:12 231:9 288:21 <b>one's</b> 69:6 133:10 233:13 340:3 <b>ones</b> 13:5,21 142:6 <b>ongoing</b> 69:5,8 <b>online</b> 296:12 297:8 364:10 368:20,21 369:20 408:9 453:16 <b>onset</b> 394:23,23 405:16 <b>op</b> 76:3,15 <b>open</b> 12:4 105:20 106:1 355:17 <b>opening</b> 138:7 171:10 <b>operate</b> 130:9 138:6 <b>operated</b> 138:3 <b>operating</b> 123:21 <b>operation</b> 8:15 106:13 123:11 148:10,12,17 176:19 178:21 289:20 293:7 299:1 334:1 464:15 467:16 478:13 <b>operations</b> 60:2 122:3 168:23 169:3 177:5,7,15 178:7,13,14 292:9 312:17 467:4 476:13,17 477:5 478:12,16,18 479:8,14,17,19 480:19	<b>operatory</b> 140:9 <b>opinion</b> 13:22 35:8 42:4 44:11 45:10 67:23 81:1 88:20 88:21 95:23 117:20,20 120:15 126:9 127:2 176:13,17 177:17 177:20 183:21 194:14 217:11,14 238:22 243:20 249:6 259:14 260:19 261:11 275:1,4 289:4 374:3,15,23 375:5 395:9 410:2 443:5 443:5 444:14,18 481:13,17 482:3,7 482:10,14 <b>opinions</b> 12:10 22:9 34:16,18 35:21 36:3,9,11 39:11,15,21 40:11 42:9,19 44:8,12 45:21 65:16 78:17 88:15 111:18 112:17,21 114:6 118:11 124:3 170:19,22 176:7 177:21 179:3,9,17 181:11 196:23 204:10 221:15 222:1 232:11 238:13 239:3 259:5 322:4 343:18 395:6 409:21 449:19,20 483:1 <b>oppose</b> 117:5 <b>opposed</b> 136:1	<b>opposing</b> 116:19 <b>optional</b> 173:3 <b>options</b> 153:12 165:23 <b>oral</b> 9:11 476:22 <b>order</b> 4:16 15:15 24:2 37:15 38:4 40:16 60:6 66:15 100:4 129:19 155:21 195:5 199:3 209:3 218:5 287:7,21 288:11 292:3 294:4 347:5 401:12 417:2 457:5 460:2 <b>ordinary</b> 145:22 <b>organization</b> 42:16,22 79:10 83:4,8 102:11,20 103:12 104:11 107:18,19 111:17 118:1 177:14 179:14,15 207:7 371:15 454:8 <b>organizations</b> 41:4 41:17 42:3,7 43:22 47:10 49:19 49:21 53:15 54:21 83:20 112:2,18 481:9 <b>organized</b> 84:4 <b>organs</b> 120:1 <b>orgasmic</b> 333:3 <b>origin</b> 369:15 <b>original</b> 129:14 135:15 136:2,17 197:13 200:14 227:16 323:3 338:11 <b>originally</b> 23:3 69:7
--	---	--	---

<b>originated</b> 19:22 19:23 <b>orthopedic</b> 291:17 291:22 292:4,10 <b>orthopedics</b> 460:15 <b>outbreaks</b> 368:19 368:23 369:21 <b>outcome</b> 287:10 399:10 480:20 <b>outcomes</b> 7:18 89:10 90:10 287:20 326:23 332:11 334:21 398:10 404:8 411:8 413:13 <b>outer</b> 129:21 <b>outlaw</b> 63:13 <b>outright</b> 44:22 <b>outside</b> 52:22 61:20 69:15 74:13 75:10 86:3 152:17 155:20 156:16 187:8 198:12,14 198:19 199:4,9 204:11 208:10 215:23 216:14 226:16 271:3 278:16 279:12 353:1,4,9 418:23 419:10 441:22 <b>outward</b> 67:23 271:15,22 309:18 <b>overall</b> 82:5 92:6 111:13 255:6 258:12 321:19 326:23 333:5 <b>overlap</b> 34:16,23 36:9 <b>overlooked</b> 134:22 377:20	<b>overreaching</b> 105:15 <b>overrepresentation</b> 67:13 <b>oversight</b> 221:12 <b>overview</b> 441:7 <b>overwhelm</b> 210:19 <b>overwhelming</b> 241:6	225:2 231:2 240:6 242:13 248:13 252:22 264:10,20 279:20 300:2 302:5 308:5 320:11 322:16 326:11,14 330:10 330:10,14 332:15 332:17,21 337:2,5 337:6 341:17 347:19 349:15,17 349:18,19 359:13 364:13 367:8,11 373:13 375:19 378:5,14,15,15 382:11 383:10,11 383:12,14 384:9 384:16,18 391:13 394:13 397:6,11 397:12,13,14,16 399:11,13,13 401:5,6,6 405:2,7 407:8 410:9 411:16 413:6 415:6 419:19,21 420:5 421:7,12,13 421:17,18 422:11 422:12 428:8,10 430:21 435:9,12 437:5 440:1 445:2 445:11,13,19 446:2,8 451:8 452:19,20 453:3 453:10 455:18 465:8,23 494:4,7 494:10,13,16,19 <b>pages</b> 36:6 <b>pain</b> 292:5,11 <b>pancreatitis</b> 134:14 135:10	<b>panel</b> 378:17 380:15 <b>panels</b> 218:11 <b>paper</b> 130:8,18 131:22 132:2,17 134:23 135:10 306:12 355:15,15 371:21 439:13 <b>papers</b> 72:21 74:4 185:7 305:21 337:20 <b>paragraph</b> 27:20 35:12,15 38:8 39:1,4 41:1 43:12 59:23 63:10 64:6 64:16 65:6 108:20 110:5 116:6 119:21 158:16 172:10 225:9 233:19 242:16 252:21 264:22 265:5 308:9 320:13 359:17 364:15 367:10 391:20 428:12 429:7 430:22 435:14 437:11 445:13 465:23 <b>paragraphs</b> 468:18 <b>parent</b> 409:6 <b>parental</b> 367:17 <b>parentheses</b> 320:21 <b>parents</b> 97:19 160:7,23 162:1,3,7 163:5,18 165:5,20 166:7 209:2 402:2 402:22 403:3,9 404:17
---	--	--	--

<b>part</b> 27:2 37:14 44:6 50:13 67:19 87:23 102:7,13,23 112:11 120:4 150:4 174:16 183:13,15,17 185:4 187:3,13,18 188:13 191:13 192:21 194:11 195:6 197:2,5 199:12 235:6 272:21 274:11 275:15,22 328:4 342:5 363:20,20 370:22,22 372:17 403:14 404:11 423:5 453:17 473:10,11,12 <b>participant</b> 315:17 <b>participants</b> 92:21 96:15 273:4 <b>participate</b> 91:8 150:13 <b>particular</b> 27:1 80:6,7 89:11 103:13 105:22 108:20 124:5,5 145:20 160:15,16 168:23 173:16 174:18 177:4 185:6,15 186:4 209:10,11,15,16 210:10,10 212:17 215:8,12 221:7,8 236:10 238:17 243:10 244:10,10 250:20 259:16 260:1,2 263:22 284:15 288:12 293:11 294:14 297:9 309:15	310:9 313:19 321:9,10 332:9 358:12 363:3 366:7 374:13 439:16,18 440:19 440:19 455:5,6 459:17 463:13,15 473:6 <b>particularly</b> 51:2 104:19 131:19 142:15 146:18 162:8 249:12 260:16 319:10 328:15 332:4 401:23 403:22 454:23 <b>particulars</b> 90:9 99:11 <b>parties</b> 199:4 492:16 <b>parts</b> 289:21 <b>party</b> 195:6 <b>pass</b> 76:16 <b>passed</b> 54:23 <b>passing</b> 52:22 61:20 <b>pastors</b> 452:1 <b>patch</b> 133:20 136:12 <b>pathologies</b> 144:2 144:2,7,8 145:2,8 146:9 <b>pathologize</b> 194:11,22 195:7 <b>pathology</b> 156:15 194:20 <b>patient</b> 6:22 12:19 13:2 60:4 61:4 68:8 70:13 71:16 74:23 82:22 112:12 120:13	123:12 124:10 130:23 145:6 149:2,22 150:5,22 151:1 152:3,6,14 153:5,6,10 154:9 154:11 155:4 156:17 157:1,6 160:16 162:2 167:5,11,17,21 168:1,5,9 175:22 194:18 207:14 208:6 209:11 210:9,19,20,23 215:13 217:7,19 217:20,22 225:15 231:13 241:13 246:4 248:22 257:21 258:11 261:6 271:16,23 280:1,7,14 285:19 285:20 286:13 287:6,6,19 288:2 290:2,4,5 295:4 309:22 310:7 311:2,4 312:23 314:8,11,16 315:4 315:11,12 317:5 323:17,22 328:6 330:1,4 333:7 353:1,9,20 355:7 355:10 356:4,13 356:21 357:3,9 359:7 374:14 447:20 448:1 478:3 482:23 484:10,16 485:4 486:11 487:3 488:3 <b>patient's</b> 253:9,14 310:18 467:17 486:6 487:19	<b>patients</b> 51:5 67:1 67:14 68:15,18,22 80:18 81:3 111:10 120:4 131:12 136:21 137:19 142:22 143:5 145:1,10,11,23 146:2,7,7,21 147:11,16,17,20 148:20 150:11 154:21 155:12 162:13 168:13,18 169:1 179:2 195:3 204:20,23 207:19 208:13 209:21 211:9,20 212:13 212:16 213:6,11 213:17 214:15,22 214:23 226:6 232:1 237:3 249:13 251:21 257:4 258:12 260:2,18,21 261:13 283:15 286:1 313:8 314:6 316:18 320:19 321:3,17,20 322:23 326:22 328:2,7,12,14,20 330:18 331:15 335:15,19 336:16 337:8,16,23 341:9 343:2 350:17 351:10 352:12,14 352:21 357:17,21 358:23 360:14 363:8,10 367:13 368:11 369:1,6,22 372:12,14 389:23 390:14,19 391:2,7 404:4 407:1 448:3
--	---	---	--

448:6 450:1 457:23 473:3 474:19 485:15 486:16 <b>patrick</b> 1:20 9:10 9:19 11:5,14 22:18 34:12 57:4 60:11 64:9 464:19 491:12 493:5 494:2,24 495:2,4 495:12 <b>pattern</b> 134:21 <b>patterns</b> 6:2 256:21 <b>paul</b> 57:20 58:8 87:10 <b>pay</b> 195:6 297:9 297:13 379:11 387:10,11 <b>payers</b> 195:6 <b>paying</b> 385:23 386:7 <b>pdf</b> 330:10 332:17 397:13 399:13 401:5 405:2 419:19,21 421:7 421:13 422:11 <b>peace</b> 66:16 <b>peculiar</b> 178:10 210:23 <b>pediatric</b> 43:1,1 45:15 48:10,15,19 51:5 86:8 133:12 249:2,12 250:20 251:21 252:4 255:17 400:1 474:18 <b>pediatricians</b> 43:2 203:23 277:2 <b>pediatrics</b> 5:21 6:3 239:1,23 241:8	255:14 256:21 258:17 <b>peer</b> 20:18 128:18 129:4,14 187:11 274:1 296:7,18 331:12 361:23 362:6 364:3 367:15,21 368:19 368:20 369:19 370:7,17 373:1,2 407:20 408:7 485:13 <b>peers</b> 287:3 317:8 317:16 <b>penalties</b> 109:17 <b>pending</b> 33:5 261:15 <b>penis</b> 478:8 <b>peop</b> 474:18 <b>people</b> 7:21 20:15 40:7 53:9 56:7,11 64:19 65:1 66:14 74:8,9 85:23 90:21 91:2,6 93:18 94:14 119:8 122:11 124:18,22 125:13,15 145:14 145:21 146:3 148:18 151:17 154:15 155:21 160:12,18 162:4 182:17 188:23 189:4 194:7 195:11 197:20 220:14 276:22 306:1 321:16 329:10 341:21 342:6 343:11 344:12 350:14 355:11 365:6,12 365:15 366:12,13	366:14,23 367:5 367:22 368:20 370:8,18 411:10 438:9 443:17 449:3,3,22 450:7 452:22 454:15 455:7 456:23 457:6,13 458:9 463:14 464:4 473:18 474:17 <b>percent</b> 102:22 161:9,19 255:10 255:10,11 258:12 258:19 297:16 298:1,1,9,19 299:10 302:21 303:3,13 304:12 304:22 307:21 308:3 342:15 344:18 352:6 354:16,16 367:12 369:8 372:12,14 <b>percentage</b> 161:12 298:11 302:9 320:19 321:3,20 322:5 329:10 344:12 367:13 370:18 485:15 486:16 <b>percentages</b> 303:3 <b>perception</b> 112:11 <b>perceptions</b> 486:20 <b>perfect</b> 256:11 <b>perfectly</b> 120:1 <b>perform</b> 103:7 105:19 277:7 294:17 295:10,15 315:2 <b>performed</b> 24:20 55:14 117:16	141:11,19 142:4 147:17,20,23 167:3,10,16,20,23 168:3,7,12 169:1 173:16 174:20 175:4,20 176:1,4 290:20 300:12 356:12 358:14 477:12 479:18 <b>performing</b> 25:8 81:6 120:19 126:10 127:3 140:4 168:17 <b>performs</b> 315:10 <b>perineal</b> 476:15 479:3 <b>perineum</b> 178:3 478:6 479:6 <b>period</b> 257:22 300:11 337:10 347:9 403:23 404:2 478:11 <b>peritoneal</b> 134:13 135:9 <b>permanent</b> 287:14 287:17 311:5 <b>permanently</b> 244:19 290:2,7,16 <b>permissible</b> 220:8 <b>permissive</b> 222:13 <b>permit</b> 440:18 <b>persist</b> 123:7 400:13 <b>persistent</b> 7:21 405:16 411:10 <b>person</b> 65:10 70:11,22 75:17 80:7 85:22 148:14 259:17 319:7 347:1 408:19,21 444:8 447:10
--	---	---	--



448:22 452:18 459:4 460:5,13 477:3 <b>person's</b> 60:3 442:13 443:12 446:17,22 447:2 449:1 464:21 <b>personal</b> 47:17,19 48:8,22,22 78:17 87:1 93:19 94:4 94:10,12 97:19 124:3 150:8 159:5 209:17 220:21 246:21 275:1 280:13 281:5,11 281:11,15,19 284:17 359:19 360:20 <b>personally</b> 47:13 55:22 150:3,21 152:2,20 153:3 175:3,19 176:4 184:3 187:1 190:11 197:12,16 198:5 207:17 208:12 213:16 214:20 272:9,12 274:4 275:5 278:1 278:4,22 284:11 381:23 417:20 418:2 446:16,21 <b>personnel</b> 473:11 473:17 <b>persons</b> 7:8 66:19 67:20 83:14 93:23 104:17 122:10,12 131:23 132:2,7,13 195:19 245:4 348:17 366:8 383:20 390:5 392:1,8 443:23	454:9 455:1 463:14,20 474:14 476:19 485:22 <b>perspective</b> 79:20 82:5 87:2 231:9 283:2 <b>perspectives</b> 6:23 356:4 <b>pertaining</b> 224:4 473:2 <b>pertains</b> 212:10 <b>pertinent</b> 12:21 13:19 <b>ph.d.</b> 263:22 <b>phalloplasties</b> 476:14 <b>phalloplasty</b> 315:7 315:11,16 338:22 468:1 478:10,15 <b>phallus</b> 339:1 <b>pharmaceuticals</b> 484:5 <b>phase</b> 235:4 <b>phases</b> 94:3 <b>phenomena</b> 373:5 <b>phenomenon</b> 363:14,15 369:15 371:6 372:10 <b>philosophy</b> 459:15 <b>phrase</b> 21:10,13 61:9 450:13 457:21 <b>physical</b> 40:6 67:4 70:16 317:3 318:3 319:2,12 399:16 <b>physician</b> 6:23 30:14 67:10 86:15 119:14 206:1 225:13 253:12 274:17 356:4,14 356:22 357:4	464:22 483:5 484:6,7 488:22 <b>physicians</b> 67:10 67:14 122:13 132:4 210:17 219:5 229:20 233:20 273:5 277:1 472:22 487:19 <b>pick</b> 283:13 <b>picture</b> 176:23 <b>pieces</b> 110:6 <b>pin</b> 25:6 <b>pitt</b> 3:11 <b>pizza</b> 131:3 <b>place</b> 14:11 91:4 <b>places</b> 389:18 484:17 <b>placing</b> 235:13 295:4 485:4 488:3 <b>plaintiff</b> 9:20 173:17 444:21 445:20,22 446:7 <b>plaintiffs</b> 1:10 2:3 4:12 10:16 13:4 17:15 207:23 208:11 417:19,21 418:3,8,19 419:4,7 445:10 448:18 449:6 <b>plan</b> 8:2 10:20 11:2 420:13,18 421:7,17,18 422:12 423:1,6,15 423:19 424:3 425:1 431:4 437:12 <b>planned</b> 229:5 <b>planning</b> 134:9 204:9 467:15 480:16 481:3	<b>plans</b> 394:22 <b>plastic</b> 5:9 6:7 8:14 22:21 23:2,4 23:13,15 25:3,3,13 25:17 26:2,14,17 27:14 28:10 31:6 32:9 44:13,19 45:3 46:2 47:8 64:10 66:9,18,20 66:21 67:9,15 68:3,10 69:7,16 72:4 73:2 79:20 90:6 95:4,7,11 96:12 99:17 100:5 100:17,19 102:20 102:22 103:19 106:9 108:11 111:9 120:18,23 122:20 123:16,20 123:23 128:8,13 134:8 138:10,11 138:17 139:6 140:5 149:21 154:16,20 155:19 159:3,18 160:13 169:7 171:13 189:3 198:17 274:16 282:4 283:5,9 293:5 294:16,21 295:9 295:14 299:20 300:6,18 306:10 306:12 310:23 311:13 332:5 436:14 464:14 466:4,16,21 467:1 467:11 468:14 472:16,23 473:22 474:5 475:12,16 477:21 480:15 488:23
--	--	--	--

<b>plastics</b> 262:12 296:1 300:9 <b>platform</b> 466:18 <b>play</b> 469:4 <b>please</b> 181:6 264:23 <b>pleased</b> 336:14 <b>plus</b> 140:16 161:19 232:5 296:11 307:20 443:7 458:8 468:15 <b>point</b> 19:2 25:21 27:3 57:8 122:20 123:16 156:22 185:17 232:12 235:17 247:3,16 264:4 309:15 335:16 360:21 380:5 390:20 403:16 432:2 434:2 456:19 457:2 458:14 460:11 470:5 <b>pointing</b> 349:1 <b>points</b> 215:10 324:6 345:10 389:21 435:8 456:17 <b>policies</b> 430:1 <b>policy</b> 5:5,21 7:6 8:5,7,10 109:12 115:23 137:10 182:6 220:12,23 223:9,12 225:6 229:14 239:19,22 240:1 260:20 261:12 376:12 377:1,6,17 378:10 378:11 379:15 380:5 382:3,13,18	382:23 383:4 384:4,18 386:6,21 424:7 427:4,8,17 428:1 430:4,13,22 431:22 432:6 433:5 434:19 436:5,6 439:16,18 441:9,20,22 473:2 473:5 481:7 <b>political</b> 447:6,7,8 <b>poll</b> 45:6 <b>polled</b> 45:2,4 <b>ponce</b> 2:14 <b>pool</b> 328:1 355:10 365:15 <b>poor</b> 354:20 <b>poorly</b> 186:13 <b>pop</b> 92:2,4 419:15 <b>pops</b> 184:23 <b>population</b> 76:9 120:14 145:6 147:6 249:2,8,20 249:21 250:7,20 252:5 255:6,17 278:10 321:9,11 321:15,19 322:5 341:8 342:16 374:14 391:4,8,10 <b>populations</b> 225:15 <b>portion</b> 17:19 18:5 59:22 97:20,22 98:2 327:10 337:3 <b>portions</b> 15:11 18:21 478:8 <b>portman</b> 53:19 <b>portsmouth</b> 262:13 473:23 <b>position</b> 40:18 41:18 50:16 51:10 51:14,18 53:12	65:2 80:20 81:11 107:11,14,19 111:5 112:3 114:8 115:17 221:17,21 227:17,22 229:19 230:2 231:22 232:4,15,19 239:9 240:16 242:2 260:6 288:11 289:3 429:19 452:3 456:13 472:19 481:7 485:18 486:8 <b>positions</b> 42:2 49:22 <b>positive</b> 80:12 87:8 148:22 <b>positively</b> 107:16 <b>possibilities</b> 210:17 <b>possibility</b> 464:6 <b>possible</b> 20:8 315:2,15 318:1,17 318:17 319:13 322:8 461:10 480:20 484:10 <b>possibly</b> 118:23 132:4 287:1 370:15 <b>post</b> 219:11 362:10,11,14 <b>posts</b> 366:20 <b>postsurgery</b> 347:5 <b>postsurgical</b> 351:20 358:16 <b>postsurgically</b> 345:12 <b>posttest</b> 304:18,19 <b>posttreatment</b> 281:20 282:2,12	<b>potential</b> 57:11 58:16 61:22 70:23 118:5 153:11 204:20 206:20 208:14 209:5 210:4 214:16 215:9 217:15 223:1,2 244:1,18 246:3 285:20 293:17 359:5 400:12 462:10 <b>potentially</b> 75:10 126:11 127:5 215:22 244:19 314:1 <b>pouring</b> 123:4 <b>poverty</b> 90:20 243:16,17,21,23 244:12,16 460:6,6 <b>power</b> 71:2 276:5 <b>ppo</b> 8:2 <b>practice</b> 24:9 25:1 69:6 119:15 137:22 140:9 143:21 148:5 151:22 154:1 189:17 234:8 244:4 249:9 259:1 276:12 402:15 475:18 476:8 477:20 <b>practices</b> 475:22 476:1 <b>practicing</b> 249:1 <b>practitioner</b> 23:22 67:3 206:11 281:6 282:18 484:18 <b>practitioners</b> 53:16 241:15 248:22 249:4
--	--	--	--



<b>pre</b> 219:10 281:19 282:12 304:18	238:2,14 245:16 246:15 251:20	97:8 148:15 450:18,21 451:18	<b>printout</b> 27:12 230:18 464:13
<b>precautions</b> 210:13	<b>prescribed</b> 201:15 201:18 203:21	451:21 452:5 455:19	<b>prior</b> 265:6 368:13 405:15
<b>precedes</b> 159:21	204:16 207:13	<b>presentations</b> 87:14 96:17,21	<b>priorities</b> 5:6 116:1,13,13,14,16 117:5
<b>preceding</b> 446:8	211:9 214:3,8,10	103:15 104:5 105:22 160:12	<b>prioritizes</b> 394:20
<b>precisely</b> 68:4 132:12 228:6 369:17 467:5	217:17 245:8 255:11 257:20 258:13,13 259:9 259:23 267:14	<b>presented</b> 82:9 259:22 330:1 343:15 482:2 486:15	<b>private</b> 143:21 376:7 475:17
<b>precocious</b> 162:20 318:16	<b>prescribes</b> 209:20 216:14 234:17	<b>presenter</b> 79:18 82:7	<b>privileged</b> 189:2 <b>privileges</b> 24:2,11 24:14
<b>predict</b> 398:9 399:10	<b>prescribing</b> 6:2 208:16 217:12	<b>presenting</b> 283:18	<b>privy</b> 194:9
<b>predicted</b> 324:10	219:23 234:23 236:4,13 237:4 245:4 251:2 256:20 258:22	<b>presents</b> 70:14 71:9 75:1 157:6	<b>probably</b> 32:15 59:3 71:7 94:17 101:13 105:1,14 143:9 146:12 152:12 156:3 185:17 201:5 202:10,11,14 237:8 259:11 298:8,8 319:16 325:10 327:13 336:20 377:1 379:7 434:1
<b>predominate</b> 488:9	<b>prescription</b> 203:14 218:19 221:3,13 222:16 251:9 255:3,5	<b>press</b> 463:10	<b>problem</b> 78:1 82:23 112:4,11,15 119:7 123:20 152:22 194:23 291:18 324:4 338:22 352:9 355:9 358:11 363:4,5 370:23 386:1 403:12 447:14 456:22 457:12
<b>prefer</b> 53:3 54:20	<b>prescriptions</b> 258:17	<b>pressure</b> 162:4,6 165:12 272:21 367:18 368:2 369:19 370:11,21 371:17 373:2 460:1,3,9	<b>problematic</b> 144:12 218:3 259:19 260:17 261:10
<b>preference</b> 53:7 76:13	<b>presence</b> 363:4	<b>pressured</b> 165:13	
<b>premarked</b> 12:3	<b>present</b> 3:17 81:1 85:10,13,23 89:6 152:15 156:17 182:4 195:13 208:3,16 211:4 306:14 329:1 336:2 343:17 351:11 357:16 367:4 369:4 373:6 406:6 418:6,18 419:6 476:22 486:17	<b>pretreatment</b> 282:2	
<b>premier</b> 296:18		<b>pretty</b> 185:13 205:20 207:6 316:4 342:18	
<b>preoperative</b> 134:9		<b>prevailing</b> 449:17	
<b>preoperatively</b> 324:10		<b>prevalence</b> 340:10 345:21 357:11	
<b>prepare</b> 12:15 14:23 27:1 128:5		<b>previous</b> 182:2	
<b>prepared</b> 11:23 128:2,3 451:10		<b>previously</b> 140:11 369:23	
<b>preparing</b> 13:13 14:3 461:13,15 462:17		<b>primacy</b> 53:22	
<b>prepubertal</b> 400:2		<b>primarily</b> 291:11	
<b>prepubescent</b> 400:5,18,20 401:2		<b>primary</b> 386:2	
<b>prerequisite</b> 100:18		<b>principle</b> 223:5 294:21 295:7,8	
<b>prescribe</b> 214:21 216:19,21 220:2 225:14 226:15 229:20 231:11	<b>presenta</b> 96:16 <b>presentation</b> 8:13 87:19,20 88:1,12 88:14,23 90:1		

<b>problems</b> 66:20 89:16 121:21 140:2 156:21 226:12 237:17 260:21 346:23 351:10 352:2 473:7 481:5 <b>procedure</b> 9:5 141:11 147:23 148:7 161:18 173:16 174:18,20 175:21 271:20 285:1,2,12 286:3,5 288:13 289:5 290:20 291:20 293:11,23 294:3 312:11 313:20 315:3,5,13 334:2 347:7 351:17 359:1 387:22 393:18 <b>procedures</b> 55:13 104:15 105:12,18 107:8 119:2 126:11 127:4 140:13 141:14,18 142:13 150:10 162:23 163:13 164:15 176:2,5 177:23 179:1 286:11 294:17 295:10,16,21 309:18 316:5 339:9 353:21 383:9 419:5 425:3 435:16 476:11 477:13,19 485:17 <b>proceed</b> 10:13 286:10 311:7 <b>proceeding</b> 492:5	<b>proceedings</b> 9:12 492:12 <b>procerus</b> 263:3 266:12,19,23 267:9 <b>process</b> 48:21 50:13 82:13 156:19 184:13 208:20 235:7 277:18 307:3 320:20 321:5,22 346:7,8 402:5 403:16 461:8 <b>processes</b> 367:18 <b>produced</b> 188:14 492:7 <b>produces</b> 206:18 <b>product</b> 45:7,19 185:11 188:14 225:12 233:20,23 234:7 235:2 <b>product's</b> 234:3 237:1 <b>profession</b> 305:18 <b>professional</b> 42:6 42:16,22 43:21 45:6 47:9,10 53:4 53:15 54:20 65:12 75:18,22 76:13 83:3 95:23 104:10 107:17 109:16 111:16 112:1,18 117:23 118:10,18 124:2 127:6 129:2 153:23 154:12 155:8 158:3 177:14 179:14,15 181:19 182:9 199:6 208:21 241:16 276:9 301:4 307:8 316:3	428:17 448:11,11 479:12 481:8 <b>professionals</b> 56:21 383:20 398:8 418:9 <b>profile</b> 489:18 <b>profound</b> 319:5 <b>progestins</b> 431:15 <b>prognostic</b> 282:9 <b>program</b> 95:13 121:12 <b>programs</b> 95:15 106:6 107:10 149:10 <b>progress</b> 219:8 <b>progression</b> 324:16 <b>prohibit</b> 226:5 406:12 <b>prohibited</b> 37:10 227:1 <b>prohibition</b> 46:3 <b>prohibits</b> 51:22 180:22 181:10 220:23 <b>prominently</b> 322:21 <b>promise</b> 248:10 <b>promised</b> 289:16 <b>promises</b> 363:18 <b>promote</b> 44:17 77:17,19 104:12 <b>promotion</b> 225:6 <b>pronounce</b> 389:3 <b>proper</b> 216:18 238:13 <b>properly</b> 120:11 145:17 276:5 280:6 330:17 <b>propose</b> 254:8	<b>proposed</b> 54:8 224:9 235:8 <b>proposes</b> 265:7 284:19 <b>proposing</b> 386:17 <b>proprietary</b> 201:12 <b>props</b> 336:22 <b>prosecute</b> 52:12 <b>prospective</b> 278:12,18 279:14 304:1,9 411:19 <b>prosthesis</b> 336:20 336:21 460:10 <b>protect</b> 76:8 <b>protections</b> 280:9 <b>prove</b> 312:22 <b>proven</b> 144:13 218:4,16 313:2,4 435:18 <b>provide</b> 15:6,10 41:7 112:8 137:10 137:17 158:4 170:15 171:1 174:13,17 400:4 400:16 401:1 415:15 <b>provided</b> 17:18 18:4 157:17,22 422:20 474:7 <b>provider</b> 153:4,10 153:21 261:1,5 279:10 308:21 312:19 423:13 <b>providers</b> 7:4 149:12 231:10 246:8 248:5 308:22 314:3 429:18 464:4 <b>provides</b> 378:10 405:7 441:6
---	---	---	---

<b>providing</b> 36:17 51:23 57:9 58:14 58:20 78:18 80:17 104:17 137:3 151:11,13,17 157:14 195:2 <b>provision</b> 109:17 481:19 <b>provisional</b> 101:21 <b>provisions</b> 170:18 <b>prudential</b> 295:3 <b>psych</b> 156:4,7 <b>psychiatric</b> 49:7 66:13,20 68:2,14 72:6 159:16 190:5 282:16 313:14 384:6 <b>psychiatrist</b> 65:22 153:17 154:22 <b>psychiatrists</b> 189:21 <b>psychiatry</b> 75:5 <b>psychological</b> 66:13 67:22 68:14 68:16,20 70:14 72:6 77:21 82:8 112:10,14 282:16 394:20 395:18 486:4 <b>psychologically</b> 71:1 317:9 <b>psychologist</b> 154:22 364:9,11 372:3 <b>psychology</b> 75:6 <b>psychotherapy</b> 157:15,18,23 158:4 437:14 <b>pubertal</b> 7:18 411:8	<b>puberty</b> 36:21 63:13 81:23 161:2 161:6,15 162:16 162:19,20 163:12 165:9 166:8 201:2 201:3,19 203:15 203:21 204:17,21 205:2,3 207:13,20 208:15 211:10,21 212:14 213:6,18 219:17 238:19 247:1,9 260:6 316:16,20,21 317:21 318:2,11 318:16 374:4,9,12 395:23 397:22 401:10,14 404:1 405:16,20 406:1 406:13,23 413:4 428:15,22,23 437:15,23 482:16 483:21 489:14 <b>public</b> 9:2 63:19 85:4,6 160:11 187:17 191:18 199:11 241:4 495:19 <b>publication</b> 130:2 131:1 133:15 134:12 136:11 182:18 190:2 224:7 227:7 228:1 240:12 275:23 283:16 296:4 306:7 307:1 355:13 356:1 360:18 362:1 368:17 407:20 <b>publications</b> 12:22 85:3 106:23 128:18,23 135:20	136:6,14 283:10 297:16 298:12 302:22 304:12,22 307:21 380:13 <b>publicly</b> 125:5 183:1 <b>publish</b> 46:18 50:20 283:11 303:18 306:9,11 306:14,17 307:5 <b>published</b> 46:13 46:17 72:21 76:3 84:18,22 129:3,13 135:16 183:4 185:16 186:3 189:23 196:1 219:4 220:12 228:20 273:23 274:13 275:20 296:10 298:2 300:9 301:19 302:10 305:14 306:21 322:22 326:6 364:2 371:16 378:1,2 465:10 482:15 486:1 <b>publishes</b> 182:16 <b>publishing</b> 76:15 182:21 284:4 301:4 305:20,21 306:3 331:5 <b>pubmed</b> 20:22 21:10 <b>purport</b> 334:19 <b>purporting</b> 277:10 <b>purports</b> 177:20 <b>purpose</b> 93:9 240:8 241:12 296:13 459:16	<b>purposes</b> 238:20 269:9 423:3 431:22 <b>pursuant</b> 9:4 <b>pursuing</b> 162:23 <b>purview</b> 474:23 <b>pushing</b> 305:4 <b>put</b> 122:8,8 136:5 312:9 327:15 350:4 362:20 371:16 375:10 382:9 395:23 452:8 471:6 <b>puts</b> 282:5 <b>putting</b> 107:5 360:13 <b>pyramid</b> 309:8
<b>q</b>			
<b>qualification</b> 244:7 <b>qualifications</b> 29:14 172:13 479:13 <b>qualified</b> 65:11 75:18,22 358:8 <b>qualifier</b> 251:6 254:4 <b>qualify</b> 250:13 274:10 318:9 <b>qualifying</b> 416:16 <b>quality</b> 71:1 89:21 120:9 123:20 285:5 300:6 354:20 381:20,21 415:16 482:6,19 <b>quantifiable</b> 331:9 <b>quantification</b> 363:13 <b>quantifies</b> 330:7 367:21 370:8,18			

<b>quantify</b> 311:10 330:4 369:3 413:4 <b>quantifying</b> 349:11 <b>quentin</b> 86:10 <b>question</b> 26:8 80:14 83:1 118:14 122:23 124:16 126:4,7,19,23 134:22 155:2 156:5 164:7,12 174:21 176:21 180:1 181:4,6 186:17,23 205:6 208:4 212:12 213:13 215:4 261:15 266:10 269:8,13,16 286:16 288:10 293:3 294:2,9 318:8 321:8 332:21 348:23 365:7 366:9,13 370:4,6 374:22 386:4 409:18 424:21 426:11 441:2 480:2 487:9 <b>questioned</b> 65:8 <b>questioning</b> 65:15 <b>questions</b> 55:15 56:7 134:21 135:2 188:20 261:17 272:5 292:17 314:22 346:21 353:17 394:4 470:19 471:10 472:11 481:7,10 481:13,18 482:1 485:8 486:15 489:3	<b>quick</b> 319:21 <b>quickly</b> 421:19 <b>quite</b> 178:8,8 276:14 309:23 313:1 395:5 404:3 <b>quotation</b> 21:12 <b>quote</b> 60:22 61:5 227:8,9,23 277:16 291:19 351:4 366:1 367:23 456:6 <b>quoted</b> 227:23 480:22 <b>quotes</b> 59:18,19  <b>r</b>  <b>r</b> 2:1 16:12 33:2 203:4,4,11,11 277:14 299:19 322:18 414:15 492:1 494:3,3 <b>radial</b> 339:5 467:22 <b>radiation</b> 479:1 <b>radically</b> 122:22 123:3 284:20 <b>radicularis</b> 267:10 <b>radio</b> 465:21 <b>radio's</b> 465:15 <b>radiological</b> 486:4 <b>raging</b> 125:6 412:16 <b>raise</b> 70:21 124:7 284:2 468:8 <b>raised</b> 65:20 119:4 119:10 <b>raising</b> 160:14 <b>ramifications</b> 213:9 <b>ran</b> 21:10 475:2,3 <b>randomization</b> 304:6	<b>randomized</b> 120:10 251:23 252:5,9,10,13 268:20 269:3 270:1 271:2 272:18 273:7,18 274:21 275:16 279:7 280:8 291:7 292:19,23 293:6,9 293:20 294:10 298:3 302:17 307:19 310:16 316:5 <b>randomly</b> 412:1 <b>ranges</b> 257:4 <b>ranked</b> 301:21 <b>ranks</b> 309:7 <b>rapidly</b> 125:2 476:6 <b>rate</b> 101:23 161:5 161:19 314:5,18 327:1 329:3 334:16 354:7 355:14 390:2 391:1 <b>rates</b> 258:5 329:2 352:5 353:9,19 354:1,3 <b>ratio</b> 390:4 <b>rational</b> 228:7 <b>rationale</b> 234:1 <b>rattled</b> 73:11 <b>rct</b> 271:7 272:10 272:14 274:5,8 275:12,13,20,22 276:23 285:13 294:18 315:15 318:1 319:14 323:7 <b>rcts</b> 271:3,11 272:8 274:2	297:18 303:7 305:8,16 315:2 <b>reach</b> 48:5 49:21 96:10 160:8 161:8 <b>reached</b> 125:2 402:1 <b>reaches</b> 288:21 289:6 <b>reaching</b> 482:22 <b>read</b> 18:14,16,21 37:17 42:7 101:6 101:7 111:21 174:7 181:16 182:6 197:1 202:17 206:2 207:22 208:1 227:20 233:11 264:2,3 277:15 301:1 307:11 324:19 325:6 340:21 358:12 371:11 376:23 377:7 402:8 410:9 430:1 448:23 449:13 493:9 495:5 <b>readily</b> 74:8,9 75:3 <b>reading</b> 117:13 184:21 185:11 194:6,7 195:11 206:6 239:21 240:20 277:11 298:16 338:8 356:10 357:1 358:4 418:23 436:3 448:10 <b>ready</b> 74:7 156:18 471:4 <b>real</b> 123:9 364:5 409:8 421:19
--	--	---	--

<b>realities</b> 82:10 447:17 450:4,7 <b>reality</b> 252:3 258:21 448:14 <b>realizing</b> 348:20 348:21 <b>really</b> 89:23 93:14 98:12 106:12 121:7 186:13 205:1 235:4 276:2 277:5 291:21 314:20 337:12 439:8 480:10 <b>realm</b> 294:13 <b>reason</b> 11:15,18 23:22 132:12 155:5 177:6,6 193:23 194:5 218:2 231:17 314:7 321:14,14 327:22 330:22 333:23 350:22 363:2 393:9 493:11 494:6,9,12 494:15,18,21 <b>reasonable</b> 276:19 <b>reasons</b> 100:8 105:4,7 108:1 177:10 180:18 250:4 328:21 348:2,10 349:6,12 358:15 <b>reassigned</b> 390:5 <b>reassignment</b> 6:14 7:9 59:16,23 60:16,21 61:4 337:11 346:17 392:2,9,11,17,20 393:12 432:3,7 <b>rec</b> 416:2	<b>recall</b> 15:21 56:4 56:12 58:22 69:11 70:2,4 80:6 92:14 93:1,21 96:11 97:1 98:14 99:11 101:5,19,21 102:4 111:2 115:19 149:7 169:8 216:10,12 222:11 262:11 334:17 345:17 347:7 394:1 421:4 481:9 489:14 <b>recalling</b> 463:11 <b>receipt</b> 493:18 <b>receive</b> 69:2 114:16 401:13 485:15 <b>received</b> 23:3 31:11 69:19 124:22 265:2 268:4 329:10 350:17 <b>receiving</b> 213:6 259:17 <b>recertified</b> 23:7 <b>recitation</b> 453:18 <b>reckoning</b> 404:7 <b>recognize</b> 66:18 154:20 406:22 416:2 <b>recognized</b> 228:18 <b>recognizes</b> 40:3 243:15 250:19 <b>recognizing</b> 74:23 243:8 <b>recoll</b> 84:5 <b>recollection</b> 97:5 110:17 <b>recom</b> 395:17	<b>recommend</b> 53:5 161:13,15 395:10 395:17,22 <b>recommendation</b> 41:3 72:1 118:23 396:3,4 <b>recommendations</b> 41:23 42:1 54:18 72:23 398:16 400:4,17 405:4,8 <b>recommended</b> 265:23 <b>recommending</b> 44:21 <b>recon</b> 142:8 467:23 <b>reconstitute</b> 478:10 <b>reconstruct</b> 468:2 478:12 479:9 <b>reconstructing</b> 289:13 290:13 <b>reconstruction</b> 44:16,23 133:23 142:15,23 167:19 169:4 178:3,4 299:6 476:16 479:1,5 480:4,12 480:23 <b>reconstructions</b> 142:21 178:11 299:5 <b>reconstructive</b> 6:8 44:19 46:2 142:23 143:8 274:16 291:20 296:1,19 299:21 300:9 311:14 334:7 335:5 443:8 467:2 467:13,15 472:16 473:15,22 474:8	474:15 475:5,12 475:17 476:1,9,11 477:9 478:9,20 488:23 <b>record</b> 9:16 10:12 11:13 79:1,4,8 86:13 115:8,11,14 166:14,17,21 176:23 189:9 207:23 208:9,9 254:13,16,20 312:12 319:23 320:3,7 388:4,8,12 417:10,12,15 418:16 447:18 470:10,13,17 472:4,7 491:7,10 <b>recorded</b> 10:4 <b>recording</b> 256:6 <b>recordkeeping</b> 235:3,18 237:15 <b>records</b> 12:20 13:2 13:3 208:1 234:3 237:1 342:6 355:7 419:1,10 <b>recourse</b> 53:12 252:14 <b>rectangle</b> 350:5 <b>red</b> 71:21 451:14 <b>reddit</b> 361:19,23 362:11,14 364:19 <b>redirect</b> 471:20 <b>reduced</b> 333:20,21 333:21 <b>reduction</b> 129:22 291:6,11,15,16,19 292:9 293:19 294:9,13 <b>reductions</b> 142:19 290:22 292:22
--	--	---	--



<b>reexamination</b> 4:6 <b>refer</b> 65:11 67:5 75:17 155:7 264:23 444:20 445:13,22 446:13 461:13 <b>reference</b> 50:21 86:21 109:20 144:1 280:13 320:18 378:6 380:3 394:17 413:22 444:16 467:9 <b>referenced</b> 301:11 301:14 493:6 <b>references</b> 50:11 72:15 301:7 364:18 378:16,19 407:18 416:15,17 439:17 <b>referencing</b> 410:17 <b>referral</b> 72:5 474:9 <b>referred</b> 68:16 233:10 474:17 <b>referring</b> 13:8 144:3 145:9 146:14 271:4 441:4 447:9 449:5 457:23 458:4 469:19 <b>refers</b> 131:18 456:9 <b>refined</b> 93:13 <b>reflect</b> 228:8 397:23 <b>reflects</b> 456:12 <b>refresh</b> 110:16 400:8	<b>refute</b> 486:10 <b>regard</b> 355:12 472:21 <b>regarding</b> 248:23 468:22 473:15 <b>regimens</b> 225:15 <b>register</b> 5:11 224:2 362:10 <b>regret</b> 6:20 328:14 328:20 329:5,12 329:17 330:4,20 331:4 335:16 343:17 344:20 345:10 346:20 347:20 348:2,3,3,6 348:9,18,19 349:2 349:2,5,12 350:14 350:18,22 351:4 352:5,20 353:1,4,9 353:20 354:3,7,19 354:22 355:4,14 356:2,14 357:4,9 357:15,22 358:14 358:22 359:5 363:10 365:16 366:14,15 <b>regretful</b> 6:12 <b>regrets</b> 340:11 352:1 <b>regretters</b> 351:19 354:7 355:2,3 366:17,18 <b>regretting</b> 360:14 <b>regulates</b> 221:3 <b>regulations</b> 224:4 <b>regulatory</b> 263:23 <b>rehearsed</b> 368:22 369:20 371:22 372:2 <b>reintroduce</b> 339:13	<b>reintroducing</b> 339:15 <b>reject</b> 150:10 <b>rejected</b> 248:2 <b>rejecting</b> 247:4 <b>rejuvenation</b> 142:9 <b>relate</b> 74:5 130:2,5 131:15 132:18 133:16 134:2,16 205:20 <b>related</b> 85:6 145:2 146:9,10 229:8 405:18 432:3,8 <b>relating</b> 66:13 447:20 473:6 <b>relationship</b> 103:21 143:2 <b>relatively</b> 45:11 357:10 <b>relatives</b> 348:12 349:8 <b>releasing</b> 201:7,9 317:22 428:14 <b>relevant</b> 43:17 118:9,17 173:15 373:23 465:15 483:20 488:20 <b>reliable</b> 89:13 90:3 180:3 280:11 323:23 362:16 366:22 371:4 408:12 485:13 486:1,3 <b>relied</b> 35:20,20 50:3,18 293:20 297:4 343:14,18 <b>relief</b> 422:21 <b>relies</b> 294:10 305:7	<b>relieving</b> 292:4 <b>religious</b> 466:18 467:9 <b>rely</b> 73:6,8,9 203:18 249:4 251:14 284:11 293:6 294:9 343:12,21 360:11 409:20 410:1 456:21 <b>relying</b> 125:18 286:23 287:1 305:15 359:13 360:12 <b>remained</b> 344:14 <b>remaining</b> 470:4 <b>remains</b> 241:3 481:15 <b>remarks</b> 87:17 91:15 <b>remedy</b> 67:21 154:16 <b>remember</b> 59:4,7 59:11 65:18 77:1 77:3 80:5 84:13 85:19 86:4,6 87:5 90:19,19 91:18,20 93:7 94:20,23 95:5,6,8,23 96:3,5 97:7,14 99:14 100:20 106:4,11 106:16 109:8 110:23 222:6 324:19,22 334:23 341:4,7 372:15,17 450:17 <b>remembered</b> 85:18,21 <b>remembering</b> 92:3 <b>remote</b> 1:18 2:3 3:1,17 9:6 10:4
--	--	---	--

70:1 210:16 <b>removal</b> 139:22,23 143:4 146:1,5 151:12 152:9,18 153:2 287:16 479:4 <b>removals</b> 148:8 <b>remove</b> 336:21 <b>removing</b> 290:6,8 <b>renew</b> 23:20 <b>renewed</b> 31:19 <b>rep</b> 55:19 <b>repair</b> 130:12 131:12 133:22 136:8 <b>replaced</b> 457:17 <b>report</b> 4:13 12:1,9 13:9,16,17 17:9 18:18 19:6 22:15 25:23 29:21 31:2 31:9 43:7 56:22 59:14 63:15 108:18 109:6 117:13 119:16 143:17 158:15 177:19 183:8 206:6 216:6 230:1 230:4 238:7,11 279:20 282:20 284:7,12 285:23 299:2 303:7 320:9 322:22 327:10 328:4 334:16 335:14 341:4 343:6,7 345:2,8,18 346:2,13 347:8 357:21 359:9 360:17 361:15 364:2,4 367:6 373:11 377:18 389:18 393:23	394:14 407:8,18 410:11,17 412:11 413:18 415:4 444:20 445:3,19 447:23 448:16 449:4 <b>reported</b> 228:10 326:21 336:14,23 341:9 345:5 348:10 349:6 350:18 351:4 357:9,15 359:17 363:16 368:5,10 369:6 463:20 490:20 <b>reporter</b> 9:2 10:8 10:12 16:12 182:13 325:13,16 325:20 350:3,9 389:13 414:15 426:1,6 471:9 <b>reporting</b> 202:19 281:7,9 282:15 283:13 299:3 300:21 327:16,17 331:10 336:5,7,7 336:10 337:17 343:16 345:6,10 349:11,13 362:21 364:11 367:14 368:14 370:1 383:4 465:13 <b>reports</b> 19:11 120:2 135:15 194:7 219:1,1,3 220:1,4 244:14 246:7 280:7,20 281:9 282:18 283:20 308:20 324:17 329:19 343:10 352:5	490:17,20 <b>represent</b> 10:18 21:9 26:18 32:18 416:4 <b>representation</b> 26:4 <b>representations</b> 32:13 <b>representative</b> 55:23 <b>representatives</b> 229:13 <b>representing</b> 28:9 452:3 <b>represents</b> 440:16 492:10 <b>reputable</b> 102:11 102:16 <b>request</b> 59:3 151:21 224:22 <b>requesting</b> 323:1 328:7 <b>require</b> 234:9 237:12,13,14,19 237:20 479:4 490:2 <b>required</b> 24:1 66:10 169:14 237:11 242:23 245:1 284:4 454:22 473:14 478:8 495:13 <b>requirement</b> 24:4 236:9 238:1 300:21 404:15 <b>requirements</b> 172:23 476:5 <b>requires</b> 174:19 <b>requiring</b> 474:14 <b>reread</b> 331:21 384:11	<b>res</b> 273:8 <b>rescinded</b> 46:3,7 <b>research</b> 6:9 106:14 120:7,9 129:14 135:10,15 136:2,17 253:3,6 299:21 300:7,8 305:6,14 308:11 308:18 309:1 321:16 324:18 390:21 485:14 486:2 <b>researcher</b> 276:11 <b>researchers</b> 326:21 <b>residency</b> 69:8,11 69:16 73:3 95:15 100:21 101:12 106:6 107:9 121:12 122:3 125:14 273:9,20 278:17 <b>resident</b> 121:19 133:8,8 156:1 272:15 <b>residents</b> 101:22 <b>resource</b> 86:21 257:13 381:8 409:15 452:6 473:10 <b>respect</b> 59:10 125:22 145:9 247:8 392:8 466:5 <b>respective</b> 270:7 <b>respectively</b> 303:4 <b>response</b> 371:12 <b>responsibility</b> 233:22 235:1 260:23 261:2 <b>responsible</b> 53:17 272:22 276:13
---	---	--	---

<b>responsive</b> 126:1 370:4	278:19 279:14 289:10 311:23 341:12,14 343:1 343:23 344:8 355:6	449:16 473:14 483:3 488:21 493:7	22:11,13,16 24:21 25:12,21 26:14 27:15,21 28:7 29:5,14,18 30:6,20 30:21 31:17,20 32:7,23 33:6,10,16 33:19 34:4,10,11 34:13,19 35:3,6,9 35:22 36:12 37:14 37:19 38:22,23 39:7,12,16,22 40:8 40:13,20,23 41:20 42:11,20 43:18 44:3 47:1,5 48:6 48:12,16 49:10 51:14 52:5,12,13 52:17,23 57:6,13 57:22 58:3,6,9,12 58:16 59:12 60:11 60:14,18 61:7,14 61:16 62:22 64:2 64:12,13 65:3,5,16 65:23 66:4 68:21 68:23 69:1,18,21 70:4 73:7,13 74:2 75:11,15,19 76:2 76:17,19,20 77:14 78:7 79:12 80:1 81:7 83:4,9,14,23 84:6,7,9,23 88:22 90:16 91:8 93:2,4 93:5 99:17 102:8 102:11 103:2 107:21 108:12,15 108:18 110:1,2,12 111:4,19 113:20 114:10 115:15,22 117:1,8,17,20 118:1,5,12 120:15 120:19 123:17 125:14 127:14,19
<b>rest</b> 217:23 246:12 310:22	<b>return</b> 493:13,17	<b>reviewed</b> 12:17,19 12:20 13:11,14,18 20:18 47:20 50:12 51:1 53:21 106:23 128:19 129:4,14 170:4,8 185:7 205:4 274:1 296:7 296:18 331:12 342:6 361:23 362:6 364:3 367:21 370:7,17 402:9 407:20 408:7 412:22 485:13	
<b>restated</b> 229:13	<b>returned</b> 331:15		
<b>restating</b> 229:8	<b>returning</b> 328:2 348:13 349:9		
<b>restoration</b> 467:3	<b>returns</b> 113:22,22		
<b>restriction</b> 226:3	<b>reversal</b> 6:11 147:15 149:3 328:2,7 329:6 330:1 338:13 363:11 429:8		
<b>result</b> 247:14 287:7 289:16 412:19,19 467:7 484:12 492:17	<b>reverse</b> 15:14 129:19 320:20 321:5,21	<b>reviewing</b> 212:2,7 212:18 258:11 439:23 450:3	
<b>resulted</b> 490:17	<b>reversed</b> 311:6	<b>reviews</b> 8:1 35:16 35:17 96:22 120:8 174:11 327:3 332:10 335:1,7 341:1,6 355:6 378:20 384:12 400:9 408:4 413:1 420:8 440:21 445:15	
<b>results</b> 21:13,18 245:9 246:17 249:21 250:21 251:13 252:6 257:17 270:1 276:8 285:13 291:7 292:22 293:9 294:18 297:18 298:13 303:7 305:8 309:23 341:19 344:9 356:17 357:8 392:16	<b>revert</b> 148:14		
<b>resumé</b> 5:7 473:20	<b>review</b> 6:22 13:6 45:9,22 70:15 89:7,9 93:15 135:11 170:17 177:3 183:8 187:12 191:12 196:20 198:6 199:3 234:12,13 235:20 253:7 265:20 274:13 283:21,23 300:8 307:19 343:2 344:1,8 356:3,12 357:3,20 377:10 379:3,6 408:3 410:20 412:21 414:9,12 415:3,14 415:14,20 416:11 416:12 417:23 418:17 427:11 443:6 448:12		
<b>retained</b> 11:19 33:8 174:22		<b>revise</b> 29:13	
<b>retired</b> 24:23 136:22 139:18 140:8 141:12 473:17,18		<b>revised</b> 196:4 427:15	
<b>retirement</b> 24:6		<b>revision</b> 196:16	
<b>retract</b> 371:18,18 371:19,20		<b>revoked</b> 29:11	
<b>retraction</b> 276:21		<b>rex</b> 55:19	
<b>retro</b> 341:10 343:23		<b>richmond</b> 264:23	
<b>retrospective</b> 257:11 278:9,12		<b>ridge</b> 130:16	
		<b>right</b> 12:1,13 14:19 16:3 17:2,7 17:16 18:17 19:8 20:12 21:4,7 22:4	



127:23 128:9,10	207:8,20 208:17	273:19,22 274:8	354:16,17 355:23
128:23 129:1,4,5,6	209:23 210:6,11	277:23 279:15	356:7 357:5,12,13
129:11,12,18,19	211:22 212:4,20	280:19,20 285:8	357:19 358:1
129:23 131:2,15	213:19,23 214:4,8	286:19 288:14	359:1,15,16
133:2,5,23 135:7	214:9 216:4,13	290:18 291:1,3,5,8	360:10,11,21,22
135:21 136:9,10	217:2,7,9,13	292:16 293:8,12	361:13,14,15,17
136:12,13,19	219:22 220:4	294:12 295:17	361:20,22 362:1,5
137:5,7,21 138:1	221:9,13,14	296:2,8,10,15,22	362:8,9,12,13,17
139:5,9,12,14,22	222:19 224:11,12	299:17,18 300:1	362:22 364:5,6,12
139:23 140:3	225:2,5,9 227:13	300:15 301:8,12	364:18,19,20
141:5 144:19	227:14,15,17,18	301:13,22 302:14	365:3,9,10,13,21
146:16 147:1,2,7,8	228:14,21,22	302:16,19,20,23	365:22 366:2,20
147:9,22 149:16	229:6 230:16,17	303:1,8,22 304:2,4	367:1,9,10,18,19
149:23 150:1,18	230:19,20,23	304:10,14,17,19	368:2 371:1,3
153:14,15,18,21	231:1,20,21 232:2	304:20,22,23	374:6 375:11,18
154:2,13 155:9,15	232:3,5,6,8,20,21	305:9 306:5,6	375:21 376:1,2,4
155:22 157:2,3,7	233:12,18 234:6	307:5,23 308:3,4,8	376:11,14,15
157:11,15,16,20	234:19 235:23	308:15 309:4	377:12,14,16,21
157:21 158:1,2,6	236:1,5,15,18	311:17 315:8,13	377:22 378:3,8,12
158:10 166:10,14	237:5,7 238:3,7,12	315:18 316:9,13	378:17,21 379:2,6
167:1 168:13	238:15,23 240:3	316:15,22 317:5	379:8,16,22
169:15,19,23	240:15,18,22	318:3 319:18	381:10,14 382:4
171:19,20 172:7	241:13,22 242:6,7	320:22 321:2,6	382:19,20 383:6
173:4,8,20 174:7	242:10,11,13	322:2,6,15 323:4,7	384:1,3,4,19 385:3
175:2,10,13,16	243:12 245:7,10	323:8,8,10,14	385:15 387:1,4,13
176:3,10 180:15	245:16 248:7,13	324:1,5 325:8	387:15 388:3,13
182:7,15,17 183:5	248:14 250:22,23	326:5,7,8,9,18	389:1,15,20 390:3
183:6,7,12,16,20	251:3,16,18 252:2	327:4,7,8,11,18	390:11,19,22
184:9 185:5 187:9	252:6,20 253:16	329:14 330:3,5,14	391:4,5,10,12,19
187:13,21 188:2,7	254:21,23 255:9	330:20,21 332:20	391:22 392:14
188:17 189:15	255:12 256:17,18	332:23 333:5,6,10	393:20,21,22
190:3,9,13,17,22	257:1,7 258:10,14	333:11,14 334:21	396:1,18 397:4,8
191:3 192:9,11,14	258:15,19,21	336:11,12 337:21	397:17,19 398:14
192:15 193:8,12	259:1 261:19,21	339:10,15 340:17	398:23 399:17,18
195:15 196:9,20	262:2,6 263:1,7,12	341:16 342:4,8,10	399:21 400:6,14
197:3,6,18 198:13	263:13 264:6,8,17	342:16,17,19	400:18 401:3,19
199:19 200:9,19	265:12,15,17	343:7,9,13 344:15	402:23 403:5,10
201:1,16,20,23	266:3,8 267:23	347:15,18 348:16	404:18,22 405:7,9
202:3 203:13,20	268:15 269:22	348:20 349:18	405:11,14,22
203:22 204:2,12	270:8,11,13,22	350:11,19,21,23	406:10,16 407:3,4
204:15,21 206:5	271:1,5,9,12	351:1,5 352:3,6	407:7,19,21 408:5

408:8,9,13 409:3 410:14,23 411:12 411:13,15,20,22 411:23 412:2,3,5,6 412:7,8 413:2,3,19 413:21 414:8,12 414:13,19 415:4,5 415:8,11,19,22,23 416:5 417:7,16 418:2,9,21 419:23 420:9,13,14,17,19 420:23 421:6,12 422:8,9,10,14,16 423:3,10,19,20 424:3,11,22 425:1 425:4,8 427:3,4,9 427:12,15,20,21 427:23 428:3 429:2 430:2,6,12 430:16,17,19 431:7,9,15,18 432:9 433:8,11,14 433:17 434:3,8,17 434:17,19,22 435:2,5,10,23 438:3,15 440:2 441:9,17,18,23 442:3,4,6,9 443:13 443:20 444:22 445:10,14,16,17 445:20,21,23 446:5,7,14,23 447:11 449:2,8 450:9,11,15,23 451:2,11 452:13 452:23 453:13,20 454:6,10,17 455:10,15 456:4,5 456:7,10,15 457:16,19 458:1,4 460:18,22 461:3,5	462:4,11 463:8 464:13,17,23 465:11,18,20 466:8,9,12,13 469:7 471:2 480:6 480:7 484:8 486:13 489:19,20 490:2,3,8,14,18 <b>rights</b> 83:13 101:3 <b>rigorous</b> 39:7 <b>rise</b> 294:3 310:5 <b>rises</b> 281:20 <b>risk</b> 41:5 67:11 90:22 206:12,19 206:19 207:4 222:13,17,21 223:1,3 251:11 260:4 270:15 285:19 286:9,12 286:14 287:5,8,12 287:19 290:1 293:17 295:3,21 301:17,20 310:7 311:2,4 312:11 313:20 314:8,15 334:10 391:9 393:1,13,19 404:8 484:9,12,16 485:3 485:3,6 488:4 489:18 490:6 <b>risks</b> 84:22 91:4 177:21 204:20 205:2 206:14,22 207:19 208:14 209:5,8,22 210:4 210:10,22,22 214:16 215:1,6,9 215:12 217:17,18 218:8,9,16 219:4 246:3	<b>risky</b> 288:3 <b>rocketcitynow.c...</b> 5:1 <b>role</b> 348:13 349:9 367:16 373:3 395:12 397:22 398:11 403:1 474:2 480:18 <b>roles</b> 398:18 <b>room</b> 94:17 106:20 208:4 235:11 <b>rooted</b> 444:7 <b>rosacea</b> 140:2 <b>rotate</b> 349:22 <b>roughly</b> 15:21 84:12 97:11,21 101:15 139:7,13 141:17 345:1 <b>round</b> 87:14 <b>route</b> 72:13 149:22 <b>rows</b> 307:18 <b>rpr</b> 492:20 <b>rule</b> 173:3 316:4 <b>rules</b> 9:5 170:14 173:9 224:9,10 <b>ruling</b> 38:10 53:21 <b>run</b> 95:14 137:23 138:16 488:8 <b>running</b> 292:14 <b>rutledge</b> 33:2 <b>s</b> <b>s</b> 2:1 4:10 55:20 202:16 203:8,11 277:14 299:19 340:15 356:2 360:9,10 492:19 494:3 <b>sacrifice</b> 348:12 349:8	<b>safe</b> 268:22 270:3 <b>safety</b> 219:14 221:12 235:9 269:5 437:17 469:6 <b>sake</b> 437:2 438:9 439:3 467:7 <b>salem</b> 3:13 <b>salvage</b> 475:3 477:5 <b>sample</b> 413:11 <b>san</b> 86:14 272:16 278:7 <b>sanction</b> 177:15 <b>sanctions</b> 176:16 <b>sat</b> 153:3,9 207:11 476:21 <b>satisfaction</b> 299:8 331:14,19 332:2,4 333:4,5,13 <b>satisfactory</b> 104:19 <b>satisfied</b> 326:22 330:18 335:20 <b>save</b> 347:17 <b>saved</b> 156:3 <b>saw</b> 18:7 78:4 95:7 106:7 341:3 407:17 471:8 <b>saying</b> 54:20 92:21 124:17,19,19 209:15 234:16 236:12 237:13 244:9 250:13 274:11 284:22 288:20 289:1 310:1,2,4 313:6 365:11,14,18 366:4 415:20 466:11
---	---	--	---

<b>says</b> 22:17,20 26:1 27:16,22 28:15,16 28:22 29:8 30:13 34:11 38:8 39:4,9 40:2,8,9 41:2,2 52:11 55:19 56:20 57:3 59:23 60:10 63:10,18 64:9,17 65:7 104:22 108:10 109:12 110:5 111:8 113:7 115:4 116:6,19 128:7,18 171:1,15 172:11,18 173:9 174:23 179:15 224:17,21,21 225:10 227:7,11 227:23 228:5,23 229:12 230:8 231:4,8,17 232:12 233:19 234:7,22 236:2,7,19,22,23 238:3,5 239:4 240:8 241:2,11,15 241:19,23 242:18 248:18 251:13,19 253:1 257:10,19 258:3 260:10 263:14,16 264:13 264:22 265:5,16 265:19 279:23 300:4 302:1 304:15 305:23 306:1,2 308:9 309:6 326:20 328:19 330:16 341:21 347:19 348:1,2,8 356:11 356:20 357:6,8,14 361:1 364:21 365:5,20 367:11	375:19 377:10 378:6 382:12,16 383:18 384:18,21 386:22 387:5,20 391:23 392:15 397:19 398:6 401:9,12,21 404:21 405:23 411:18 413:9 415:12 421:9,22 422:5,18 424:8 427:11,17 428:13 429:7 430:16,23 432:2 434:8,17,21 435:15 437:8,11 440:4 454:14 456:3 459:4 461:1 464:19,21 466:2 468:22 <b>scarless</b> 131:11 136:8 <b>scarring</b> 145:20 <b>schechter</b> 216:7 280:4 377:20 395:6 <b>school</b> 165:12 166:4 409:7 452:1 464:5 <b>schools</b> 83:13 <b>science</b> 46:6 51:6 78:2 82:15 86:16 90:2,3 92:9,11,11 93:15 94:11 122:17 124:4 125:20 177:8 280:11 <b>scientific</b> 20:18 21:7 43:17 44:10 45:6,9,21 46:18 47:20 50:3,11 51:17,19 72:15	81:13 83:4 86:12 86:12 89:7,21 103:14 104:13 112:8 123:4,22 135:14,17 185:3 186:7 187:2 191:12 198:6 218:4 219:8 234:1 244:12 275:2 280:9,16 281:16 281:22 282:13 283:2 284:8 287:22 288:1,5 308:14 311:16 323:23 362:16 363:23 373:23 374:19 378:6,11 380:3,7 381:4,5,8 381:19 382:9 387:21 408:12 410:19 439:5 441:7,12 443:6 444:15 449:20 452:12,15 453:19 454:4 469:5 482:19 483:3 484:19 488:20 <b>scientifically</b> 44:10 287:9 366:21 <b>scientist</b> 408:23 409:3 <b>scope</b> 52:7,15,20 53:2 54:14 55:4 62:2 81:9 83:7,16 83:17,18 89:4 90:18 91:17 92:6 92:18 96:19 97:13 98:1,9 99:9 117:11,18 120:21 126:14 137:14	151:21 204:12 297:19 298:6 425:21 426:18 429:23 438:5,18 442:17 443:16,22 451:20 453:22 454:13,19 455:13 458:3 459:12 460:21 461:19 462:7,13 465:7 469:9 <b>score</b> 161:3 <b>scottsbluff</b> 138:15 138:23 139:16 <b>screen</b> 256:3 <b>screened</b> 416:19 <b>scripture</b> 456:21 <b>scroll</b> 344:10 345:13 <b>scrotoplasty</b> 478:10 <b>scrotum</b> 478:7 <b>se</b> 151:8 178:22 213:7 392:17 <b>search</b> 21:2,6,10 268:19 353:18 453:16 <b>searches</b> 297:12 <b>second</b> 39:3 58:1 64:6,8 70:22 93:3 93:10 94:9,15 95:2,3 96:2,15 97:8 110:5 119:20 134:20 233:19 241:2 255:20 320:17 328:18 339:15 360:4 364:15 383:13 384:11 391:22 413:9 428:12 440:10 445:8,12
---	---	--	--

477:3 <b>secondary</b> 165:14 479:2 <b>section</b> 35:4 36:3 59:15 116:17 172:4,5,6 225:5 240:5 257:8,17 265:16 326:12 330:13 339:3 341:17,19 342:11 344:9 378:9 382:12 391:16 397:8 399:15 400:3,15,19,23 401:8 405:3 413:7 415:9 437:7 440:3 440:16 441:6 <b>sections</b> 116:12 <b>see</b> 13:20 22:17,18 22:22 25:9 27:3,6 27:18 28:5,20 29:2,16 30:18 34:9 35:12,18 36:2 38:6,7,13 39:7 41:1,8,10,12 41:13,15 43:12 53:4 55:17,23 56:22 59:12,14,19 60:8 63:3,16,22 64:20 65:12 70:16 71:5,6,6,7,19 74:20 80:22 91:23 92:8,9 95:21 104:2 108:14,22 109:18 110:9 111:14 113:1,10 113:14 116:1,10 116:14,21 123:13 123:19 128:19 131:13 132:22 134:9,14 141:22	143:19 146:1 150:12 158:20 171:13,16 172:15 172:23 173:18 174:5 202:18 212:19,20 224:13 224:14,16,19,23 225:5,7,17 226:8 227:6,11,22,23 228:2,11 229:15 230:17 231:6,14 232:12 233:15 234:4,13 237:16 239:4,21 240:13 241:9 243:6 246:1 247:13 249:10 253:9 256:22 257:5,8,15,23 258:8 262:11 263:13,16 264:12 265:3,13 266:1 268:19 279:22 280:2,11,17 299:21 300:1,12 301:23 302:2,7,11 308:11 309:12 313:9,12 320:13 320:23 322:18 323:5,19 324:13 326:12,16 327:2,4 327:4 328:11,17 330:14 332:6 334:22 337:8 339:6,7 340:11,20 341:16,19 342:1 342:10 344:7,20 344:23 345:4 346:3 348:4,14 349:23 350:1,7,22 351:20 352:1,20 356:4,15,17,23	357:17 358:12 359:12 361:10 364:15 365:8 366:5 373:17 374:1 377:10 378:5,13,15,18,22 379:3,4,7 382:12 382:15 383:3,11 383:14 384:2 385:2 391:14,15 392:13,21 394:17 394:18 395:1,7 397:10 398:3,12 400:7 401:8,16 402:6 405:20 406:8 407:15 411:16,20 412:21 413:6,8,15 414:1,6 415:8,12,17 419:14 420:1 421:9,22 422:3,15 427:6,8 428:18 429:7,12 430:14 431:5 432:4,4 434:9 435:1,7,19 437:7,17 440:3,8 440:12,22 441:3 446:9 447:14 449:1 451:15 453:1,2 461:4 471:20 <b>seeing</b> 71:17 114:21 237:9 355:1 386:8 <b>seek</b> 66:14 334:19 351:8 457:13 <b>seeking</b> 67:20 71:9 74:10 132:8 146:4 152:14 154:16 165:9 276:11 300:22 363:11	456:23 459:18 <b>seen</b> 17:21 18:13 77:8,11 96:8 123:6 162:5 165:4 165:4 219:4 223:21 233:8 249:21 309:11 338:1 340:19 388:23 420:2 436:5 488:15 <b>sees</b> 245:21 <b>select</b> 307:4 <b>selected</b> 7:19 191:2 193:8 198:2 411:9 476:23 477:1 <b>selecting</b> 306:21 <b>selection</b> 472:22 <b>selective</b> 306:8,19 <b>self</b> 70:18 94:1 120:2 145:1 161:10 162:9 313:13 314:19 318:11 333:21 334:10 341:9 347:2 355:11 357:9,15 362:21 363:16 368:10,15 369:1,6 370:1,2 374:10 444:1 463:21 476:19 485:22 487:3 <b>seminal</b> 480:21 <b>sen</b> 378:20 <b>senate</b> 4:23 63:2 63:11 <b>send</b> 143:5 154:21 156:23 157:8 <b>sending</b> 473:7 <b>senior</b> 378:20
---	--	--	---

<b>sense</b> 24:4 66:15 66:16 80:23 81:14 117:12 152:15 206:5 226:4 235:5 266:10 348:19 355:8 386:9 <b>sent</b> 80:8 156:10 157:3 493:14 <b>sentence</b> 39:3 40:1 41:2 65:6 109:12 111:8 113:6 116:5 119:20 143:20 172:18 231:16 233:19 234:6 241:2 257:19 258:2 300:4 308:9 309:5 326:20 328:18 330:16 348:1,2 356:11 357:7 384:11 391:22 395:4 402:12 403:13,15 405:23 413:9 <b>sentences</b> 172:10 302:1 344:11 398:5 <b>separate</b> 365:11 <b>separately</b> 136:5 <b>september</b> 1:21 9:9,17 171:16 465:10 491:10 <b>sequential</b> 283:12 283:14 <b>sequitur</b> 402:13 <b>serendipitous</b> 229:3 245:23 247:14 308:19 <b>series</b> 283:11,14 304:18 308:2,10 308:14,20,21 309:9 310:21	311:15 312:18 314:6,9 322:17,23 323:12 324:13 335:15,18 343:6 343:11 <b>serious</b> 109:16 487:7 490:7 <b>serve</b> 189:4 456:17 457:1,13 <b>served</b> 194:8 450:6 475:9,11,16 <b>service</b> 151:17 432:9 <b>services</b> 95:17 104:18 111:9 140:15 195:2 248:3 376:22 384:21 385:14 422:5,19 431:3,3,9 434:5 435:9 437:22 438:11 454:5 473:4 474:8 474:9 475:10 <b>serving</b> 33:1,15 92:15 172:21 173:10 <b>session</b> 187:5 195:13 <b>sets</b> 420:21 <b>setting</b> 258:16 356:15 374:10 435:8 480:17 <b>settings</b> 258:5,8 <b>seven</b> 45:23 123:1 141:22 166:1 322:23 325:10 335:15 336:16 337:7 343:6,12 357:20 391:18 <b>seventeen</b> 474:6	<b>severe</b> 265:9 266:5 267:17 487:2 <b>severity</b> 405:19 <b>sex</b> 6:13 7:9 8:14 36:22 59:15,23 60:3,7 61:7 81:20 82:1 94:1 145:3 146:10 147:1 161:10 164:9 165:14 213:7,22 214:11,16 219:17 238:19,21 247:2 247:10 260:7 318:6,20 319:4,8,9 319:14 337:10 346:16 370:1 383:23 392:1,9,10 392:17,19 393:11 404:2 405:18 416:13 417:5 437:14,22 442:13 442:21 443:12,20 446:17,22 447:2 447:20 448:1,15 454:9,15 455:2 457:14,15 464:15 464:21 482:17 487:16,20 <b>sexual</b> 192:17,20 333:3 436:8,16,21 461:15 462:11 463:18 464:1,1 469:20 <b>sexualize</b> 469:23 <b>sexualizing</b> 462:4 462:20 468:23 <b>sham</b> 250:5 316:1 <b>shaping</b> 461:1 <b>share</b> 364:22 <b>shared</b> 270:16	<b>shareholders</b> 381:2 <b>sheet</b> 493:11 <b>shield</b> 376:1,7 381:1,9 382:1,22 383:8 429:15 <b>shift</b> 99:15 400:12 442:4 <b>shifted</b> 305:1 369:7 <b>shipp</b> 55:20 56:3 <b>short</b> 7:17 48:4 53:10 271:4 327:17,17 336:4 336:10 411:8 <b>shortcut</b> 188:21 <b>shorter</b> 150:20 <b>shortly</b> 361:10 <b>shoulder</b> 292:5,11 <b>shoulders</b> 261:3 276:9 <b>show</b> 37:19 114:13 230:8 264:19 325:1 327:23 336:2 339:11 363:7 366:22 371:21,22 375:12 396:13 412:16 426:20 430:4 433:5 <b>showed</b> 32:8 181:7 354:15,15 371:23 424:6 439:12 <b>showing</b> 90:4 92:9 247:23 346:14 453:15 <b>shown</b> 312:15 415:15 439:18 <b>shows</b> 122:17 258:20 313:7 329:23 352:19
--	--	--	--

355:9 368:8,16,18 369:17 374:20 405:18 414:4 453:20 <b>sic</b> 12:23 <b>side</b> 77:2,3 94:12 99:13 142:17 146:15,17 151:16 159:15 217:16 282:16 285:9 349:20 <b>sided</b> 222:23 <b>sign</b> 493:12 <b>signature</b> 264:12 <b>signed</b> 27:2 493:20 <b>significant</b> 206:22 207:4 295:2 368:9 383:21 483:19 484:15 487:1 490:6 <b>significantly</b> 487:16 <b>signify</b> 243:3 <b>signs</b> 463:18 <b>similar</b> 46:10 52:23 54:9 61:20 63:6 76:23 77:7 77:10 88:14,19 93:11,16 99:11 140:4 <b>similarities</b> 475:21 <b>simple</b> 289:12 <b>simply</b> 124:17 151:16 <b>single</b> 20:17 42:8 42:15 150:22 152:2,6 298:20,23 299:3 308:20,21 312:19,19,20 323:16 328:9 416:20	<b>singulair</b> 222:7 <b>sinus</b> 129:21 133:12 <b>sir</b> 11:11 18:16 31:15 32:5 34:23 35:10,13,19 36:5 39:9 40:9 42:14 48:1 64:3 76:19 77:9 118:14 119:19 120:16 133:3 174:23 296:12 331:17 466:10 477:15 490:20 <b>sit</b> 183:8 <b>site</b> 407:23 408:1 <b>sitting</b> 70:3,9 170:21 173:21 221:20 239:8 297:15 310:17 <b>situation</b> 179:20 244:1 <b>situations</b> 206:9 251:2 253:1,20 254:1,5,10 <b>six</b> 56:17,18 128:23 129:3 136:14 158:16 160:2,3 163:23 164:1 336:15 337:14 380:19 391:17 <b>sixteen</b> 56:16 360:22 <b>size</b> 355:8 372:9 413:10,11 426:8 <b>skin</b> 131:12 134:7 136:8 137:23 139:3,20 140:1,2 142:14,14 144:1,2 144:4,7,8,15,18	145:2,8,13 146:9 <b>skipping</b> 231:16 258:2 <b>slide</b> 88:3,7 456:18 457:2,8 458:15,21 458:23 460:22 461:23 462:22 463:13 464:3 <b>slides</b> 87:23 451:10 456:17 <b>slightly</b> 155:1 <b>slipped</b> 131:4 <b>slow</b> 161:14 165:22 207:6 381:1 388:17 <b>slowing</b> 384:15 <b>slowly</b> 114:20 <b>small</b> 20:15 45:8 45:11 290:13 295:20 352:16 413:11,12 <b>smaller</b> 317:7 <b>social</b> 70:19 71:11 348:3,6,9 349:1,5 351:15 362:7 366:21 367:15,17 367:17 368:1,1,7 368:21 369:18 370:10,10,20,20 371:6 373:1,2,3 397:9,17,21 <b>socially</b> 351:12 <b>societies</b> 53:5 76:14 <b>society</b> 5:9 44:18 45:3,15,18 46:1,7 47:8 48:11,15,19 72:3 99:16 100:5 100:19 103:19 104:22 108:11 118:10,18 123:23	169:7 171:12 181:19 182:1,3 195:16 196:22 197:3,6,9,21 198:7 198:19 199:11 200:13,20 282:4 283:8 300:18 301:4 404:5 <b>soft</b> 479:5 <b>sole</b> 410:1 <b>solely</b> 331:14 <b>solicited</b> 187:18 191:19 199:12 <b>solo</b> 23:21 <b>solution</b> 324:4 <b>solutions</b> 10:7,9 493:23 <b>solve</b> 351:9 <b>solved</b> 313:13 <b>somebody</b> 121:11 245:21 250:5 276:11 284:19 318:22 322:9,11 <b>sorrow</b> 194:18 <b>sorry</b> 57:18 77:9 108:20 138:19 142:11 144:18 163:16 170:5 172:2 201:10 212:9,11 227:4 268:6,11 280:23 281:3,13,14 318:19 325:19 327:20 340:1 353:7 373:2 379:12 384:14,14 385:19 397:15 409:1 421:16,19 426:1,7 440:22 441:2 445:17 446:20 457:14
---	--	--	---



464:7 471:5,11,12 474:12 <b>sort</b> 19:18 70:20 71:2 87:18 88:5 89:13 94:4 96:22 96:22 101:4,21,23 103:16,20 107:4 127:11 140:3 159:3,13,21 165:8 165:10,22 208:20 301:15 323:16,17 324:6 372:7 475:6 <b>sorts</b> 53:5 104:12 334:11 <b>sound</b> 22:11 76:10 170:5 194:13 196:9 202:23 203:2 234:2 <b>sounds</b> 22:13 84:9 190:3 203:5,9 472:2 <b>source</b> 74:1,3 296:18 361:22 407:18 <b>sources</b> 378:7 380:4 458:13 <b>space</b> 306:6 <b>speak</b> 14:7 79:19 81:16 82:11 87:1 87:6 96:13 161:21 163:16,17 328:16 366:18 416:8 445:1 447:17 457:1,5,7 <b>speaker</b> 82:3 471:16 <b>speakers</b> 81:16 <b>speaking</b> 20:1 85:4,6 93:18 107:16 126:17,18 338:20 448:3,10	466:19,19 467:2 469:19,21 <b>speaks</b> 73:3 95:9 351:23 358:10 369:12 373:8 466:23 <b>special</b> 253:7 <b>specialist</b> 74:16 75:13 87:18 155:22 156:20 <b>specialists</b> 149:16 206:2 <b>specialized</b> 66:2 204:2 <b>specialty</b> 155:21 156:16 378:16 472:15 <b>specific</b> 26:9 135:2 170:14 174:20 180:1 212:12 213:14 242:19,20 288:10 365:19 <b>specifically</b> 70:4 132:17 144:20 145:5 163:20 192:16 198:18 209:22 210:5 255:15 334:18 376:23 417:19 418:11 <b>specifics</b> 27:23 <b>specified</b> 437:12 <b>specimen</b> 292:2 <b>spectrum</b> 152:10 313:18 487:4 <b>speculating</b> 47:4 <b>speech</b> 368:21,22 369:20 371:22 372:2 <b>speeches</b> 261:18	<b>spell</b> 16:13 <b>spelling</b> 445:6 <b>spend</b> 135:3 412:11 <b>spent</b> 17:8 <b>spoke</b> 14:2,16,22 64:10 81:18,20 481:2 <b>spoken</b> 15:16 16:8 16:10,16,18,22 64:17,23 205:5,8 206:1 418:3 <b>spread</b> 490:13 <b>spring</b> 207:5 <b>srs</b> 322:22 330:19 <b>stable</b> 344:14 <b>staff</b> 13:1 56:3 98:23 99:1 307:1 474:5 <b>stage</b> 107:4 122:19 125:2 <b>stainless</b> 131:5 <b>stake</b> 286:14 287:18 386:20 447:19 <b>stamp</b> 339:14 340:4 <b>stand</b> 61:13 120:16 <b>standalone</b> 410:16 <b>standard</b> 183:2 209:13 244:23 249:3 <b>standards</b> 7:15 182:16,19,21 183:9 184:5 186:9 186:10,11 189:11 196:14 199:7 316:3 396:15 397:4,14 398:14 399:2 401:1	<b>standpoint</b> 194:17 387:8 447:15 466:16 <b>stands</b> 87:10 <b>start</b> 23:2 84:7 85:9 156:18 162:15 163:11,12 164:4,9 237:9 254:19 302:16 316:19 324:17 351:20 383:14 <b>started</b> 24:3 67:9 106:14 107:3 146:23 148:3 184:8 202:12 216:4 226:8 268:17 345:1 372:7 408:16 409:6 480:13 <b>starting</b> 106:16 143:20 161:1 165:14 166:8 228:1 236:15,17 236:20 237:4 320:14 328:11 344:13 345:7 <b>startled</b> 477:2 <b>starts</b> 228:3 405:14 <b>state</b> 5:2,5 9:2 10:10,20,21,22 11:1,12 27:23 28:2,19,23 33:9 37:10 51:22 52:5 53:8,10 54:4,7 57:10 58:15,21 59:8,13 63:5 76:16 78:14 79:21 81:1 82:15 89:6 90:2 96:8 113:8 115:23 116:8
---	---	--	--

284:5 376:8 396:3 397:20 420:13,16 473:14 482:11 492:2,22 <b>stated</b> 227:7 228:2 349:3 483:13 <b>statement</b> 5:21 44:20 45:16 46:8 46:15,20 47:15,22 48:6,16 49:3,15 105:15 113:12 114:1,3 239:20,22 240:1,9,13 250:12 253:22 254:3 331:8 377:2 <b>statements</b> 45:5 46:12,13,17 47:12 50:10,16 51:11,14 117:23 199:2 247:11 444:16 481:8 <b>states</b> 1:1 9:22 30:7 52:21 54:23 61:19,23 62:4 110:9,12,19 111:3 429:4 472:18 474:2 475:13 <b>stating</b> 27:17 <b>statistic</b> 102:21 <b>statistically</b> 392:4 <b>status</b> 27:18 29:1 30:15 240:10 365:7 366:9,13 <b>stay</b> 98:6 <b>stayed</b> 53:10 <b>stays</b> 256:7 <b>steel</b> 131:5 <b>stenographic</b> 492:6 <b>step</b> 53:8 339:8	<b>stephen</b> 58:2 <b>stepped</b> 260:12,13 <b>stepping</b> 54:1 105:9 <b>steps</b> 69:15 <b>sterilization</b> 287:15,16 <b>sterilizing</b> 290:7 <b>steroids</b> 145:3 146:9,10,16 147:1 <b>stick</b> 261:16 448:14 <b>sticking</b> 449:18 <b>stomach</b> 121:22 <b>stop</b> 251:2,8 <b>stopped</b> 25:8 <b>stopping</b> 366:10 <b>stories</b> 280:1,14 323:22 365:6,21 366:1,2,7,11,16 <b>story</b> 95:21 <b>street</b> 2:20 3:12 <b>strength</b> 413:7 <b>strengths</b> 342:11 391:15 <b>strictly</b> 424:17 466:15 467:10 <b>stricture</b> 338:10 <b>strictures</b> 338:21 <b>strike</b> 13:12 14:17 16:4 18:10 23:13 33:13 49:5 84:2 90:12 125:23 147:17 158:14 174:14 177:17 186:21 202:1 228:17 267:15 268:15 272:12 289:3 314:23 326:10 348:6 370:5 377:17	433:6 461:13 <b>stringent</b> 281:16 <b>strive</b> 454:16 <b>strong</b> 78:17 290:3 <b>strongest</b> 490:1 <b>strongly</b> 114:14 <b>struck</b> 106:13 131:4 <b>struggles</b> 455:1 <b>stuck</b> 361:8 <b>student</b> 101:11 <b>studies</b> 13:9,11,15 13:18 35:21 108:17 109:5,9 124:12 248:10 249:20,23 250:7 270:8,11 271:17 278:1,15,22 292:18 298:10,13 298:21 301:20,20 302:1 304:2,9 305:9 321:10 329:22 331:20 343:20 353:1,8 354:22 356:20,21 356:22 357:3,4,11 358:8 367:21 371:5 378:2 391:7 412:13 415:13,15 415:21 416:3,18 441:14 482:2,15 485:14 486:2 490:5 <b>study</b> 6:19 7:10 39:7 50:17 109:10 250:1 256:18 257:11,22 258:10 258:20 271:19,21 273:18 275:17 276:1,5,17,19,22 277:4,7,18 278:2,5	278:8,10,19,23 279:3,7,15,17 281:17,18 282:7,8 282:9,9,14 286:4 289:11 291:12 292:13 298:23 299:18 300:5,15 309:11 311:10 313:7 317:17 318:10 319:17 321:9 323:9 324:20 329:16 330:3,6,22 334:15 334:17,18 339:11 340:8,10,19 341:14 342:5,18 342:22 343:5,8,10 343:15,17,19 346:14 347:8 348:18 352:5,10 352:15 354:14,21 355:9 358:3,10 363:7 370:7,17 388:23 389:14,17 389:22 390:10,23 391:16 392:7 393:10,17 410:22 411:20 412:4 413:10,14 414:4,5 414:8,9 416:20 440:9,10,11 453:6 453:13,15 <b>stuff</b> 101:4 107:1 148:8 220:18 359:13 363:16 372:7 448:12 <b>subcategories</b> 74:21 <b>subcategorizing</b> 301:15
--	---	---	---



<b>subcategory</b> 154:7 <b>subgroups</b> 390:7 <b>subject</b> 20:2 34:21 39:6 51:4 79:17 82:3 88:19 104:17 172:14 176:14 205:21 272:1 274:14 287:5,6 389:5 416:12 450:2 <b>subjective</b> 112:4 114:2 282:15 327:16,17 331:10 336:5,7,10 349:13 <b>subjects</b> 87:21 454:1 <b>submission</b> 234:10 <b>submitted</b> 33:22 34:3 42:17 43:3 55:19 292:3 <b>subreddit</b> 364:19 364:21 365:13 366:5 <b>subscribed</b> 495:14 <b>subscribing</b> 297:1 <b>subscription</b> 297:4 <b>subscriptions</b> 100:10 <b>subsection</b> 174:5 <b>subsequent</b> 122:3 185:22 461:10 <b>subsequently</b> 74:6 226:22 229:4 270:21 <b>subset</b> 68:15 <b>subsidiary</b> 103:21 <b>subspecialty</b> 173:15 <b>substance</b> 14:6 70:17 77:14,15 363:6	<b>substantive</b> 98:12 98:17 168:16,21 173:11,23 181:1 181:12 <b>success</b> 161:19 300:17 331:2 <b>successful</b> 95:15 301:3 303:18 <b>succinctly</b> 127:1 <b>sudden</b> 368:23 <b>suddenly</b> 368:14 369:7 372:13 <b>suffer</b> 132:13 444:3 486:18 <b>suffered</b> 463:23 <b>suffering</b> 41:6 53:9 66:19 122:11 122:13 151:5 260:18 457:6 <b>sufficient</b> 294:1 358:9 482:20 484:21 <b>sufficiently</b> 310:8 311:22 <b>suggest</b> 414:4 <b>suggesting</b> 118:2 <b>suggestion</b> 173:4 <b>suggestive</b> 362:23 <b>suggests</b> 394:22 <b>sugrue</b> 6:6 299:19 <b>suicidal</b> 487:5 <b>suicidality</b> 313:13 333:20 334:20 338:5 347:2 <b>suicide</b> 119:9 162:9 314:5,18 334:10 372:4 390:2 391:1,9 393:13,20 <b>suitability</b> 416:17	<b>suitable</b> 398:23 <b>suite</b> 2:14 3:6,12 <b>summary</b> 82:15 88:23 89:5,5 300:2 303:8 327:14 405:3,3 <b>supervision</b> 492:9 <b>supplement</b> 263:17 <b>supplemental</b> 4:16 38:4 264:1 265:1 265:6,20 <b>supplements</b> 38:10 296:11 <b>supplies</b> 422:6,19 <b>supply</b> 339:2 468:9 <b>support</b> 48:16 49:13 51:18 52:4 52:8 57:10 58:16 64:1 72:6 77:21 88:21 89:8,22 103:14 104:11 112:9 244:13 284:21 287:23 303:19 314:17 336:3 352:17 380:7,18 381:19 382:10 387:21 393:7,11,17 395:18,19 403:5 406:19 409:20 410:1,19 416:22 439:14 444:6,6 454:5,8 469:6 482:16,21 484:19 485:20 <b>supported</b> 39:5 45:17 50:10,17 120:6 123:19 186:14 243:11	245:9 251:23 285:12 286:3,12 287:9 288:13 294:18 295:10 488:19 <b>supporting</b> 46:18 76:4,21 117:8 402:4 403:2 481:19 482:4,11 <b>supportive</b> 417:4 <b>supports</b> 46:15 338:2 487:6 <b>suppose</b> 50:23 53:11 226:8 311:19 323:18 381:3 <b>supposed</b> 28:9 <b>supposedly</b> 117:14 <b>suppress</b> 428:15 428:23 <b>suppressing</b> 401:10,14 437:15 437:23 <b>suppression</b> 7:19 404:1 406:1 411:9 413:5 <b>sure</b> 15:2,20 32:15 94:19 97:6 113:5 115:9 118:13 121:2 126:23 139:1 181:4 184:14,15 256:7 273:15,16 277:18 288:19 297:21 325:12 340:23 343:1 360:5,5 434:4 453:3 463:9 468:7 477:11 485:7 487:14 <b>surgeon</b> 8:14 24:5 64:10 66:18 95:4
--	--	--	--

95:7 106:5 119:14 121:16 123:10 130:20 133:6 154:20 155:19,19 159:18 160:13 174:19 198:17 213:2 274:16,17 281:7 284:16 315:10,12 402:15 443:8 464:15 466:4,17 467:11 467:14 472:17,20 473:1 475:12,17 476:9 480:14,15 <b>surgeon's</b> 79:20 466:5 480:18 <b>surgeons</b> 5:10 44:19 66:10 67:16 68:10 96:12 99:17 100:5,19 102:23 108:11 120:18,23 122:14 123:7,21 126:9 127:3 130:14 132:3,5 149:21 154:16 169:7 171:13 285:3 294:17,22 294:23 295:9,15 299:3 312:4 419:8 474:5 <b>surgeries</b> 24:21 25:2,8 59:16 90:9 90:10,11 103:8,13 118:3 119:22 120:19,23 121:23 122:1 125:14 140:12 142:4 143:8 147:15 148:11 176:8 177:4 315:22,23 336:4 338:18	358:13 379:20 478:21 <b>surgery</b> 6:8,11,14 7:10 8:5 22:21,22 23:3,4,15 25:3,14 25:17 26:2,14,17 27:14 28:11 30:9 31:7,8,12,23 32:3 32:10,11,17,19 36:23 44:13 45:1 45:3 46:2 47:8 60:1,17,22 61:5 64:18 66:11,21,21 67:9 68:4,5,6,17 69:7,16 71:3 72:4 72:4 73:2 79:22 81:2,6 82:10,12,14 89:7 90:7 95:12 100:17 102:20 103:19 104:7 106:2,9,10,17 107:13,20 111:9 111:18 112:10,14 112:22 114:10 115:19 121:17,19 122:2,7,9,21 123:8 123:17,23 125:9,9 128:8,8,13,14 130:3,15 131:16 131:19 132:1,18 133:17 134:3,17 138:10,11,17 139:7 140:5 141:13 143:4 147:20 149:3 151:8,23 152:5 159:3 166:23 167:4,8,14,20 168:8,13,18 175:5 175:10 176:22 178:2 181:21	189:3 250:5 273:8 273:8 282:4 283:5 283:9 287:13 290:11 291:6,15 291:19 293:5,19 296:1,20 299:21 300:6,10,18 306:11,13 309:12 309:16,21 310:19 310:23 311:14,14 312:3 314:11,18 316:1,12 323:1 328:3,8 331:3,9,13 332:5 333:8,14,19 334:3,6 335:4,20 337:11 338:11,14 346:17,22 351:9 351:19 358:17 366:14 373:21 375:7 376:13 382:23 384:22 386:16,17 387:2 387:14 390:1,16 391:3 392:23 393:12 394:22 423:22,23 425:17 426:14 427:6,18 428:2,7 429:8 432:3,8 433:19 437:21 444:19 450:15,22 454:6 466:21 467:1,3 468:12,14 469:17 472:16,23 473:16 473:22 474:15 475:5 476:2,2,15 477:4,5,10,14,21 478:20 479:10,15 481:2,15 482:18 488:18,23	<b>surgery's</b> 159:19 159:21 <b>surgical</b> 6:21 24:23 65:1 104:15 105:12 112:3 117:15 121:18 126:10 127:4 134:8 140:9 141:11,18 142:13 144:8 154:23 159:15 162:23 163:13 164:14 174:18 175:21 176:5 177:21,22 220:20 271:19 284:13 285:12 286:2,4 288:12 289:5 290:19 293:11 295:15 296:14 308:10,23 315:3,20 316:5 322:21 326:23 330:8 334:2,7 336:17 353:10,20 353:21 354:3 356:2,14 357:5,16 357:21 358:23 369:13 393:18 400:17 402:18 419:5 424:10 435:16 436:14,17 444:11 459:6,10 459:20 469:22 470:7 474:8 480:16 481:3,20 485:1,21 486:3 <b>surgically</b> 144:4 151:2 152:4 323:2 328:12 329:4 <b>surprise</b> 20:4,9 21:23 32:16,22
---	--	--	---

103:4 196:11 425:13,22 <b>surprised</b> 303:12 <b>surprising</b> 21:15 113:12,15 <b>surroundings</b> 348:11 349:7 <b>survey</b> 331:14 <b>surveys</b> 299:8 332:4 <b>suspect</b> 26:23 151:5 196:18 220:13,22 <b>suspend</b> 140:8 <b>suspicion</b> 58:23 185:12 433:22 <b>suspicious</b> 144:13 144:14 <b>swear</b> 10:12 184:23 <b>swede</b> 329:21 <b>sweden</b> 7:11 35:16 248:4 329:20 <b>swedish</b> 313:7 329:21 330:6 346:14 389:23 391:3 453:5 <b>sweet</b> 131:3 <b>swissophone</b> 389:9 <b>switch</b> 182:8 <b>sworn</b> 11:6 495:14 <b>symptoms</b> 152:7 405:18 <b>system</b> 116:7 280:10 319:6 345:21 <b>systematic</b> 6:22 8:1 300:8 307:18 356:3,12 357:3,20	<b>t</b> <b>t</b> 4:10 33:2 182:13 202:16 203:4,4,11 203:11 277:14 360:9 372:7 425:7 446:12 492:1,1 494:3,3 <b>table</b> 87:14 129:21 131:5 302:7,9 307:13 337:6 338:8 349:20,23 350:13,16 <b>take</b> 14:11 24:20 69:14 90:22 115:17 131:17 140:16 143:11 176:6 204:18 282:11 294:12 312:15 315:7 316:15 318:6,20 319:21 367:20 397:1 408:13 463:14 470:3 471:18,19 <b>taken</b> 9:20 40:18 41:17 42:2 51:12 79:5 115:12 166:18 227:22 229:19 232:4 240:16 254:17 320:4 322:12 388:9 417:13 470:14 472:5 492:5 <b>takes</b> 42:8 80:17 80:23 107:12,19 111:5 112:3 118:10,18 221:17 222:13 231:23 232:16 242:1 429:20 442:12	443:11 <b>talk</b> 23:1 31:7 35:15 83:23 118:15 136:20 163:5 201:2 210:21 271:1 290:1 331:10 347:11,11,13 381:4 452:14,23 453:17,23 464:3 <b>talked</b> 61:16,17 87:22 110:1,14 169:6 189:14 204:23 232:8 261:19 267:12 268:1 290:18 300:20 324:14 345:11 347:3 351:23 352:8 354:12 363:9 380:20 421:3 424:13 429:14,15 448:5 469:11 <b>talking</b> 13:3 20:15 68:21 109:21 115:16 144:5 159:7 166:3 206:21 212:13 216:4 255:2 270:14 271:14 277:6 278:9 287:14 289:10,12 289:19 290:12,15 291:18 293:15 295:19 312:10 313:17 314:20 328:5 338:15,16 361:19 366:16 369:11 372:3,5 386:12 425:4 446:6 448:1,7	449:19 460:14 462:14 471:14 484:15 488:2,3 <b>talks</b> 131:22 240:12 402:21 <b>tangential</b> 132:10 132:16 <b>tangentially</b> 130:5 <b>tara</b> 2:12 <b>tattoo</b> 139:23 <b>tavistock</b> 53:19 <b>tborelli</b> 2:16 <b>teachers</b> 10:20 420:15,16 452:1 <b>teaching</b> 121:13 454:2 467:10 <b>teachings</b> 452:17 <b>team</b> 149:11 150:5 150:14 272:22 336:23 <b>teams</b> 83:14 151:9 <b>technical</b> 82:11 295:20 <b>technique</b> 130:9 130:17 284:13,15 289:12,15 299:1 310:10,21 311:3 311:11,21 312:14 <b>techniques</b> 130:13 286:11 290:11 295:1 296:15 311:12,20 338:3 <b>telephonic</b> 192:7 200:1 <b>tell</b> 21:18 22:8 68:5 76:21 114:19 174:8 196:8 207:18 208:13 214:23 292:6 341:4 352:21 372:3,6 434:2
--	---	--	---

<b>telling</b> 12:13 59:13 226:14 237:2 306:15 433:16 <b>tells</b> 244:11 <b>temporary</b> 265:8 <b>ten</b> 23:11 46:8 86:2 138:20,21 139:7 140:16,20 140:23 141:7 262:2,6 263:1 266:21 351:22 476:23 <b>tend</b> 210:14 284:16 285:4,5 <b>tends</b> 345:11 <b>term</b> 7:7,17 18:18 19:7,11,17,19 20:3 20:6,19 21:18,19 21:22 22:2,7 61:11 89:10 119:12 124:11 141:5 164:22 193:20 241:20 249:20 291:12 292:12 313:10 314:15,16 332:8 398:10 399:10 404:7 411:8 442:6 442:8,21 447:4,6,7 447:8 459:14 466:14 485:12 <b>terminology</b> 60:23 194:13 <b>terms</b> 24:8 26:7 89:20 93:17 119:10 148:12 152:22 176:20 277:21 311:16 355:13 413:22 424:17 446:21 458:12,14 469:20	469:21 484:22,23 487:8 <b>test</b> 219:10,11 324:11 332:3,22 333:1 486:12 <b>testified</b> 11:7 38:19 64:1 91:11 91:13 308:16 <b>testify</b> 38:15 90:21 173:13 <b>testifying</b> 90:23 91:5 95:10 274:23 <b>testimonies</b> 359:18 360:19 365:12 <b>testimony</b> 1:19 11:16 17:20 18:6 50:14 63:19 97:19 170:15 171:2 172:7,11,12,20 174:14,17 177:2 180:3,6,14,23 182:5 216:11 254:9 329:8 363:6 449:14 487:12 491:4,12 493:9 495:8 <b>testing</b> 281:20 282:2,12 437:16 <b>testosterone</b> 214:7 214:22 215:17 318:23 <b>tests</b> 124:9 211:11 486:9 <b>texas</b> 62:5,7,11 76:20,22 77:5 78:10 110:15,22 <b>text</b> 266:1 416:19 <b>textbooks</b> 73:1 <b>thank</b> 10:13 19:5 98:15 133:15 275:10 325:5,17	445:4 470:21,23 490:23 491:2,5,5,6 <b>thanks</b> 470:20 <b>theirs</b> 196:13 <b>therapeutic</b> 229:4 248:18 282:8 291:10 301:16 <b>therapies</b> 52:9 105:23 106:21 110:8 147:4 150:15 208:22 324:7 <b>therapy</b> 77:22 124:5 139:22 140:14 145:17,19 159:20 163:17 164:5,10 215:8 228:9 238:17 243:4 247:17 249:22 289:14 345:8 376:14 379:21 384:23 387:3 394:21 400:5 425:18 426:15 431:12 437:15,17,23 481:20 482:12 <b>thing</b> 59:1 70:20 93:21 94:10 96:22 98:17 103:16 114:21 125:11 127:13 140:3 145:15 159:22 162:1 164:21 222:23 303:16 358:3,6 364:5 380:14 403:18 436:3 440:8,10,11 459:17 475:6 478:22 487:11	<b>things</b> 16:13 20:16 46:10 50:21 53:6 54:6 68:11 77:22 83:12 101:8 102:1 102:16 103:23 105:20 106:1 119:11 121:13 122:22 123:2 144:11,14 159:15 178:7,17 209:16 210:1 218:12 224:4 226:11 247:6 260:5 262:14 271:14 281:9 282:16 288:7 290:21 299:8 301:6,17 313:15 332:7 333:2,18,20,22 334:4,11 347:3 369:17 392:18 402:8 404:8 421:2 432:13,15 447:19 457:22 463:11 464:2 <b>think</b> 14:9,13,14 15:17 16:1 18:15 18:15 19:18,21 25:8 26:2 32:11 45:12 46:20 48:19 52:16,21 54:4,17 58:7 61:10 62:9 62:10 65:19,19 69:9 72:11,17,18 73:12,20 74:5 82:3 84:6,11 85:2 85:15 86:10,15 87:1,6,19 88:6 93:11,15,17,20 94:10,11,14,16,17 94:22 96:20 97:10
--	--	---	---

98:10,13 99:10	460:16 462:2,8	336:15 337:23	182:12 186:20
100:12 101:7,11	474:6,22 489:3	364:14 381:22	254:12,21 256:12
101:17,19 102:21	<b>thinking</b> 106:12	391:17 431:10	319:23 320:8
103:6,20 105:11	154:17 166:2	455:22	325:22 340:5
105:14 106:16	372:4 470:1	<b>throttling</b> 143:10	370:3 388:13
107:1,14 110:20	<b>thinks</b> 154:9 383:8	<b>thursday</b> 9:17	389:12 414:14
110:20,21 115:4	<b>third</b> 27:20 41:2	491:10	417:9,16 445:5
117:17 118:8,17	64:16 65:6 71:4	<b>thyroid</b> 156:8,12	470:9,18 471:2,23
118:21 119:1,3,3	98:4 133:1 195:6	<b>thyroidectomy</b>	472:2 489:6,10
121:5,8,9 122:19	300:4 309:5 348:1	156:13	<b>tissue</b> 467:17
141:14,18 149:5,6	356:11 357:7	<b>time</b> 14:22 19:2	479:5
152:3 160:4,10	391:19 430:22	20:2 24:7,13 29:9	<b>title</b> 230:21 464:14
163:19 165:23	437:11 440:11	88:5 100:10 101:5	<b>titled</b> 36:3 55:12
166:11 171:22	<b>thirteen</b> 416:18	102:8 121:20	59:15 62:23
179:12 180:4	<b>thirty</b> 107:2 195:6	133:8 135:5 137:9	115:23 129:20
184:11,12 196:5	232:5 246:19	141:10 161:7	131:11 133:10,20
196:12 202:9,11	<b>thonen</b> 446:7	169:19,21 170:3,7	134:6,12 225:6
206:4 218:12,18	<b>thought</b> 50:15	202:7 226:7,13	233:13 256:19
222:10,15 227:21	95:20 103:4	267:7 269:18	299:19 326:12
238:8,10 245:7	121:20 180:10,12	273:6 311:23	340:8 350:13
256:5 262:22	266:20 471:8	332:13 344:14	356:2 376:12
273:11,13,17	<b>thoughtful</b> 126:21	345:12,14,18	397:9 399:15
279:4 280:19	<b>thoughts</b> 462:20	347:17 351:18	411:7 415:9 427:5
281:12 282:20	<b>thousand</b> 360:22	412:12 416:16	430:13 450:21
285:11 286:2	416:15	436:4 447:22	453:5 456:1
290:20 297:17,23	<b>thousands</b> 120:18	470:4,20 471:22	458:21
298:12 306:15	<b>threaten</b> 67:3	473:13 474:20	<b>today</b> 11:17 12:16
318:18 322:7	<b>threatening</b> 119:9	492:13 493:19	13:14 14:3 70:10
323:22 327:13,22	314:2 490:7,17	<b>timeframe</b> 493:8	92:1 120:17
328:3 334:15	<b>three</b> 10:18 14:9	<b>times</b> 13:1 14:7,9	123:11 126:9
335:2,21,22 341:3	15:19 19:17 24:5	29:1 159:6 206:10	127:5 170:21
345:23 346:2,9	51:3 73:11 103:17	390:1 468:2	173:22 180:13
359:23 365:14,18	110:6 116:12	<b>timing</b> 139:2	181:8 192:19
366:3 377:1 380:8	122:21 123:17	<b>timmerie</b> 465:16	221:20 230:9
386:11 389:6,7	124:15 125:12	<b>tipping</b> 123:16	233:9 239:8
392:22 399:4,8	138:22 160:6	<b>tishyevich</b> 2:6 4:4	252:18 288:8
402:14 408:2	165:1 174:21	4:7 10:14,15 11:9	297:16 313:17
409:14 410:15	175:5,22 176:6	15:19 16:11 78:23	470:20 488:15
420:3 434:1 439:4	229:18 247:7	79:9 114:22 115:7	<b>today's</b> 491:11
439:8 443:17	260:8 261:7 299:2	115:15 125:22	<b>told</b> 48:20 165:17
448:13 453:18	312:14 327:6	126:16 166:13,22	261:23 262:4

409:7 443:19 <b>top</b> 58:2 59:15 108:10 109:8 128:7 130:14 167:14 224:13 240:23 263:13 337:7 367:11 375:19 377:11 384:18 394:16 421:9,21,21 430:16 434:8,17 453:8 461:1 <b>topic</b> 239:10 458:7 458:19 <b>topics</b> 90:13 180:23 181:11 452:10 <b>total</b> 338:22 345:15 <b>totally</b> 19:4 229:11 314:7,8 <b>touch</b> 98:6 <b>touched</b> 216:17 <b>toxin</b> 263:5 490:13 <b>track</b> 312:12 <b>trade</b> 201:9 203:5 203:9 <b>tradition</b> 8:2 <b>train</b> 106:6 155:7 157:8 <b>trained</b> 68:11 75:5 104:2 155:8 157:1 157:9,14 211:6 274:18 275:6 <b>training</b> 66:3,6,8,9 66:12 67:20 69:3 69:5,10,19 73:3 74:4,13,16 75:14 95:15 101:22 107:7 121:12,16 122:4,15 124:21	125:15 155:13 156:2 158:4 204:3 274:11,15 284:19 284:23 466:16 467:10,13 468:16 472:23 477:3 483:4 488:22 <b>trajectory</b> 152:23 <b>tran</b> 18:9 365:12 <b>trans</b> 145:21 148:13 151:12 370:1 428:15 429:1 <b>transcript</b> 8:20 15:12 18:7,11,12 18:22 492:7,11 493:6,18,20 495:5 495:8 <b>transcripts</b> 17:19 18:5 <b>transfeminine</b> 167:13 <b>transform</b> 323:1 <b>transformative</b> 71:2 <b>transgender</b> 4:22 19:7 20:19 21:11 22:1 40:4,7 55:13 63:1 64:19 65:1 79:17,21 81:2 82:12 83:13 89:6 95:17 104:6 106:2 106:10,17 109:13 122:9,12 123:7 130:14 131:23 132:7,11,12 136:21 145:1,10 146:7 147:5 151:9 160:21 167:4,11 167:17,21 168:1,4 168:9,13,18 169:1	175:21 178:22 179:1 181:20 182:10,17 214:2,6 247:17 314:6 318:12 341:9 342:15 343:16 347:1 348:20,22 351:9 353:3 354:7 355:12 365:7 366:8,9,12 368:10 368:15 369:1,6 374:11 386:17 412:17 428:17 444:1,18 448:6 450:1,22 454:5 460:15 463:14 468:11 469:16 476:15,18 477:14 478:21 479:10,15 482:18 485:22 486:10 <b>transgendered</b> 259:17 <b>transgenderism</b> 194:16 <b>transition</b> 55:13 113:10,19 153:1 165:18 169:2 176:22 287:13 353:4 359:19 360:20 363:10 365:17 366:10,18 395:12,19 397:9 397:17,21 398:11 398:18,23 479:22 <b>transitioned</b> 148:14 328:13 <b>transitioning</b> 82:13 94:3 146:4 178:13 238:20 312:3 320:20	321:5,21 360:15 373:22 416:23 <b>translation</b> 7:14 <b>transmen</b> 344:17 344:18 345:15 <b>transsexual</b> 7:8 330:18 392:1,8 <b>transsexualism</b> 392:12 <b>transsexuals</b> 6:13 <b>transwomen</b> 344:16,18 345:15 348:8 349:4 416:14 417:6 <b>trauma</b> 133:13 143:1 178:18 272:18 279:5 <b>traumatic</b> 178:6 <b>treasurer</b> 10:22 <b>treat</b> 65:9 131:22 132:1 144:23 151:7 215:18 220:19 231:19 435:17 436:20 450:1 460:2 488:19 <b>treatable</b> 122:6 <b>treated</b> 131:1 132:14 144:1 146:8 150:22 151:1 152:2,6 212:13 217:20 318:23 400:1 <b>treating</b> 75:14 136:21 146:21 200:14 218:9 249:7 262:9 273:5 460:8 <b>treatment</b> 4:21 8:7 8:11 19:7 20:19 21:11 22:1,3 39:5
--	--	--	---



40:19 41:5 49:16 52:1 54:10 63:1 65:1 78:19 80:18 81:7 89:10 111:6 117:15 129:20 137:4,11,18 146:23 151:16 153:11 178:6 186:12,14 195:17 196:15 206:16 211:21 214:11,17 215:1 216:9 219:19 220:16 225:14 266:4 267:17 268:4,7 316:19 329:11 340:11 345:22 350:17 353:2,10 353:21 354:3 373:10 374:17 375:1 392:11 394:21 402:3,5 405:8 406:2,6,23 422:20 423:8,17 424:1,10,21 429:21 430:13 431:1 433:20 434:22 435:22 437:13 438:2 459:21 460:14,17 473:4 474:21 475:3,4 481:3,14 481:21 482:12 483:14,22 485:21 487:21 <b>treatments</b> 35:5 36:18 43:15 44:2 65:21 89:8 119:6 120:5 139:21 140:5 150:16 319:3 373:20	487:15 <b>treats</b> 342:14 <b>trelstar</b> 203:11 <b>tremendous</b> 70:23 162:4,6 165:16 290:1 484:18 <b>trend</b> 109:15,21 <b>trending</b> 465:15 <b>trends</b> 340:10 <b>trial</b> 217:21 236:15,17,19,21 237:4,22 246:17 249:13 250:3 251:13 252:6,9,10 252:13 268:21 270:2,19 272:19 273:7 274:21 275:17 291:8 292:19 293:1,6,10 301:16,17 310:16 316:6 341:12 412:1 <b>trials</b> 120:11 218:12 235:22 245:10,20 246:11 246:22 247:20 249:3,18 250:21 251:23 269:4 271:2 280:8 293:20 294:10 298:3 302:18,18 307:20 422:23 <b>tried</b> 96:10 <b>triptodur</b> 203:3 <b>trivial</b> 244:18 <b>troubled</b> 179:13 179:22 <b>troublesome</b> 381:2 <b>troubling</b> 179:20 402:8	<b>true</b> 17:4 30:5 33:18 151:19 196:11 270:7,10 348:3 349:2 351:4 409:13 461:16 492:11 495:8 <b>truth</b> 444:7 <b>truthful</b> 11:16 <b>truths</b> 449:18 <b>try</b> 16:12 69:12 288:3 289:15 294:23 334:1 443:1 <b>trying</b> 19:20 88:11 91:18,20 94:5,16 149:6 153:5 273:11,13 276:3 279:4 300:15 324:19,21 334:22 340:20 345:4 348:22 455:2 458:9 <b>tubularized</b> 478:18 <b>turn</b> 151:20 397:6 471:15 <b>turned</b> 150:8 471:6 <b>turns</b> 45:23 <b>twenty</b> 107:2 219:21 320:12 <b>twice</b> 165:5 <b>two</b> 25:20 84:3,5 98:11 99:23 100:1 136:15 139:17 144:5 147:21,22 148:18 172:10 271:7 307:18 336:15 337:22 344:11 364:14 391:17 404:14,16	407:17 431:10,12 455:22 459:2 460:5 468:18 475:22 <b>type</b> 202:21 282:7 333:13 335:20 343:8 350:18 <b>types</b> 36:17 203:14 316:11 343:19 358:17 <b>typical</b> 90:10 160:22 315:19 <b>typically</b> 50:17 149:10 165:2 203:21 207:18 211:10 214:3,8 271:7,11 337:22 385:13 490:4 <b>typo</b> 359:21,22 <b>typology</b> 7:1
<b>u</b>			
<b>u</b> 16:12,16 20:23 203:4 299:19,19 <b>u.s.</b> 137:2 425:12 <b>uc</b> 86:14 273:12 278:7 <b>uh</b> 264:9 361:16 365:4 396:17 420:20 <b>uk</b> 7:22 411:11 <b>ulcer</b> 121:19,23 122:7 123:11 <b>ulcers</b> 121:20 <b>ultimate</b> 459:17 <b>ultimately</b> 53:17 156:13 <b>ultrasound</b> 142:11 <b>unable</b> 413:3 <b>unacceptable</b> 8:16 464:16 466:3 467:8,12 484:7			

<b>unapproved</b> 5:14 225:7 228:4,5 230:22 231:6,11 <b>unbiased</b> 409:14 <b>unborn</b> 131:12 <b>uncertain</b> 412:19 <b>uncertainty</b> 406:18 <b>unchangeable</b> 442:14 443:13 <b>uncommon</b> 255:5 255:16 294:16 357:10 358:22 463:22 <b>uncontrollable</b> 478:6 <b>uncontrolled</b> 411:19 413:10,14 <b>undergo</b> 316:21 330:19 390:15 <b>undergoes</b> 61:4 <b>undergoing</b> 7:9 60:5 211:21 213:18 <b>undergone</b> 419:5 <b>underlying</b> 194:19 210:8 211:1 215:14 217:19 368:19 <b>underneath</b> 60:10 <b>underpinnings</b> 104:14 <b>understand</b> 26:8 28:7,14 29:4,17 30:20 99:3 100:14 116:23 143:16 156:15 159:2,8,10 162:2 182:7 225:19 228:13 229:17 234:15 239:19 247:13	264:16 266:3 274:12,22 275:8 277:9 288:18 297:6,15 300:14 342:4,13 346:19 348:23 357:2 369:15 377:16,23 378:9 382:21 384:3 390:9 399:20 404:13 406:10 419:22 423:5 427:14 437:20 440:16 441:5 443:9 452:6 457:3 458:15 466:13 468:17 <b>understanding</b> 5:13 21:5 33:17 83:10 90:6 149:20 150:2,9 160:20 184:10 195:9,14 230:21 275:19 347:6 402:20 444:10 449:15 459:23 460:12 466:21 <b>understands</b> 207:2 <b>understood</b> 14:1 118:13 130:21 133:10 195:15 373:4 <b>undertook</b> 411:19 <b>underwent</b> 344:12 344:19 345:6,16 389:23 391:2 <b>unethical</b> 118:4 120:12 <b>union</b> 420:15 <b>unit</b> 9:18 79:3,7 166:16,20 254:15 254:19 272:18,23	320:2,6 388:7,11 470:12,16 491:9 <b>united</b> 1:1 8:9 9:22 433:18 434:8,18 435:21 437:20 441:8,21 472:17 474:2 475:13 <b>unitedhealthcare</b> 433:7 <b>university</b> 95:13 95:19 96:8 272:16 368:18 <b>unknown</b> 320:18 321:6,12,15,22 322:1 330:2 367:12 486:16 <b>unlabeled</b> 228:6 <b>unofficial</b> 7:13 <b>unproven</b> 120:4 206:22 481:15 <b>unquote</b> 291:20 351:4 367:23 <b>unreliable</b> 280:15 <b>unsupported</b> 243:4 <b>untenable</b> 250:6 <b>untested</b> 120:4 <b>unusual</b> 106:13 <b>unverified</b> 120:2 280:7 <b>update</b> 6:3 7:6 31:1 256:21 381:10 382:13 <b>updated</b> 171:16 197:17 378:1 430:19 435:4 <b>updates</b> 197:22 198:2,8,21 199:13 199:18 200:2,4,21 <b>updating</b> 198:20 441:20	<b>ups</b> 337:22 489:4 <b>upset</b> 409:6 <b>urethra</b> 478:13,14 478:15 <b>urethral</b> 336:17 336:18 338:10,20 <b>urgency</b> 463:12 <b>urinary</b> 178:16 <b>usage</b> 258:3 <b>use</b> 5:14,17,22 18:18 19:7,11 44:15,22 61:11 64:18,23 73:22 84:22 87:23 101:3 112:13 119:5 130:8,10,16 145:2 145:18 161:15 162:18 189:18 194:12 205:13 206:4,8,9,9,10,18 207:1,3 216:5,13 218:2,5,6,18,22,22 219:6,10,16 221:17 222:2,4,7 222:16 226:2,6,12 226:23 228:17,19 229:9 230:22 231:6,11,23 232:9 232:16 233:14,20 234:1,3,7,19 237:1 237:18 238:2 239:5 240:2,10,16 241:3,8,12,16,22 242:2,3,6,9,21 243:10,18,22,23 244:3,8,11,23 246:5 247:12,19 249:7 250:17 251:22 253:2,5,13 253:15 254:11 255:3,5,16 257:3
---	---	--	--



257:13 258:6 259:18,21 260:16 260:23 261:9 262:9,16,23 263:4 265:22 267:11,12 267:23 268:22 269:5 270:3 316:23 333:21 338:5 354:19,21 385:4 389:10 406:12,19 417:5 438:19,19 442:21 443:3,10 446:20 459:22 461:22 466:14 482:16 483:8,20 484:8,17 488:18 489:12 490:16 <b>useful</b> 310:3 330:22 344:2 354:23 355:1,13 374:20 <b>useless</b> 355:16 <b>uses</b> 225:7,14 226:15 228:6 229:1 241:17 461:20 469:12 484:4 <b>usually</b> 88:2 145:23 149:15 162:6 210:14 298:20 299:2 <b>utah</b> 4:18 54:8,16 56:1,12 57:10 58:15,20 59:7 61:17,20 77:8,11 78:7 109:23 110:14,23 117:7 <b>utterly</b> 8:15 220:23 247:11 464:15 466:2	<b>uva</b> 106:7,9,10 125:9  <b>v</b> <b>v</b> 1:12 9:21 16:21 33:2 202:16 203:8 322:18 493:4 494:1 495:1 <b>vaginal</b> 476:16 479:3,7,7 <b>vagineal</b> 479:3 <b>vaginoplasty</b> 168:1 175:13 476:18 478:23 <b>vague</b> 87:9 <b>valid</b> 23:11 199:3 209:4 228:23 288:4 310:21 314:7,9 485:13 486:1,2 <b>validated</b> 282:13 282:14 <b>validity</b> 274:19,22 275:2,19 282:17 358:9 <b>valuable</b> 333:17 <b>value</b> 305:22 <b>values</b> 334:14 <b>van</b> 86:7,10 <b>vanderbilt</b> 2:8 <b>vantas</b> 202:15 <b>variation</b> 71:19 <b>variety</b> 145:15 201:8,12 332:2 <b>various</b> 13:1 36:17 94:2,2 144:9 160:12 208:23 473:4 <b>vascular</b> 339:1 468:3 <b>vast</b> 330:17 335:18	<b>vehemently</b> 247:4 <b>venues</b> 160:12 <b>veracity</b> 274:19 <b>verbiage</b> 185:12 400:8 <b>verify</b> 493:9 <b>veritext</b> 10:6,9 493:14,23 <b>veritext.com</b> 493:15 <b>version</b> 7:16 183:2 183:9 184:5,8,18 185:4 187:3,9,13 187:18 188:1,7,16 188:20,23 189:10 196:21 396:15 397:4 398:15 399:3 401:1 <b>versus</b> 77:18 92:11 135:15 299:6 432:14 473:7 477:7 <b>vertical</b> 349:20 <b>veterans</b> 137:7,12 <b>victory</b> 161:20 <b>video</b> 256:6 <b>videoconference</b> 1:18 2:4 3:2,18 9:7 <b>videographer</b> 3:20 9:15 10:7 79:2,6 115:10,13 166:15 166:19 254:14,18 320:1,5 388:6,10 417:11,14 470:11 470:15 472:3,6 491:8 <b>videorecorded</b> 9:18 <b>videotaped</b> 1:18	<b>view</b> 42:9 79:21 80:17 118:10,19 186:6 428:1 431:18 432:7 442:11 443:9,10 484:3 485:9,10,23 486:14 487:14 488:17 489:14 <b>views</b> 398:7 452:11 465:2 489:12 <b>violated</b> 170:2 171:3 182:3 <b>violating</b> 182:1 <b>violation</b> 179:8 182:5 316:3 464:22 <b>violence</b> 67:13,15 <b>vir</b> 292:6 <b>virginia</b> 262:13 <b>virtually</b> 102:14 369:7 <b>visible</b> 319:12 328:5 <b>visit</b> 347:10 <b>visited</b> 341:23 342:7 <b>visiting</b> 343:2 <b>visits</b> 257:22 258:11 <b>vital</b> 309:9 <b>vocal</b> 125:5 <b>vol</b> 5:11 <b>volume</b> 74:7 <b>vote</b> 63:16,21 <b>vs</b> 394:23 <b>vulnerable</b> 76:9 120:13
--	--	---	--

<b>w</b>	<b>warnings</b> 215:22	<b>weight</b> 284:1	400:9 408:4 413:1
<b>w</b> 182:13 340:15	<b>warrant</b> 217:17	292:2	420:8 426:4,7
356:2 445:6	218:6 253:7 310:9	<b>weighted</b> 185:13	440:21 445:15
<b>wait</b> 289:15,17	<b>warranted</b> 217:18	<b>welcome</b> 351:2	491:2 493:8,10,12
313:22	<b>watchful</b> 77:20	<b>welcomed</b> 443:18	493:19
<b>waiting</b> 77:20	<b>wave</b> 260:9	444:2	<b>witnesses</b> 90:15
<b>waits</b> 293:9	<b>way</b> 38:15 54:3	<b>went</b> 74:1,3 94:5,6	91:3,8 92:20
<b>walk</b> 377:8 444:23	73:1 88:13 132:10	97:14 103:18,23	172:21 173:10
<b>wall</b> 2:20	134:19 151:9	104:4 139:18	<b>woman</b> 456:15
<b>walter</b> 11:14	171:4 181:21	164:4,9,14 165:17	<b>woman's</b> 156:3
<b>wandered</b> 186:15	206:19 225:4	188:1 192:1 200:7	<b>women</b> 151:12
<b>want</b> 15:1,19 19:3	243:3 244:14	336:20 361:9	152:15 214:2
72:13 80:11 90:12	245:5 261:9	<b>west</b> 2:14	348:10 349:6
101:13 126:23	266:19 311:9	<b>whatsoever</b> 61:21	<b>wonder</b> 393:6
135:1 150:13,19	317:17 322:13	<b>white</b> 102:2	452:22
151:18 172:9	338:3 346:18	298:22 387:5	<b>wondered</b> 134:21
181:3 210:19,21	350:2,21 354:5,9	<b>who've</b> 145:12	<b>word</b> 176:15,17
256:6 262:18	367:4 382:5,12	<b>widely</b> 189:21	228:3 438:20
272:7 273:14	385:18,21 429:6	201:6	462:16 469:12
289:22 344:23	438:8 442:1 443:2	<b>wider</b> 410:7	<b>words</b> 60:13 61:13
349:22 359:12	447:10 449:6	<b>wiepjes</b> 6:17	209:16 392:15
362:12 396:13	462:20 474:11,13	340:15	402:11 443:10
397:20 420:5	486:12	<b>williams</b> 3:10	<b>work</b> 45:7,18
453:2 462:16	<b>we've</b> 61:16,17	<b>willing</b> 90:21 91:7	61:21 76:21
470:3 480:8,9	77:8,11 125:2,11	96:13 286:10	184:17 191:13
487:13	175:2 180:19	<b>wilson</b> 6:20 356:1	192:18,21 193:3
<b>wanted</b> 82:10 90:5	182:6 268:1 344:5	<b>winston</b> 3:13	198:2 211:12
95:19 159:2,7,9,12	439:10	<b>wisdom</b> 436:15	212:2,18 213:17
159:13 194:12	<b>weak</b> 51:6,19	<b>wise</b> 311:10	466:7
440:22 441:3	<b>weakest</b> 382:10	<b>wish</b> 470:5	<b>worked</b> 110:17
452:6,8 472:10	<b>wealth</b> 292:1	<b>withdrawn</b> 108:3	273:6 382:7
487:12 489:5	<b>web</b> 27:13	177:12	<b>working</b> 16:5,17
<b>wanting</b> 159:19	<b>website</b> 230:19	<b>witness</b> 9:10 10:13	17:2,8 143:2
235:18	361:19 362:7	91:11,13 92:16,22	156:20 184:8,18
<b>wants</b> 148:14	366:21 407:12	174:11,22 255:22	190:16,21 192:7
149:22 166:4	455:14	256:2,9 280:23	272:17 273:1
219:7	<b>wednesday</b> 63:12	281:3 325:15,18	474:5,7
<b>ward</b> 156:4,7	<b>weeks</b> 15:2,16,20	327:3 332:10	<b>works</b> 48:21 311:1
<b>warning</b> 215:20	37:7 156:7	335:1,7 340:6	<b>world</b> 117:22
489:22 490:1,4,11	<b>weigh</b> 206:12	341:1,6 350:7,11	121:14 123:16
	207:1 226:2,9	384:12 385:19	125:1 161:4

177:16 182:9	397:11	186:8,18 188:15	344:3 345:17,23
260:3 329:1 332:5	<b>wrote</b> 183:7 408:3	189:7 195:21	346:9 347:10
410:5,8 412:16	<b>wyoming</b> 3:7	196:19 205:7,9	349:10 350:3
428:16 474:22	<b>x</b>	208:2,5,9 211:3,19	351:6,22 352:8
476:7 479:10	<b>x</b> 4:1,10 360:9	212:10 213:12,13	353:11,15 358:19
480:12 486:22	<b>y</b>	220:6,7 221:1	359:21 360:15,22
487:5	<b>y</b> 256:19,19	224:6,12 228:5	361:8,21,22 362:4
<b>worldwide</b> 416:11	<b>yackey</b> 6:1 256:19	229:7,11 236:12	362:18 367:3
<b>worry</b> 135:8 264:5	<b>yeah</b> 18:15 22:1,7	236:22 237:12,21	371:2 375:9,10
<b>worse</b> 392:19	22:13 32:16 41:22	237:22 238:5,6	377:5,7 378:18,22
393:8	42:5,23 48:2	240:21 242:1,6	378:23 379:9
<b>worst</b> 381:18	51:20 54:19 65:19	243:14 245:14	382:6,11,17 384:5
<b>worth</b> 485:6	69:14 73:17 78:12	246:18 251:5,12	384:8,13 385:12
<b>worthless</b> 282:23	83:2,18 84:5,9,11	251:19 253:21	387:7 390:4,9,20
283:3,4	91:23 92:5,12	256:1 263:2	390:23 391:12
<b>wound</b> 289:13	96:20 97:4 99:5	264:19 266:22	392:14,21,22
450:14 475:7,10	99:21 100:1,15	267:4,13 268:12	393:2,4,10 394:18
478:11	101:4,9,17,19	268:12 272:2,3,3	395:20,21 396:5
<b>woundedness</b>	102:13,14,21	273:19 280:21	396:12 398:19
67:21	103:1,5 105:5	281:4,10 285:3	399:4,7,23 400:3
<b>wounds</b> 475:6	107:10,17,23	286:15,18 289:21	400:10,14,22
<b>wpath</b> 7:15 182:8	108:3 109:1,4,7	290:14 294:8	402:7,10 403:1,3,6
182:16 183:13,16	110:20 111:23	295:5,19,21 297:4	403:11,19 404:12
183:18,19,23	113:3,4,5,11,13,14	297:10,21 300:16	404:13 406:21
184:8,17 185:3,22	114:4,4,23 118:15	301:5 303:10,14	407:23 408:5,6
187:2,8,12,17	119:3 128:1,10	303:15,21 304:5	411:14 413:2,2
188:6,16 189:5,10	130:22 133:9	305:5,6 307:10	416:7 417:1 418:1
313:3 395:7,10,14	135:9,12 143:9	309:1,14 311:6,19	418:18 420:4,11
395:21 396:13	144:17,19 145:4	313:16,17 315:6,9	421:14 423:16
397:3 398:14	146:18 147:2,13	315:19 318:14	424:6,13,18
402:10 428:18	148:3,5,6,21 149:5	321:13,23 322:1,7	426:10 428:5
429:2	150:21 151:10	323:13,21 325:1,9	429:17 431:23
<b>wpath's</b> 184:4	152:16 153:2	326:4,5,8 328:4,17	434:1 435:11
<b>wrinkles</b> 262:10	154:23 155:1	329:7,13,20	436:2 438:6,10
<b>write</b> 144:22 280:4	156:22 157:5	332:18,18,19	441:5 443:23
<b>writing</b> 185:19	160:3 162:10,12	333:1,16 334:11	445:2,8,12 452:14
441:20	162:18 163:7,9	335:2,6,8,9,10	453:11,23 456:2
<b>writings</b> 195:11	164:1,7,21 166:11	336:11 338:7,8,18	458:19 460:16
<b>written</b> 130:19	171:4,20 179:19	338:19 339:23	461:11,21,22
<b>wrong</b> 43:23 62:10	179:23 185:23	340:16 341:2,7,12	464:11 471:4,9,23
184:11,13 379:23		341:13 343:10	472:20 480:6,10

<b>year</b> 7:20 24:15,19 24:22 34:1 37:9 57:9 63:7 76:3 117:5 138:5 139:3 143:11 148:4 184:7,12 196:16 300:10 302:10 317:6,19 342:22 344:8 345:19 346:5 380:10,11 380:19 411:10 427:15 477:3	313:8,11 337:13 337:14,18,23 344:13 346:7 347:12 351:22,22 352:2 381:22 402:15 443:7 468:15 476:8
<b>yesterday</b> 14:12 14:19,21	<b>york</b> 2:9,9,21,21
<b>young</b> 7:21 161:11 368:12 369:7,9,22 411:10 469:1	<b>younger</b> 142:22 347:10
<b>years</b> 6:10 23:11 24:2,5 25:20 32:6 44:14 46:1,8 51:3 63:9 69:9 72:21 95:14 97:3 99:21 99:23 100:1 102:17 103:17 106:2,20 107:2 122:4,21 123:1,5 123:18 124:15 125:12,17 129:11 129:15 130:18 138:19,20,21,22 138:23 139:7,10 140:16,20,23 141:8 148:9 160:5 165:1 170:9,9 174:21 175:6,22 176:6 181:17 196:6,12 202:11 213:4 219:21 232:5 246:19 247:7,21 257:5 260:8 261:7 262:2 262:6 263:1 266:21 283:8 297:5 298:16,17 300:8,10 301:19 307:12 312:14	<b>youtube</b> 367:16
<b>z</b>	
<b>z</b> 16:12 <b>zantac</b> 123:13 <b>zero</b> 21:12 284:7 <b>zoom</b> 10:4 325:17	

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS  
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at [www.veritext.com](http://www.veritext.com).

# **EXHIBIT 3**

- [+About Us](#)
  - [Mission Statement](#)
  - [Plastic Surgery](#)
  - [Purpose](#)
  - [History](#)
  - [+Officers & Directors](#)
    - [Welcome New Directors](#)
  - [Advisory Council & Sponsoring Orgs](#)
  - [Policies](#)
  - [Statistics](#)
  - [Contact the Board](#)
  - [Fee Schedule](#)
  - [ABPS 75th History Presentation 2012](#)
  - [Publications & Requirements](#)
- [+Residents](#)
  - [Written & Oral Exam Processes](#)
  - [Important Dates & Deadlines](#)
  - [Training Requirements](#)
  - [Resident Registration & Evaluation of Training](#)
  - [Entering the Examination Process](#)
  - [Quick Reference Tips & FAQs: Residents](#)
- [+Candidates](#)
  - [+Written Examination](#)
    - [Written Examination Process & Requirements](#)
    - [Quick Reference Tips: Written Exam Candidates](#)
  - [+Oral Examination](#)
    - [Oral Examination Process & Requirements](#)
    - [Quick Reference Tips: Oral Exam Candidates](#)
  - [Important Dates & Deadlines](#)
  - [Examination Content](#)
  - [Reapplication Information](#)
  - [Logo Use](#)
  - [Written Exam Tutorial](#)
- [+Diplomates](#)
  - [+Continuous Certification \(CC\) Program](#)
    - [Overview of CC Program](#)
    - [CC Exam Process & Requirements](#)
    - [CC Activities Process & Requirements](#)
    - [Quick Reference Tips & FAQs](#)
    - [Important Dates & Deadlines](#)
    - [Continuous Certification: Examination Content](#)
  - [CME resources](#)

**Exhibit  
0002**

9/30/2021  
Dr. Lappert



- [+Hand Surgery Exam \(HSE\)](#)
  - [HSE Initial Certification Process & Requirements](#)
  - [Quick Reference Tips: HSE Candidates](#)
  - [Important Dates & Deadlines](#)
  - [Hand Surgery Exam Content](#)
  - [Hand Surgery Exam Tutorial](#)
  - [HSE Recertification Process & Requirements](#)
- [Logo Use](#)
- [Newsletter to Diplomates](#)
- [Guidelines for Stating Certification Status](#)
- [+Program Directors](#)
  - [Reference for Program Directors](#)
  - [Resident Tracking website](#)
- [+Public](#)
  - [Verify Certification](#)
  - [FAQs](#)
  - [What is Certification?](#)
  - [What is Continuous Certification?](#)
  - [American Board of Medical Specialties](#)
  - [Federation of State Medical Boards](#)
- [Contact Us](#)
  - [Login](#)

## [HOME](#) >> [Diplomates](#) >> [Guidelines for Stating Certification Status](#)

### GUIDELINES FOR STATING CERTIFICATION STATUS

The American Board of Plastic Surgery (ABPS) is very proud of its diplomates who have achieved Board Certification, Hand Surgery subspecialty certification or recertification and those who are participating in the Continuous Certification in Plastic Surgery Program.

Many diplomates include information about their certification status on letterhead, business cards and other materials. Board certification is an important marker of your competence and skill, and the ABPS encourages you to showcase this accomplishment with your patients, your colleagues and the public.

ABPS does not mandate the specifics of how diplomates state their certification, except to assert that diplomates should not state or imply that they are certified if their certification has expired. If you have multiple certifications by ABMS member boards and allow one of them to lapse, you should revise your public materials (letterhead, business cards, advertisements, websites, etc.) to reflect those certifications that are currently valid.

We ask that you follow these guidelines throughout your career to accurately state your ABPS certification.

- Diplomates of ABPS must accurately state their certification status at all times. This includes descriptions in Curriculum Vitae, advertisements, publications, directories, letterhead and websites.

- Diplomates with expired time-limited certification or those whose certification is revoked may not claim Board certification by ABPS and must revise all descriptions of their qualifications accordingly.

When a physician misrepresents certification status, ABPS may notify local credentialing bodies, licensing bodies, law enforcement agencies and others.

**Note: The Board does not allow the use of its trademarked logo on diplomate or candidate websites or for any other commercial purposes.**

#### **Examples of accurate statements of certification:**

Once you have successfully passed your initial certification examination or renewed your certification through the Continuous Certification program, you may represent that you are "ABPS Board Certified in Plastic Surgery (with a sub-specialty certification in Hand Surgery – if applicable)" or a "Diplomate of the American Board of Plastic Surgery":

- John Doe, M.D., ABPS Board Certified in Plastic Surgery

or

- John Doe, M.D., a Diplomate of the American Board of Plastic Surgery

Important: Please be sure to correctly state your certification status in your Medical Licensing Board Profile. In addition, pay close attention to your group practice listings. A blanket statement that everyone in a group is Board certified may be misleading if multiple specialties are listed and some group members are certified in certain specialties and others are not currently certified. ABPS expects that certifications will be listed individually or stated in a way that is not misleading. Aside from accuracy and ABPS requirements, inaccurate statements of certification may create embarrassment or legal issues. ABPS understands that maintaining currency in stating the certification status of groups of physicians may not be easy. We encourage you to work with your colleagues to be sure the certifications you represent to the public are current and accurate.

Refer to the Board's [Advertising Policy](#).

**Feel free to contact ABPS whenever you have a question about stating your certification.**

**Call the Board Office at 215-587-9322, or send an e-mail to [info@abplasticsurgery.org](mailto:info@abplasticsurgery.org).**

Seven Penn Center  
1635 Market Street, Suite 400  
Philadelphia, PA 19103-2204

[Tech Support](#)

Copyright ©2021  
The American Board of Plastic Surgery, Inc.

# **EXHIBIT 4**

# CODE OF ETHICS OF THE AMERICAN SOCIETY OF PLASTIC SURGEONS

(PLEASE NOTE: All complaints regarding possible ethical misconduct must be in writing and sent to:  
[EthicsComplaints@plasticsurgery.org](mailto:EthicsComplaints@plasticsurgery.org) or  
ASPS Ethics Committee, 444 East Algonquin Road, Arlington Heights, IL 60005.)

## PREAMBLE

As stated in its Bylaws, the American Society of Plastic Surgeons (ASPS) is organized:

To benefit humanity by advancing the art and science of plastic and reconstructive surgery; to promote the highest standard of professional skill and competence among plastic surgeons; to promote the exchange of information among plastic surgeons; to promote the highest standard of personal and professional conduct among plastic surgeons and other Members; to provide the public with information about the scientific progress in plastic and reconstructive surgery; to promote the purpose and effectiveness of plastic surgeons as is consistent with the public interest.

Membership in ASPS is granted to those surgeons who are competent practitioners of the art and science of plastic surgery. Competence in plastic surgery involves attainment and maintenance of high standards of medical and ethical conduct. Medical competence is fostered by successful completion of the examinations of the American Board of Plastic Surgery, The Royal College of Physicians and Surgeons in Canada and/or the Corporation Professionnelle des Médecins du Québec. Ethical competence is fostered by the adoption and enforcement of a Code of Ethics, adherence to which is prerequisite for admission to and maintenance of membership in ASPS. Members are expected to act in accord with the General and Specific Principles of the Code of Ethics of ASPS in all their contacts with patients, peers and the general public. Further, Members are individually responsible and accountable for their actions and words, as well as the use of their names, by any individual or entity. Members shall be subject to disciplinary action, including expulsion, for violation of any of the General or Specific Principles of this Code.

### Section 1: General Principles

- I. The principal objective of the medical profession is to render services to humanity with full respect for human dignity. Members should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.
- II. Members should strive continually to improve medical knowledge and skill, and make available to their patients and colleagues the benefits of their professional achievements. Members have an affirmative duty to disclose new medical advances to patients and colleagues.
- III. Members should practice a method of healing founded on a scientific basis, and should not voluntarily associate professionally with anyone who violates this principle.
- IV. Members should observe all laws, uphold the dignity and honor of the profession, and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow Members of the profession.

- V. Members may choose whom to serve. In emergency situations, however, Members should render service to the best of their ability. Having undertaken the care of a patient, a Member may not neglect the patient; and until the patient has been discharged, a Member may discontinue services only after giving adequate notice.
- VI. Members should provide services under the terms and conditions which permit the free and complete exercise of sound medical judgment and skill.
- VII. A Member should seek consultation upon request, in doubtful or difficult cases or whenever it appears that the quality of medical service may be enhanced thereby.
- VIII. A Member may not reveal a patient's confidence, any observed characteristics of the patient, or any information obtained from the patient in a professional capacity, without such patient's consent or unless required to do so by law or unless it becomes necessary in order to protect the welfare of the patient or of the community.
- IX. The honored ideals of the medical profession imply that the responsibilities of the Member extend not only to the patient, but also to society. Activities, which have the purpose of improving both the health and well-being of the patient and the community, deserve the interest and participation of the Member.
- X. To assist the public in obtaining medical services, Members are permitted to make known their services through advertising. Advertising, however, entails the risk that the Member may employ practices that are false, fraudulent, deceptive, or misleading. Regulation is, therefore, necessary and in the public interest. Subsection II of the Specific Principles permits public dissemination of truthful information about medical services, while prohibiting false, fraudulent, deceptive or misleading communications, and restricting direct solicitation.
- XI. In their public and private communications with or concerning patients and colleagues made in a professional capacity or environment, Members shall strive to use accurate and respectful language and images.

## Section 2: Specific Principles

- I. Each Member may be subject to disciplinary action, including expulsion, if:
  - A. The member's right to practice medicine is limited, suspended, terminated, or otherwise affected in any state, province, or country for violation of a medical practice act or other statute or governmental regulation or the Member is disciplined by any medical licensing authority.
  - B. The Member fails to inform ASPS that the member's right to practice medicine has been limited, suspended, terminated, or otherwise affected in any state, province, or country for violation of a medical practice act, other statute or governmental regulation or, the Member has been disciplined by any medical licensing authority.
  - C. The Member is convicted of (or pleads guilty to) a felony or any crime relating to or arising out of the practice of medicine or involving moral turpitude.

- D. The Member engages in sexual misconduct in the practice of medicine.
- E. The Member is involved in improper financial dealings including, but not limited to:
  - 1. Dividing a fee for medical service with another person licensed to practice medicine who is not a partner or associate of his or hers, unless
    - (a) The patient consents to employment of the other person licensed to practice medicine under a full disclosure that a division of fees will be made; and
    - (b) A division is made in proportion to the services actually performed and responsibility assigned to each; and
    - (c) The total fee charged by all persons licensed to practice medicine is not increased solely by reason of provision for the division of fees.
  - 2. Payment and/or acceptance of rebates or referral fees to or from any person, including agents and employees of the member, in exchange for the referral of patients. Nothing in this Principle shall be construed to prohibit a Member from participating in a referral service, in which the member's paid participation is disclosed, where permitted by state law.
  - 3. Charging exorbitant fees, particularly of a non-contractual nature (e.g., emergency care). Fees, whether for professional fees or associated with the use facilities owned in whole or in part by the Member, are exorbitant when they are wholly disproportionate to the services rendered and care provided. The reasonableness of fees depends upon the novelty and difficulty of the procedures involved; the skill required to provide proper care; the time and labor required; the fee charged for similar services by similarly situated peers; and whether or not the patient had agreed in advance to the fee. Members are responsible for ensuring the reasonableness and appropriateness of fees charged to patients and payors on such Member's behalf either directly or through third party billing services.
  - 4. Except in instances of emergencies or urgent and life threatening disease or injury, nothing in this Principle shall be construed to prohibit a Member from requiring prepayment of professional fees for all elective surgical operations.
  - 5. Nothing contained in this provision shall be construed to limit price competition among Members.
- F. The Member uses, participates in or promotes the use of any form of public communication (as defined in Glossary to the Code) or private communication (as defined in the Glossary to the Code) containing a false, fraudulent, deceptive, or misleading statement or claim, including a statement or claim which:
  - 1. Contains a misrepresentation of fact, or fails to state any fact that is necessary to make the statement not deceptive or misleading, when considered as a whole.

2. Omits facts or information of which the public ought to reasonably be informed before selecting a qualified plastic surgeon.
3. Contains photographs, images, or facsimiles of persons that falsely or deceptively portray a physical or medical condition, injury, disease, including obesity, or recovery of relief therefrom.
4. Contains photographs, images, or facsimiles of persons who have received the services advertised, but who have experienced results that are not typical of the results obtained by the average patient, without clearly and noticeably disclosing that fact.
5. Contains photographs, images, or facsimiles of persons before and after receiving services, which use different light, poses, or photographic techniques to misrepresent the results achieved by the individual.
6. Contains a testimonial or endorsement pertaining to the quality of the member's medical care if the experience of the endorser does not represent the typical experience of other patients or if, due to the infrequency and/or complexity of such care, results in other cases cannot be predicted with any degree of accuracy.
7. Contains a testimonial or endorsement pertaining to the quality of the member's medical care or the member's qualifications if the endorser has been compensated by the Member or a third party retained by the Member for making such testimonial or endorsement.
8. Is intended or is likely to create false or unjustified expectations of favorable results.
9. Contains a representation or statement of opinion as to the superior quality of professional services which is not susceptible to verification by the public or contains a statement representing that the Member possesses skills or provides services superior to those of other physicians with similar training unless such representation can be factually substantiated.
10. Appeals primarily to layperson's fears, anxieties, or emotional vulnerabilities.
11. Contains, in reference to any matter material to a patient's decision to utilize a member's services, a representation of fact or implication that is likely to cause an ordinary prudent person to misunderstand or be deceived, or fails to contain reasonable warnings or disclosures necessary to make a representation or implication not deceptive.
12. Contains a guarantee that satisfaction or a cure will result from the performance of the member's services.
13. States or implies that a Member is a board-certified specialist unless the Member is certified by a board recognized by the American Board of Medical Specialties, The

Royal College of Physicians and Surgeons in Canada and/or the Corporation Professionnelle des Médecins du Québec.

- 14. Is not identified as a paid advertisement or solicitation unless it is apparent from the context that it is a paid advertisement or solicitation.
- 15. Is intended or is likely to attract patients by use of exaggerated claims.
- G. The Member performs an unjustified surgical operation or a surgical operation that is not calculated to improve or benefit the patient.
- H. The Member performs a surgical operation or operations (except on patients whose chances of recovery would be prejudiced by removal to another hospital) under circumstances in which the responsibility for diagnosis or care of the patient is delegated to another who is not qualified to undertake it.
- I. The Member participates in a charity raffle, fund raising event, contest or other promotion in which the prize is any procedure, or an integral component of a procedure (e.g. breast implants), as defined in the Glossary to the Code.
- J. The Member seeks or obtains a patent for any invention or discovery of a method or process for performing a surgical procedure or employs trade secrets, confidentiality agreements or other methods to limit the availability of medical procedures and the dissemination of medical knowledge.
- K. The Member engages in unprofessional conduct in violation of the General Principles of the Code.

## II. Advertising

- A. Subject to the limitations of Section 2, I, F, a Member may advertise, including advertising through public communications media (as defined in the Glossary of the Code).
- B. A Member shall not compensate or give anything of value directly or indirectly to a representative of the press, radio, television, or other public communication media in anticipation of or return for recommending the member's services. A Member shall approve all advertisements before dissemination or transmission, and shall retain a copy or record of all such advertisements in their entirety for one year after its dissemination. A Member shall be held personally responsible for any violation of the Code of Ethics incurred by a public relations, advertising or similar firm which he or she retains, or any entity that advertises on the member's behalf.
- C. A Member may use photographs of models in his or her advertisements or other promotional materials. If photographs of models who have not received the services advertised are displayed in a manner that would suggest the model received the services advertised, the advertisement or other promotional material shall clearly and conspicuously state that the model has not received the advertised services.



### III. Solicitation

- A. A Member shall refrain from engaging in systematic verbal solicitation (as defined in the Glossary of the Code) of patients in person, by telephone, or through agents.
- B. A Member shall not initiate contact with a prospective patient knowing that the physical, emotional, or mental state or degree of education of the person solicited is such that the person could not exercise reasonable judgment in employing a member.
- C. A Member who has given unsolicited, in-person advice to a layperson that the individual should have medical or health care shall not accept employment resulting from that advice if:
  - 1. The advice embodies or implies a statement or claim that is false, fraudulent, deceptive or misleading within the meaning of Article I, Section F.
  - 2. The advice involves the use by the Member of undue influence, coercion, duress, harassment, intimidation, unwarranted promises of benefits, over-persuasion, overreaching, or pressure for immediate response.
  - 3. The Member has been given notice that the individual non-patient does not want to receive a communication from the member.

### IV. Expert Testimony

It is in the public interest that medical expert testimony be readily available, objective and unbiased. Members have an obligation to testify as expert witnesses when appropriate. However, Members may not accept compensation contingent upon the outcome of the litigation, nor agree to testify in any case where the Member has a conflict of interest (including, without limitation, where the Member is or has been the treating physician for the patient at issue or where the physician has a personal or professional relationship with the patient or plaintiff in the case). Members whose testimony, including testimony as to credentials or qualifications, is false, deceptive, or misleading may be subject to disciplinary action, including expulsion. Further to help limit false, deceptive and/or misleading testimony, Members serving as expert witnesses must:

- 1. Have recent and substantive experience (as defined in the Glossary of the Code) in the area in which they testify, including, without limitation, experience in the relevant subspecialty or the particular procedure performed on the plaintiff;
- 2. Thoroughly review the medical facts and testify to their content fairly, honestly, and impartially;
- 3. Be familiar with the standards of practice prevailing at the time of the occurrence,
- 4. Provide evidence-based testimony regarding the standard of care, citing peer-reviewed plastic surgery literature where possible and identifying personal opinion as such;

5. Demonstrate (or be prepared to demonstrate) a causal relationship between an alleged substandard practice and a medical outcome;
6. Neither condemn performance that clearly falls within the standard of care in the community nor endorse or condone performance that clearly falls outside of such standard of care; and
7. Not testify that a maloccurrence is malpractice.

#### V. Conflicts of Interest

A Member's clinical judgment and practice must not be affected by economic interest in, commitment to, or benefit from professionally related commercial enterprises or other actual or potential conflicts of interest. Disclosure of professionally-related commercial interests and any other interests that may influence clinical decision-making is required in communications to patients, the public, and colleagues. When a Member's interest conflicts so greatly with the patient's interest as to be incompatible, the Member should make alternative arrangements for the care of the patient.

In the context of Member ownership interest in a commercial venture, the Member has an obligation to disclose the ownership interest to the patient or referring colleagues prior to utilization; the Member's activities must be in strict conformance with the law; and the patient should have free choice to use the Member's facility or therapy or to seek the needed services elsewhere.

#### VI. Enforcement

Any Member charged with a violation of any ethical standard set forth herein may be subject to disciplinary measures, including censure, suspension or expulsion, as described in Article XXII of the Society's Bylaws.

#### VII. Glossary

For purposes of this Code and unless the context otherwise requires,

- A. "Electronic Media" includes websites, social media forums, blogs, video streams, discussion boards, digital platforms and any means of communication over the internet or similar virtual technology or networks.
- B. "Private communication" includes any information, written or otherwise, that is disseminated by a Member and not made known to the general public or nor intended to be made known to the general public at the time it was made.
- C. "Procedure" for the purposes of Section 2, Article I(I) of the Code, is defined as a medical service that requires an incision. Examples of services that require an incision include, but are not limited to, facelift, breast augmentation, blepharoplasty and liposuction. Examples of medical services that would not be considered procedures for purposes of Section 2, Article I(I) include, but are not limited to, injections (botulinum toxin, hyaluronic acid), microdermabrasion and other skin surface treatments.

- D. “Public communication” includes any information transmitted orally, in writing, or through Electronic Media, the primary purpose of which is to communicate with the public, or a segment thereof.
- E. “Public communications media” includes, but is not limited to, Electronic Media, television, radio, recorded video or motion picture, telephone, written correspondence, electronic mail/e-mail (other than those which are which are Private Communications), print (i.e. newspaper, magazine, book), marketing materials and branding (i.e. directory, business card, professional announcement card, office sign, letterhead, telephone directory listing or professional notice).
- F. “Recent and substantive experience” means that the Member is familiar with the practice of plastic surgery and the particular procedure performed at the time of the occurrence that is the subject of legal action, was engaged in the practice of plastic surgery for a period of not less than three (3) years prior to the date of the occurrence and has performed the specific procedure in question within three (3) years of the date of being retained as an expert witness.
- G. “Solicitation” is a communication to a specific individual to attract him or her as a patient.

## **STATEMENT OF PRINCIPLE OF INFORMED CONSENT**

The American Society of Plastic Surgeons recognizes the Member-patient relationship as one of shared decision-making. Through a process of communication and dialogue the Member provides information that allows a patient and/or the patient's authorized representative to make individual choices about his or her medical treatment.

Shared decision-making is at the heart of the doctor-patient relationship and is based on the ethical principles of respect for individual autonomy and dignity.

The process by which Members and patients make decisions together is informed consent. For any surgical operation or treatment, relevant information must be provided, discussed, and understood by the patient and/or the patient's authorized representative. Relevant information for proper informed consent for any procedure may include, but is not limited to:

- Nature of the surgery or treatment
- Indications for the operation
- Expected benefits
- Consequences and side effects of the operation
- Potential risks and adverse outcomes with their probability and severity
- Alternatives to the procedure being considered, and their benefits, risks, and consequences
- Outcome anticipated
- Whether the operation or treatment is experimental or being applied in a manner not approved by the relevant regulatory authorities (e.g. an off-label use or without approval of an Institutional Review Board)

The patient and/or the patient's legally authorized representative(s) should sign a written consent form before any surgical procedures are performed.

# **EXHIBIT 5**

**IN THE UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF ARKANSAS  
CENTRAL DIVISION**

**DYLAN BRANDT, et al.,**

**PLAINTIFFS,**

**v.**

**No. 4:21-CV-00450-JM**

**LESLIE RUTLEDGE, et al.,**

**DEFENDANTS.**

**DECLARATION OF DR. PATRICK W. LAPPERT**

Pursuant to 28 U.S.C. 1746, I declare:

**I. KNOWLEDGE, TRAINING, AND EXPERIENCE**

1. **Education and Training:** I received my Bachelor of Arts in Biological Sciences at the University of California, Santa Barbara, 1979. There I was engaged in research in cell membrane physiology with Dr. Philip C. Laris, studying stoichiometry of the sodium: potassium ATPase pump. I received my M.D., Doctor of Medicine degree at the Uniformed Services University of the Health Sciences, 1983 at Bethesda, Md. I served my General Surgery Residency at the Naval Hospital Oakland/UC Davis East Bay Consortium, 1987-1991 and served as Chief Resident, Department of Surgery, Naval Hospital Oakland, 1990-1991. I also served a Plastic Surgery Residency at the University of Tennessee-Memphis, 1992-1994. My professional background, experience, and publications are described in more detail in my curriculum vitae, which is attached as Exhibit A to this declaration.

2. **Board Certifications in Medicine:** I have been Board Certified in Surgery (American Board of Surgery, 1992), in Plastic Surgery (American Board of Plastic Surgery, 1997; American Board of Plastic Surgery, 2008).

3. **Medical Staff Appointments:** I served as the Staff General Surgeon at the Naval Hospital Oakland, CA 1991-1992 and as Associate Professor of Surgery, UC Davis-East Bay,

**EXHIBIT**

**Exhibit  
0003  
9/30/2021  
Dr. Lappert**

1991-1992. I also served as a Plastic and Reconstructive Surgeon, Naval Medical Center, Portsmouth, Virginia, 1994-2002 and as Chairman, Department of Plastic and Reconstructive Surgery, Naval Hospital Portsmouth, Virginia, 1996-2002. I later served as Clinical Assistant Professor, Department of Surgery, Uniformed Services University of the Health Sciences, 1995-2002 and as Founding Director, Pediatric Cleft Palate and Craniofacial Deformities Clinic, Naval Hospital Portsmouth, Virginia, 1996-2002 also as the Founding Director, Wound Care Center, Naval Hospital Portsmouth, Virginia, 1995-2002. I have also served as a Staff Plastic Surgeon in Nebraska and Alabama.

4. **U.S. Surgeon General Service:** I served as a Specialty Leader, Plastic and Reconstructive Surgery, Office of the Surgeon General-USN, 1997-2002.

5. **Faculty Appointments:** I served as Teaching Faculty at Eastern Virginia Medical School, Division of Plastic Surgery, 1995-2002. I also served on the teaching faculty of the Via College of Osteopathic Medicine, 2017-2020.

6. **Military Service:** I served as an Aviation Officer Candidate, Naval Aviation Schools Command, NAS Pensacola, 1978 and was Commissioned an Ensign, MC, USNR 1979 and Commissioned as a Lieutenant, MC, USN 1983. I served as a Designated Naval Flight Surgeon, Naval Aerospace Medical Institute, 1985, and I was Assigned Marine Fighter/Attack Squadron-451, serving as Flight Surgeon, and serving as Radar Intercept Officer in the Marine F-4S Phantom, accumulating 235 flight hours, and trained for qualification as an Air Combat Tactics Instructor. I was deployed to the Western Pacific as UDP forward deployed fighter squadron in Korea, Japan, and the Philippines. I served in the US Navy for 24 years, and I served in the USMC for 3 years. I retired with the rank of Captain, USN in 2002.

7. **Publications - Peer Reviewed Medical Journals:** Lappert PW. Peritoneal Fluid in Human Acute Pancreatitis. *Surgery*. 1987 Sep; 102(3):553-4; Toth B, Lappert P. Modified Skin Incisions for Mastectomy: The Need for Plastic Surgical Input in Preoperative Planning. *J Plastic and Reconstructive Surgery*. 1991; 87 (6): 1048-53; Lappert P. Patch Esophagoplasty. *J Plastic and Reconstructive Surgery*. 1993; 91 (5): 967-8; Smoot E C III, Bowen D G, Lappert P, Ruiz J A. Delayed development of an ectopic frontal sinus mucocele after pediatric cranial trauma. *J Craniofacial Surg*. 1995;6(4):327–331; Lappert PW. Scarless Fetal Skin Repair: “Unborn Patients” and “Fetal Material”. *J Plastic and Reconstructive Surgery*. 1996 Nov; 98(6): 1125; Lappert PW, Lee JW. Treatment of an isolated outer table frontal sinus fracture using endoscopic reduction and fixation. *Plastic and Reconstructive Surgery* 1998; 102(5): 1642-5.

8. **Publications - Medical Textbooks:** Wound Management in the Military. Lappert PW, Weiss DD, Eriksson E. *Plastic Surgery: Indications, Operations, and Outcomes*, Vol. 1; 53-63. Mosby. St. Louis, MO 2000.

9. **Operations and Clinical Experience - Consultations and Discussions:** As a physician and surgeon, I have treated many thousands of patients in 7 states and 4 foreign nations. My practice has included Primary Care, Family Medicine, Aerospace Medicine, General Surgery, Reconstructive Surgery for combat injured, cancer reconstructive surgeries including extensive experience with microvascular surgery, Pediatric Congenital Deformity, and the care of chronic wounds. I have practiced in rural medicine, urban trauma centers, military field hospitals, university teaching hospitals, and as a solo private practitioner. In my private practice I have had occasion to treat many self-identified transgender patients for skin pathologies related to their use of high dose sex steroids, laser therapies for management of facial hair both in transi-



tioners and detransitioners. I have performed breast reversal surgeries for detransitioning patients. My practice is rated as “LGBTQ friendly” on social media. I have consulted with families with children who are experiencing gender discordance. I have given many presentations to professional meetings of educators and counselors on the subject of transgender, and the present state of the science and treatment. I have discussed the scientific issues relevant to the case with many physicians and experts over a number of years and also discussed related issues with parents and others.

10. **Retained as an Expert Witness - Compensation - Bases for Opinions:** I have been retained as an expert witness by the State of Arkansas for the defense in connection with this litigation. I have actual knowledge of the matters stated in this declaration. I am being compensated at an hourly rate for actual time devoted, at the rate of \$400 per hour including report drafting, travel, testimony, and consultation. My compensation does not depend on the outcome of this litigation. To formulate opinions in this case I have reviewed many scientific publications, case filings, and the plaintiffs’ witness declarations.

11. **Expert Report Limitations:** My opinions and hypotheses in this matter are — as in all expert witness reports — subject to the limitations of documentary and related evidence, the impossibility of absolute predictions, as well as the limitations of social, biological, and medical science. All opinions are offered to a reasonable degree of medical certainty. I have not met with, nor personally interviewed, anyone in this case. As always, I have no expert opinions regarding the veracity of witnesses in this case. I have not yet reviewed all of the evidence in this case and my opinions are subject to change at any time as new information becomes available to me. Only the trier of fact can determine the credibility of witnesses and how scientific research may or may not be related to the specific facts of any particular case. In my opinion, a key role

of an expert witness is to help the court, lawyers, parties, and the public understand and apply reliable scientific, technical, and investigative principles, hypotheses, methods, and information.

## II. GENDER AFFIRMING TREATMENTS ARE EXPERIMENTAL.

12. “Gender affirming” treatments remain experimental as the historic Branstrom study and National Reviews in England, Sweden, and Finland indicate. “Gender affirming” treatments (i.e., hormones and surgery) have not been proven effective, or even competently tested. Such “treatments” are not generally accepted by the relevant scientific community and have no documented error rates (See, Daubert/Kumho). Patients who experience a gender identity that is discordant with biological sex have an alarmingly high incidence of serious psychosocial morbidity including depression, anxiety, eating disorders, substance abuse, HIV infection, suicidality, and homelessness. Connolly, M. D., M. J. Zervos, C. J. Barone, C. C. Johnson, and 2nd C. L. Joseph. 2016. *“The Mental Health of Transgender Youth: Advances in Understanding.”* Journal of Adolescent Health 59:489–95. :10.1016/j.jadohealth.2016.06.012. While a need for effective treatment modalities is clear, there are currently significant deficiencies in our understanding of the etiology of this condition, of the risks and benefits of the current experimental (unproven, untested) medical interventions, and of the long-term success of various “affirmation” treatments in achieving the primary desired goal of reducing mental illness including reductions in suicide risk.

13. Multiple recent studies and reviews including the recent national science summaries and guidelines from England-NICE, Sweden, Finland, the Cochrane Review, the British Royal College of Psychiatrists and others all document significant deficits in our current understanding of these complex disorders and significant defects in the “low quality,” contradictory, and controversial existing evidence. As we strive to provide real, effective, and sustained treat-

ment to patients who experience gender dysphoria within established ethical boundaries, it is essential that we properly and scientifically research the causes of gender dysphoria as well as conduct competent, properly conducted randomized clinical trials and long-term treatment outcome studies. These basic, foundational tasks — the tasks that make experimental procedures actual, proven treatments worthy of trust — have *never been accomplished in the highly controversial field of the transgender treatment industry*. Why? Suffering and vulnerable patients and their families continue to wait for this basic, foundational scientific work to be completed. Meanwhile, affirmation “treatments” are properly viewed as experimental. (See detailed citations in the “Notes” section of this report below).

14. The science and medical world have — in just the past few years — become increasingly aware of and deeply concerned about the glaring science and ethical defects of the transgender treatment industry. For example, the very recently released 2020 Finland national science review and guidelines documented “a lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria.” The new strict Finnish guidance prioritizes psychological therapy over treatment with hormones or surgery, thus directly contradicting the non-science-based association protocols of WPATH. The 2020 Finland national science review and guidelines also document the ongoing lack of scientific basis for the transgender treatment industry, stating “Only limited research has been conducted on transgender identity and other gender identity conflicts, and comparative studies are very rare.” In sum, the Finland National Science Review and Guidelines, like the new Sweden Review and Guidelines, the Cochrane Review, and other reviews, and the collapse and recantation of the 2020 Branstrom long-term treatment outcome study (which proved *no benefits* to these “treatments”) claims, all

appear contrary to the opinions of plaintiffs’ experts, WPATH, and the endorsements of professional associations. (See detailed citations in the “Notes” section of this report below).

15. Meanwhile, practitioners in this troubled field continue to offer defective research and politicized endorsements from politicized, union-like associations (WPATH, APA, ACP, etc.) rather than competent, credible, valid, and reliable peer-reviewed and published scientific evidence. The plaintiffs’ experts failed to even discuss the serious defects and methodological limits of transgender medicine data and experimental practices. Fifty years of experimenting is enough. It is time for the transgender treatment industry to come up with real, competently constructed scientific evidence that they help more people than they hurt. As the recent national science reviews from England, Sweden, the Cochrane Review, and Finland have all noted, it is time to step back, slow down, and prudently investigate a range of approaches — including years of careful psychotherapy prior to experimental sterilizing “treatments” — to vulnerable patients struggling with gender discordance issues. (See detailed citations in the “Notes” section of this report below).

### **III. THE ETHICS OF PLASTIC SURGERY**

#### **A. “Chest Masculinization” in Natal Females is Not Ethically Equivalent to Mastectomies for Breast Cancer.**

16. When mastectomy is performed for the management of breast cancer, or to mitigate the proven risk of developing breast cancer in women, it is done on the basis of objective diagnoses either by pathological examination of biopsy tissue, or as in the case of prophylactic mastectomy, on the basis of genetic analysis that shows known markers of increased risk of developing breast cancer. These tests (microscopic examination of tissue specimens, detection of cell surface markers with proven association with malignancy, and genetic screening of at-risk patients) have known positive predictive value for the diagnosis of breast cancer, and these tests

have known error rates that can be used when obtaining informed consent for mastectomy. The validity of these tests has been proven using scientific methodologies that produce high quality evidence in longitudinal population studies with control populations, and very long follow up. As the result, when a woman gives consent for mastectomy to control or prevent the potentially lethal disease, it is with a clear and proven evaluation of the risks and benefits that consent is obtained. Mastectomy is being performed based upon an objective diagnosis of a potentially lethal condition, and the surgical procedure has proven benefit in management of that condition.

17. In stark contrast, this is not the case when mastectomy is performed to “masculinize” the chest of girls and women who self-identify as transgender or who self-report symptoms of dysphoria. Otherwise healthy breasts are being removed on the basis of a diagnosis that is made by the patient since there are no tests with known error rates that can be used to predict who will benefit from this disfiguring and irreversible surgery. The claim is made that chest masculinization has proven benefit in reducing dysphoria and the associated risk of suicide. But published studies that make this claim of benefit offer evidence that is low to very low quality, typically small case collections with self-selection bias, very short follow up, and no case controls.

18. The best data presently available on the long-term effects of medical and surgical transitioning are long-term, longitudinal, population based studies. For example, Dehjne, et al., examined the putative long-term benefit of full transitioning (including hormonal and surgical treatments) found in the Swedish medical database. (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 <https://doi.org/10.1371/journal.pone.0016885>). That database includes

all persons in the Swedish medical system, from pre-natal to death. It reports all episodes of care and all demographic information in a uniform vocabulary. Furthermore, Sweden has been on the forefront of “gender affirmation” long before the American medical system seriously considered its claims. Because of the nature of Sweden’s database, it is possible to study a cohort of patients that exactly matches the inquiry group with regards to age, sex, economic status, etc. It is possible to ask precisely such questions as, “What is the likelihood that a fully transitioned transgender male will be hospitalized for psychiatric illness when compared to the age/sex matched control group?” or “What is the relative risk of suicide in transgender persons, when compared to age/sex matched controls?”

19. Why are such longitudinal, population based studies superior to the case-collection/case series methodology? Because confounding variables such as age, sex, and self-selection biases are removed. In the flawed case-collection methodology, the reported cases are typically only those who return for follow up. You have no way of knowing if the patient had a good outcome or didn’t return for follow up because they were in a psychiatric hospital, were incarcerated, or committed suicide. In the Swedish longitudinal study, the suicide is in the same database, as are the other issues of hospitalization, incarceration, and addiction treatment, among other rates of comorbidity. Thus the longitudinal population study can give us what is called a “hazard ratio” for a particular study population (patients who have completed transgender transition).

20. What did this Swedish study show us? It showed us that the risk of completed suicide in all transgender persons is *19.1 times higher* than in the control cohort. If you look only at patients who have transitioned — patients after “treatment” — from female to “male presentation,” the risk of completed suicide is *40 times higher* than in the general population.

(Note: this finding is consistent with the historic Branstrom 10yr follow up study, which found no benefits to “transitioning treatments” but did note an increased risk of serious suicide attempts and anxiety disorders AFTER “treatment.” (Correction to Bränström and Pachankis, Am J Psychiatry 177:8, August 2020; see detailed citations in the “Notes” section of this report below).

21. Another cautionary note was added to the literature review by the reputed Cochrane Review, a UK based international association of researchers who examine the quality of scientific evidence used in medical decision making. The Cochrane Review recently published findings concerning the medical evidence used to support the decision to give young women cross sex hormones as part of the transition process. The authors summarize the world literature review thus: “We found insufficient evidence to determine the efficacy or safety of hormonal treatment approaches for transgender women in transition. This lack of studies shows a gap between current clinical practice and clinical research.” (Does hormone therapy help transgender women undergoing gender reassignment to transition? See, Haupt C, Henke M, Kutschmar A, Hauser B, Baldinger S, Saenz SR, Schreiber G., Cochrane Review, 28 Nov 2020).

22. Similar issues of very poor, low quality scientific support for chest masculinization surgery can be seen in a recent article by Tolstrup et al. published in the journal Aesthetic Plastic Surgery (See Anders Tolstrup, Dennis Zetner, Jacob Rosenberg, Outcome Measures in Gender-Confirming Chest Surgery: A Systematic Scoping Review, Aesthetic Plast Surg 2020 Feb;44(1):219-228. doi: 10.1007/s00266-019-01523-1. Epub 2019 Oct 29). The article reports a comprehensive review of the world literature concerning the efficacy of “gender confirming” chest surgery in transgender patients. The authors found 849 articles on the subject, published in peer reviewed medical journals. Of these 849 articles, only 47 could be included in the review. This means that only 5.5% of all the published, peer-reviewed transgender surgery articles

demonstrated even rudimentary scientific rigor. Of those 47 articles, the authors report that only 29 of the articles addressed mental health outcomes (3.4% of all the articles). What is startling is that the mental health outcomes were judged only on the basis of uncorroborated, untested, and unassessed patient subjective reporting with descriptors that varied so widely from article to article that results could not even be compared. The authors summarize by saying, “Evaluation of outcomes in gender-confirming chest surgery showed large variations in reporting, and further streamlining of reporting is therefore required to be able to compare surgical outcomes between studies.” None of these negligent articles even bothered to examine rates of psychiatric hospitalization, substance abuse, self-harm behaviors, and suicide. This tells us that the main reason for performing these surgeries (psychological distress and suicide risk) isn’t even evaluated with regard to efficacy.

23. An example of an article with very low quality data, reckless (now banned practices), and methodology, published in a “leading journal,” and promoted as evidence for the efficacy of “chest masculinization” surgery makes this fact very clear. The lead author (Olson-Kennedy, a leading national advocate for the transgender treatment industry) is a board certified pediatrician who leads the gender clinic for the Los Angeles Children’s Hospital. The article appeared in 2018 (See J. Olson-Kennedy, J. Warus, MD1, et al., *Chest Reconstruction and Chest Dysphoria in Transmasculine Minors and Young Adults; Comparisons of Nonsurgical and Postsurgical Cohorts.*, JAMA Pediatr. 2018;172(5):431-436. doi:10.1001/jamapediatrics.2017.5440). In their summary of findings, the authors reported that “chest dysphoria” is common among “trans males” (natal females seeking to present as males), and claimed that dysphoria is “decreased by surgery.” They claim that regret for surgery is “rare.” The article reports breast removal surgery on at least one girl aged 13 years. (Note that this reckless, experimental



practice has now apparently been abandoned as unethical/experimentation on children by England, Sweden, and Finland). The average age of patients in the study was 19. Children were entered into the study through recruitment from among patients visiting the clinic and by telephone over a six month period. The authors found that of the patients recruited from among visitors to the clinic (convenience sampling) there was an abundance of non-operated patients, so they were forced to reach out to all the post-surgical patients by phone. Twenty-six percent of the clinic's post-surgical patients could not be reached for various reasons including no working phone, or failure to respond to multiple messages. The 26% drop-out rate is never even questioned by these authors. Were surgical patients lost to follow up because of dissatisfaction, psychiatric hospitalization, or *suicide*? This problem is called "self-selection bias," and it is evidence of careless study design. Of the remaining 74% of patients, only 72% completed the survey. This is a second example of self-selection bias. Why would some post-surgical patients who had been successfully contacted, not complete the survey? The authors — demonstrating multiple levels of confirmation bias — do not even ask such essential questions. (See detailed citations in the "Notes" section of this report below).

24. In the study, dysphoria was evaluated using what the author called "a novel measure," which amounted to a series of subjective questions about happiness that was in part designed by the adolescent test subjects themselves. Essentially, the methodology used an entirely unvalidated ("junk science") test instrument, with no known error rates and no proven predictive power. Furthermore, the post-surgical patients were administered the survey at widely varying time intervals post-surgery. The longest interval between surgery and the satisfaction survey was 5 years, but children less than a year post-surgery were included in this obviously flawed sample, and yet the authors claim evidence of "negligible regret." This is a remarkable, misleading, and

deceptive claim given that long-term, longitudinal population studies show that there is a dramatic rise in post-surgical problems such as depression, hospitalization, substance abuse, and suicide beginning at around 7 years post-surgery (Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 <https://doi.org/10.1371/journal.pone.0016885>). Surely the authors are familiar with the world literature on transgender outcomes?

25. Having deceptively or negligently promised in the introduction to their paper that “chest dysphoria” is reduced by surgery, at the conclusion the authors confessed to the fact that the study design and execution produced very low quality data that is not useful for patient selection, or prediction of outcomes. They even confessed that the study does not address the efficacy of surgery in improving outcomes regarding the single most compelling reason for performing the operation: mitigation of depression and suicide. The authors write: “An additional limitation of the study was the small sample size. The nonsurgical cohort was a convenience sample, recruited from those with appointments during the data collection period. There could be unknown imbalances between the nonsurgical and postsurgical cohorts that could have confounded the study findings.”

26. Finally, the authors did not even bother to validate their “Chest Dysphoria Scale.” Such a “made-up” scale is unlikely to accurately represent distress or correlate with properly validated measures of quality of life, depression, anxiety, or functioning.” Their own analysis at the conclusion or the paper directly contradicts their own deceptive claim made in their introduction.

27. This is the kind of “junk science” that is used to support transgender medicine and surgery. It was written by board certified physicians who practice in one of the nation’s largest pediatric gender clinics and published in a peer-reviewed medical journal. It is essentially useless in making any clinical decisions regarding who should be offered surgery, what is the likelihood they will benefit from it, what is the likelihood they will regret their decision, and most importantly, whether their risk of suicide would be reduced.

28. Because of the very low quality scientific support for mastectomy in the management of gender dysphoria, valid consent would require that these procedures be described as experimental, would need the approval of ethics panels to monitor human experimentation, and would require the use of valid controls found in long-term, longitudinal population based study models. These are the kinds of patient protections now endorsed in England, Sweden and Finland but still ignored in the US environment where proper scientific critiques of such studies can get faculty “cancelled.” (See detailed citations in the “Notes” section of this report below).

29. Even though the transgender treatment industry has been performing these surgeries for over 50 years, gender treatment centers continue to publish the same low quality, methodologically defective studies based upon collected cases that are degraded in value by self-selection bias, confirmation bias, and short-term follow-up, while continuing to deceptively claim that such defective research provides a sufficient scientific basis for performing irreversible, disfiguring, and ultimately sterilizing hormonal treatments and surgeries. (See detailed citations in the “Notes” section of this report below).

**B. “Chest Masculinization” in Natal Females is Not Ethically Equivalent to Gynecomastectomy.**

30. Gynecomastectomy is the surgical treatment of gynecomastia, a fairly common condition in which males develop female-type breast gland tissue. Proponents of “masculinization” mastectomy in natal females erroneously equate the ethics of removing healthy breast tissue from these patients with the removal of abnormal breast tissue in men (gynecomastia). In the case of gynecomastectomy in male patients, the operation is performed to remove the objectively diagnosed presence of female type glandular breast tissue present in a male patient. Physical examination demonstrates the presence of a dense retro-areolar mass which is tender and sometimes disfiguring. Pathological examination of the removed tissue will demonstrate the presence of female-type fibroglandular tissue in a male patient. This is an objectively abnormal condition. It should further be noted that in the absence of such abnormal, female-type fibroglandular tissue, chest recontouring is considered to be cosmetic, and is typically not paid for by third-party payors.

31. I have never read a peer reviewed journal article which discusses the indications for gynecomastectomy that included any claim to reduce major depression and suicide. This is because any male patient seeking removal of abnormal, female-type, breast tissue who reported suicidal ideation would be considered incompetent to give consent, and would require a psychiatric evaluation and treatment to manage suicidal thinking before being considered for surgery.

**C. “Chest Masculinization” in Natal Females is Not Ethically Equivalent to Breast Reduction.**

32. It should be obvious that “Chest Masculinization” surgery in natal females is not ethically equivalent to breast reduction surgery in non-transgender females. In the case of breast reduction for females with excessively large breasts (macromastia, or gigantomastia), the operation is performed to relieve a debilitating orthopedic complaint of neck, back, and shoulder pain

associated with the postural/mechanical effects of the weight of the breasts. These patients experience significant activity restriction and chronic pain that is not relieved by medical management or physical therapy. Furthermore, there is voluminous actuarial data, based upon many years of longitudinal population based study by medical insurance agencies that is used to predict who will benefit from surgery, and who will not. These physical, objective tests, based upon the actual measurement of the breasts, and the patient's overall body habitus, have known error rates that can be used to predict the likelihood that a breast reduction will relieve the orthopedic complaints of neck, back, and shoulder pain. When the tissue specimens are submitted to pathology, they are weighed in order to ensure that enough tissue has been removed so that there will be a very high likelihood that the surgery will relieve the orthopedic condition of neck, back, and shoulder pain ( Accuracy of Predicted Resection Weights in Breast Reduction Surgery, Theodore A. Kung, MD, Raouf Ahmed, MBBS<sup>1</sup> Christine O. Kang, MPH,<sup>1</sup> Paul S. Cederna, MD, and Jeffrey H. Kozlow, MD; *Plast Reconstr Surg Glob Open*. 2018 Jun; 6(6): e1830.

33. Based upon that, adequate pre-operative consent can be obtained. The supporting data is based in very high quality methodology. There is no quality research data, no pre-operative test or study, and no known error rates, that can be used to predict the likelihood that any child suffering from gender dysphoria will benefit from the experimental procedures of mastectomy and chest "masculinization." As noted above, because of the very low quality data, transgender chest masculinization is at best experimental and at worst, should be viewed as a form of medical child abuse — it is important to note that Finland, Sweden, and the UK appar-

ently now all agree with this analysis, as they have all retreated from such reckless surgical procedures for minors — similar to what Arkansas’s science-informed, responsible legislature has now done. (See detailed citations in the “Notes” section of this report below).

34. It is crucial to remember that “chest masculinization” of healthy breast tissue results in a complete loss of function, that this loss is two-fold (breast feeding and erotic sensibility), and the cause of the loss is two-fold (gland removal and severing of the intercostal nerve). (See Breast Reduction with Use of the Free Nipple Graft Technique; Stephen R. Colen, MD; Aesthetic Surgery Journal, (Breast Reduction with Use of the Free Nipple Graft Technique; Stephen R. Colen, MD; Aesthetic Surgery Journal, Volume 21, Issue 3, May 2001, Pages 261–271, <https://doi.org/10.1067/maj.2001.116439>).

35. If a patient who undergoes “chest masculinization” should regret the surgery, they do have the option of breast reconstruction. But all that will be produced is the appearance of a breast. The patient will have lost the function of breast feeding. Additionally, the most commonly performed “masculinization” surgery involves the removal of the nipples, and subsequent re-attachment in the form of a nipple graft. Those nipples will have lost their native nerve connections that provoke erotic sensibility. All that can be hoped for is the eventual random ingrowth of local skin sensation, but there will never be erotic sensation because the particular branch of the fourth intercostal nerve which communicates with particular centers in the brain responsible for oxytocin release and erotic provocation will have been permanently severed. This means that breast function has been completely and irreversibly sacrificed for the sake of producing a cosmetic result (a masculine appearing chest). This is the exact opposite of the goals of any reconstructive surgery. It must therefore be understood that “chest masculinization”

is a cosmetic procedure that has violated the most essential principle of cosmetic surgery: never sacrifice function for the sake of a cosmetic result.

**D. Masculinizing and Feminizing Chest Surgeries are Not “Medically Necessary.”**

36. Supporters of “transitioning” treatments justify surgical treatment based upon “medical necessity.” They claim that gender dysphoria can lead to debilitating anxiety and depression, as well as serious incidents of self-harm, including self-mutilation, suicide attempts, and suicide. Yet with only a single exception, in the studies they cite no measures are made of the effects of surgery on what is claimed to constitute the “medical necessity” for these procedures.

37. In contrast, the Branstrom study cited in detail in the Notes Section of this declaration documented no reliable benefits for transgender surgery/hormonal treatments and no reduction in suicide and even an *increase* in serious suicide attempts requiring hospitalization in patients receiving surgery. These recent, long-term, published, peer reviewed, credible research findings are quite contrary to the claims of supporters of “transitioning treatments” — as are the National Science Reviews in this area from England-NICE, Sweden, and Finland. (See detailed citations in the Notes section in this declaration).

38. Scientific rigor would demand an examination of such outcomes as: rates of substance abuse, psychiatric hospitalization, self-harm, or suicide, and how they were changed by surgery. One paper does ask these crucial questions concerning efficacy is a very comprehensive, long term, longitudinal population cohort study which actually shows the opposite of what plaintiffs’ experts’ claims for these patient outcomes. When followed beyond 8 years post operatively, this paper shows patients receiving plaintiffs’ experts’ treatments have the same alarmingly high rates of hospitalization, substance abuse, self-harm, and completed suicide as persons

who have had no medical or surgical intervention. The fact that the citation is included by plaintiffs' experts, but never discussed in his opinion regarding efficacy is troubling. In summary, on the issue of the safety and efficacy of these surgeries, the scientific support is very weak, while the scientific evidence rejecting the hypothesis of efficacy is remarkably strong (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 <https://doi.org/10.1371/journal.pone.0016885>)

39. The surgical removal of the breasts, and the re-contouring of the chest through liposuction is a common procedure for women who seek to present as men. These operations are performed in both men and women, for a variety of reasons, are very safe, and typically performed in the outpatient setting. It is important to understand that the only way of distinguishing cosmetic breast surgery from "medically indicated" surgery is based upon the diagnosis of underlying pathology. For example, breast reduction may be cosmetic, or it may be medically indicated. In both cases, the patient presents with a complaint that her breast are too big. The distinction between cosmetic breast reduction and medically indicated breast reduction is based upon the presenting symptoms of orthopedic problems caused by the weight of the breasts, but even then, the weight of the removed tissue is factored into the objective verification that the surgery was "medically necessary."

40. The same issues are at stake in breast enhancement for men seeking to present as women. Cross-sex hormones will have caused varying degrees of gynecomastia (breast enlargement in men). Surgical enhancement procedures are exactly the same in both men and women.



Medically necessary surgery in women is based upon the diagnosis of an objective medical condition, such as Poland's syndrome (congenital absence of a breast), surgical absence of the breast following cancer care. In men, the objective diagnosis of gynecomastia might warrant surgery based upon medical necessity, but it would be a removal of tissue. A rare diagnosis of breast cancer in a man might warrant chest wall reconstruction after cancer care. On the other hand, cosmetic surgery of the breast is entirely about the subjective feelings of the patient, and that is all that we have in the case of the self-identified transgender patient.

41. In the case of transgender chest surgery, the diagnosis is based on the patient's subjective report of dysphoria, but the medical necessity is based on the expectation that surgery will relieve the patient of the risk of, among other things, major depression, self-harm behaviors, and suicide. None of the papers typically cited by supporters of "transitioning treatments" address themselves to the question of medical necessity for either masculinizing surgery, or feminizing surgery. They only address technical issues, management of complications, and subjective outcomes that employ precisely the same language that is used to assess cosmetic surgery of the breast. In summary, the medical necessity of transgender chest surgery is not supported by scientific evidence, and appears to be firmly in the category of cosmetic surgery.

**E. Virtually All Transgender Patients are Born with Normal, Healthy Sex Organs and No Scientifically Validated Reason to Surgically Damage Them.**

42. Sex is not "assigned at birth" but permanently "assigned" at conception by DNA. Medical technology can be used to determine a fetus's sex before birth. It is thus not scientifically correct to talk of doctors "assigning" the sex of a child at birth; almost anyone can accurately and reliably identify the sex of an infant by genital inspection with approx 99.9% accuracy. Every nucleated cell of an individual's body is chromosomally identifiably male or female—XY or XX. Claims that patients can — via hormonal and surgical treatments — obtain a

“sex change” or a “gender transition” process are misleading and scientifically impossible. In reality, the typical “transgender” gender discordant patient has normal healthy sex organs but struggles with gender discordant feelings and perceived identity — a psychiatric and not a medical problem.

**F. Detransitioners are Real and Surgeons Have No Diagnostic Tools to Identify Who They Will Be.**

43. The phenomenon of desistance or regret experienced later than adolescence or young adulthood, or among older transgender individuals, has to my knowledge not been quantified or well-studied. But it is a real phenomenon. I myself have worked with multiple individuals who have abandoned a trans female identity after living in it for years, and who would describe their experiences as “regret.” More dramatically, a surgical group prominently active in the sexual reassignment field has published a report on a series of seven male-to-female patients requesting surgery to transform their surgically constructed female genitalia back to their original male form. See Djordjevic ML, Bizic MR, Duisin D, Bouman MB, Buncamper M. Reversal Surgery in Regretful Male-to-Female Transsexuals After Sex Reassignment Surgery. *J Sex Med.* 2016 Jun;13(6):1000-7. doi: 10.1016/j.jsxm.2016.02.173. Epub 2016 May 4. PMID: 27156012. Further, there is an increasingly visible online community of young women who have desisted after claiming a male gender identity at some point during their teen years. See, e.g., <https://our-duty.group/2020/04/29/the-detransition-advocacy-network/>. Given the rapid increase in the number of girls presenting to gender clinics within the last few years, the phenomena of regret and desistance by young women deserves careful attention and study.

44. Transgender surgeons have no objective, reliable means of evaluating the diagnostic error rate because there is no body of reliable scientific evidence that can be used to counsel the patient about what their risk of regret is. The ever growing population of de-transitioning

patients suggests that the error rate may be considerable, and the future medico-legal consequences may be proportionate.

45. Valid surgical consent requires that the surgeon is ultimately responsible for the accuracy of the diagnosis. For example, if an endocrinologist refers a patient for thyroidectomy because they have diagnosed a malignant thyroid nodule, the operating surgeon is still obliged to ensure the validity of the diagnosis. He has to entertain alternative diagnoses. Is it a benign nodule? Can it be treated with non-surgical means at lower risk to the patient? What do the scans show? What do the hormone levels show? Having evaluated all the alternative possibilities in the differential diagnosis, the surgeon can then counsel the patient and their family on the options of care, the likelihood of cure, and proper informed consent can be obtained.

46. But the transgender treatment industry, employing scientifically unsupported WPATH guidelines essentially (and unethically) excuse the surgeon from any responsibility for the diagnostic process or its consequences if the diagnosis is incorrect. The 7th edition of the WPATH guidelines requires only two letters written by psychologists, and a period of social transition. There is no action taken to verify the diagnosis on the part of the surgeon. The surgeon has no objective, reliable means by which to anticipate who might benefit or who might be harmed by surgery.

47. By the time a patient presents to a transgender surgeon, they have been the subject of affirmation processes that include everything from social transitioning, to hormonal manipulation. The surgeon is performing permanently life-altering surgical interventions to cure a psychological condition that was diagnosed by the patient, and sometimes the patient made the diagnosis before they even entered puberty. Since the abandonment of frontal lobotomies in 1967, there has been no other psychological-psychiatric condition for which surgery is performed, and

there is no other area of surgical care where the diagnostician is the patient themselves, and the surgeon has no objective, reliable means of confirming or rejecting the diagnosis.

**G. I Do Not Engage in Experimental Treatments Lacking Reliable, Credible Scientific Support.**

48. As multiple national science reviews and multiple peer reviewed science publications demonstrate, the relevant scientific community has never accepted the reliability, validity, safety or effectiveness of “gender affirmation” treatment procedures — including surgical procedures. Significant medical, ethical, and potential legal problems are created when health care providers employ experimental, unproven, treatment including surgical procedures. Due to the well-documented lack of scientific support and only low quality evidence of efficacy and safety, I will not personally engage in the delivery of experimental gender affirming medical interventions to patients of any age. I will not consider doing such invasive, potentially harmful surgical procedures — that can lead to life-long sterilization of vulnerable patients — until reliable, valid scientific research supports such methods.

49. The transgender treatment industry generates considerable income for hospitals, clinicians, and pharmaceutical companies. Members of the transgender treatment industry have a vested interest in believing that science has already justified their existence. Further, as sterilization is the expected adult outcome of endocrine and surgical treatments of the procedures undertaken in youth prior, the transgender treatment industry must have developed strong rationalizations to justify creating infertility. Will one day the medical profession look at support for transitioning youth in the same manner the eugenics movement is now regarded? (See, Hruz, PW, Mayer, LS, and McHugh, PR, "Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria," The New Atlantis, Number 52, Spring 2017 pp. 3 -36 ; See also,

McHugh, P., Psychiatric Misadventures, The American Scholar, Vol. 62, No. 2 (Spring 1993), pp. 316-320

50. In summary, proponents of “affirmation care” for self-identified transgender patients have no body of quality scientific evidence that proves benefit from their interventions. They rely on low to very low quality data when they recommend affirmation therapy. Consensus statements by professional bodies are based upon the lowest category of evidence available. Advocates of “affirmation care” have no long term data to support their therapeutic recommendations, and they never compare their data to the historically proven approach of “watchful waiting.” Advocates for “affirmation care” including medical and surgical intervention, have no objective test, with published error rates, that can be employed to determine who will benefit from their treatments. They rely only on subjective reporting by the patient. Transgender surgery, including “chest masculinization” does not meet the criteria for reconstructive surgery. Because the sole aim of the surgery is the claimed, but unsupported, emotional benefit, it is *by definition* aesthetic (feelings) or cosmetic (appearance) surgery. Chest “masculinization” surgery fails on professional moral grounds because informed consent is impossible (given that there is no way to predict who will benefit), and because function is utterly destroyed in order to achieve a counterfeit form.

#### **IV. PLASTIC SURGERY IS CONCERNED WITH PSYCHOLOGY.**

##### **A. Why is Plastic Surgery Concerned with Psychology?**

51. Plastic surgery has two areas of activity with broad overlap. The practice of plastic surgery includes reconstructive as well as aesthetic (often called cosmetic) surgery.

52. Reconstructive surgery is ordered to the establishment, or restoration, of normal body structures and their associated functions. The reconstructive process aims at deformities caused by trauma, disease or the management of disease such as cancer surgery, and congenital

deformities. The goal is the restoration of form and function. Sometimes functional restoration is given priority over form, as with the reconstruction of a hand injury in a man. Sometimes functional restoration is impossible, and all that can be offered is aesthetic, as with reconstruction of a facial wound that has resulted in the loss of an eye, where vision cannot be restored, and all that can be offered is a prosthetic eye.

53. Aesthetic (cosmetic) surgery on the other hand is surgery to modify the appearance of an area of the body that is functionally normal, and that has an appearance that, even though it is within the range of normal, causes some degree of annoyance or discomfort to the patient. (For example, prominent ears on a boy.) The ears are functionally normal, and their prominence may even be a recurring family trait, but their prominence is a daily annoyance to the boy; he may even have been given a pejorative nick name. A simple and safe procedure can be performed that reduces the prominence of his ears *without sacrificing any function*, and his daily annoyance is resolved. Form is changed within the range of normal, function is preserved, and the aesthetic (feelings) problem is solved.

54. In the clinical training of plastic surgeons, we learn to carefully evaluate aesthetic patients, not only for the sake of surgical planning, but because we have to understand their motivation for the surgery and how to anticipate potential complications. It is axiomatic in plastic surgery that the most avoidable complication in aesthetic surgery is disappointment and regret on the part of the patient. We are taught that disappointment is first and foremost managed by ensuring that the doctor understands what the patient is seeking to achieve, that the goal is worthy of pursuing, and that the surgeon is likely to achieve the goal.

55. Plastic surgeons are trained to recognize a particular subset of aesthetic patients who at first appear to be seeking some ordinary improvement in appearance, but upon further

evaluation discovers that the patient is seeking cosmetic surgery because they are convinced they are horribly disfigured — and *this* is the reason they feel alone, isolated and depressed. If such a patient has an otherwise normal physical appearance, then the diagnosis of Body Dysmorphic Disorder must be entertained. See (5) Body Dysmorphic Disorder, Andri S. Bjornsson, PhD, Elizabeth R. Didie, PhD, Katharine A. Phillips, MD; Dialogues Clin Neurosci. 2010 Jun; 12(2): 221–232; and Body Dysmorphic Disorder and Cosmetic Surgery Crerand, Canice E. Ph.D.; Franklin, Martin E. Ph.D.; Sarwer, David B. Ph.D. Plastic and Reconstructive Surgery: December 2006 - Volume 118 - Issue 7 - p 167e-180e.

56. Persons who suffer with this condition are seeking a physical explanation for a psychological wound. They are trying to explain their isolation, anxiety, depression, and despair by pointing to their appearance as the cause of their sorrows. Plastic surgeons learn that such patients may be elated at first with their surgery, but they return with complaints that “you didn’t do the surgery right.” They are disappointed because they still experience the anxiety, isolation, depression, and despair, which should not be surprising given the obvious fact that *you cannot heal a psychological wound with cosmetic surgery.*

57. Indeed, to offer cosmetic surgery to a person suffering from Body Dysmorphic Disorder is considered a failure of diagnosis. *To know that a person is suffering from body dysmorphic disorder, and to offer them surgery in spite of that knowledge is malpractice.* The surgeon is taking advantage of a psychologically vulnerable patient for the sake of financial gain. See Cosmetic Surgery and Body Dysmorphic Disorder – An Update B S. Higgins, MD and A. Wysong, MD, MS, Int J Womens Dermatol. 4(1); March 2018.

58. Gender dysphoria is a diagnosis that is based upon the subjective reporting of the affected child. There is no objective test, with known error rates, that can be employed to confirm the diagnosis, or predict who will benefit from any putative therapeutic interventions. There is no chromosomal study, no genetic marker, no gene product, no hormonal abnormality, or any dynamic brain scan that can be used to confirm the diagnosis. Essentially, the transgender treatment industry is offering permanently life altering hormonal manipulation and irreversible surgery based upon a diagnosis that is made by an emotionally stressed adolescent, or even prepubertal child who is being socially transitioned. (See Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria Paul Hruz, MD, PhD. Linacre Quarterly 2020 Feb 87 (1)34-42. doi10.1177/0024363919873762. Epub 2019 Sep 20.)

**B. Gender Dysphoria or Gender Identity Disorder is a Logical Subcategory of Body Dysmorphic Disorder.**

59. Body dysmorphic disorder is a subcategory of obsessive compulsive disorder. What distinguishes gender identity disorder from other forms of body dysmorphic disorder is that the content of the obsessive thought is the sexed appearance of the patient. The obsessive thought is that they have the wrong genitalia, that they are really the other sex, and if they could change that, their anxiety, isolation, depression, and despair would resolve. Given that the patient is physically normal, and that the patient is seeking a change in appearance in order to resolve a feeling (aesthetic), all transgender surgery, by definition, is cosmetic surgery.

60. To call a “chest masculinization” mastectomy a “chest reconstruction” is not just an imprecision of language. It is intentional deception. Such mastectomy is in no way a restoration of form and function. It is rather the willful destruction of function for the purposes of producing a counterfeit form. What is more, because these mastectomies involve the irreversible destruction of normally functional parts, with associated loss of function, these operations violate



the first and most important principle of plastic surgery: It is bad surgical planning if you compromise function for the sake of a cosmetic result. In this case the compromise of function is actually a 100% loss.

**C. There Are Multiple Pathways to Gender Dysphoria.**

61. The diagnosis of “gender dysphoria” encompasses a diverse and controversial array of conditions, with widely differing pathways and characteristics depending on age of onset, the complexities introduced by co-occurring mental illnesses, social contagion and other environmental factors, among other things. Data from one population (e.g. adults, those struggling with complex mental illnesses) should not naively be assumed to be easily applicable to others (e.g. children, those changed by social contagion) and other factors. The developmental and mental health patterns for these groups are sufficiently different that data developed in connection with one of them cannot be assumed to be reliably applicable to another. See K. Zucker (2018), The Myth of Persistence: Response to “A Critical Commentary on Follow-Up Studies & ‘Distress’ Theories about Transgender & Gender Non-Conforming Children” by Temple Newhook et al., Intl J. of Transgenderism at 10, DOI: 10.1080/15532739.2018.1468293 (“Myth of Persistence”).

**V. OPINIONS REGARDING THE SHOCKING OMISSIONS OF PLAINTIFFS’ REPORTS**

62. As a physician and surgeon for decades, I have dedicated my life to helping the injured, the wounded, the sick, the vulnerable, and those in distress. As a physician and surgeon, I have a duty to carefully assess the available scientific research literature and determine what surgical procedures have been scientifically proven safe and effective for use on patients — and which procedures are still experimental, potentially dangerous, and may well do more harm than good for patients. Such an assessment requires the prudential review of scientific publications and my being familiar with the ongoing methodological and scientific debates in the field.

63. I have reviewed the plaintiffs’ declarations from Drs. Adkins and Antommara in this case. Those declarations demonstrate a stunning lack of knowledge or candor regarding the ongoing, raging, international scientific debates over the safety and effectiveness of “gender affirming” medical procedures. Those reports offer no proper disclosure of these controversies and demonstrate no apparent awareness of the serious methodological and ethical defects and controversies exposing the lack of scientific foundations for the transgender treatment industry. Over the past few years, multiple methodological exposes and national reviews in England (NICE), Sweden, and Finland, plus other reviews (e.g., Cochrane, Griffin, Carmichael, etc), have all raised urgent warnings and serious questions about the quality and the integrity of the scientific foundation for this very controversial field.

64. It is troubling that the plaintiffs’ experts both appear to have significant financial and professional conflicts of interest as they themselves have reported in their appended curriculums vitae that much of their practices and incomes are derived from these experimental, unproven, potentially harmful methods and procedures of “gender affirmation transitioning” medical treatments. Further, not only their incomes but their professional reputations, academic positions, journal publications, and association memberships would all collapse if the transgender treatment industry collapsed due to widely noted missing evidence of safety and effectiveness.

65. The following are among the shocking errors, omissions, and failures of the plaintiffs’ expert reports.

**A. Failure to Disclose Multiple International Controversies and the Poor Quality of the Evidence**

66. The plaintiffs’ experts failed to properly disclose and discuss the international debates and controversies surrounding transgender affirmation methods and procedures discussed above. Indeed, it is difficult to imagine a more inaccurate summary of the state of the embattled,

experimental transgender treatment industry that that reflected in their reports. (See detailed citations in the “Notes” section of this report below).

67. The plaintiffs’ experts failed to properly disclose and discuss multiple peer-reviewed, published exposés of significant methodological defects in research on transgender affirmation methods and procedures. Further, the plaintiffs’ experts failed to properly disclose and discuss recent scientific studies and reviews including the Cochrane Review, the Carmichael study, the Griffin review and the devastating scientific critiques of the ill-fated and recanted Branstrom, et al. study, including the many multiple, detailed, methodologically sophisticated letters to the editor. (See detailed citations in the “Notes” section of this report below).

#### **B. Failure to Acknowledge Comorbidities**

68. Plaintiffs’ experts fail to recognize how the existence of comorbidities complicate the treatment of gender dysphoric patients. It is well established in peer-reviewed medical literature that children who experience gender discordance have a very high likelihood of major anxiety disorders, major clinical depression, self-harming behaviors such as cutting, substance abuse. They also have a greater than 30% likelihood of being on the autism spectrum. Under the “affirmation care” model, these issues are more often than not ignored, ascribing all of the child’s problems to their self-diagnosed gender dysphoria. (See Elevated rates of autism, other neurodevelopmental and psychiatric diagnoses, and autistic traits in transgender and gender-diverse individuals, Varun Warriar, David M. Greenberg, Elizabeth Weir, Clara Buckingham, Paula Smith, Meng-Chuan Lai, Carrie Allison & Simon Baron-Cohen ; Nature Communications volume 11, Article number: 3959 (2020), <https://www.nature.com/articles/s41467-020-17794-1>).

**C. Failure to Acknowledge the Radically Changing Patient Demographics and Problems for the “Affirmative” Model**

69. Plaintiffs’ experts fail to recognize that the demographics of transgender patients have seen a radical transformation in the last several years. Historically, the condition was rare (less than 0.2% of children), had initial presentation in pre-puberty, was almost exclusively boys, and showed a desistance (i.e., abandonment of cross-sex self-identification) rate of over 80% by mid-adolescence, and over 90% when followed into adulthood. See A Follow-Up Study of Boys With Gender Identity Disorder; Devita Singh, Susan J. Bradley, and Kenneth J. Zucker, *Front. Psychiatry*, 29 March 2021.

70. Currently, the majority of newly diagnosed transgender children are natal females (over 50%), initial presentation is in early adolescence to young adulthood, and some reports have the overall prevalence rate rising to somewhere between 2 and 10% of school age children. See Evidence for a Change in the Sex Ratio of Children Referred for Gender Dysphoria: Data From the Gender Identity Development Service in London (2000-2017) Nastasja M de Graaf , Polly Carmichael , Thomas D Steensma , Kenneth J Zucker, *J Sex Med* 2018 Oct;15(10):1381-1383 and also Characteristics of Referrals for Gender Dysphoria Over a 13-Year Period Melinda Chen, M.D., John Fuqua, M.D., and Erica A. Eugster, M.D *J Adolesc Health*. 2016 Mar; 58(3): 369–371. doi: 10.1016/j.jadohealth.2015.11.010). This means that the diagnosis among females has risen by nearly 50-fold in the last five years (See Gender dysphoria in adolescence: current perspectives, Riittakerttu Kaltiala- Heino, Hannah Bergman, Marja Työläjäarvi, and Louise Frisén; *Adolesc Health Med Ther*. 2018; 9: 31–41. Published online 2018 Mar 2. doi: 10.2147/AHMT.S135432).

71. Additionally, there appear to be “outbreaks” of clusters of adolescent females that are connected either by school, or social media that suddenly appear. This was first reported by

Dr. Lisa Littman of Brown University in her 2018 paper which coined the diagnostic term of Rapid Onset Gender Dysphoria. (See Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria, Littman, L. PLOS One, August 16, 2018; <https://doi.org/10.1371/journal.pone.0202330>). She found evidence suggesting that these subjects developed transgender self-identification through a social contagion process that included highly rehearsed speech to be used when speaking to psychologists, counselors, pediatricians, and surgeons. A moment's reflection on this single fact should be enough to dissuade anyone from the idea that transgender self-identification is a biologically determined condition. Has there been a mass mutation in the human genome that would cause a fifty-fold increase among girls? Is there some substance abroad in the world that has radically and swiftly altered childhood brain development? The numbers of affected children would easily place this in the category of a pandemic, given the geographic range of the condition in the western world.

72. The transgender treatment industry has not shown the slightest interest in examining alternative causes, and it offers precisely the same treatment model to children whether they experience gender dysphoria from their first days of character formation in early childhood or at age 14 when their psychosexual development is under the tremendous pressures of puberty. All patients are given "affirmation care" in spite of the fact that we are dealing with wildly different psychological processes. The only variation in treatment plan, from the youngest patient to the oldest, is where along that single line of care they are brought in: social transition, puberty blockers, cross-sex hormones, then surgery.

73. Psychological evaluation and treatment, even of the known psychological comorbidities such as depression and anxiety, bipolar disorder, etc., is a priori decried by the American Psychological Association and other political allies as "conversion therapy," even if the therapy

is used to reduce depression and anxiety. Therapists are *barred* by “political correctness” from seeking alternative causal explanations and thus less able to avoid confirmation bias. Properly exploring the possibility of alternative diagnoses, such as anxiety disorder, major depression, or autism spectrum, even though part of the standard of care, is labelled as “trans-phobic.”

74. Because the alternative causal explanations identify disorders that are far more treatable, cross-sex identification may, for many patients, be treatable using safe, proven methodologies such as Cognitive Behavioral Therapy (CBT). Instead, “affirmation” advocates claim that CBT — the most tested and validated form of psychotherapy for depression and anxiety relief — is nothing more than “conversion therapy”, or even “psychological torture.” (See APA Resolution on Gender Identity Change Efforts Feb. 2021 <https://www.apa.org/about/policy/resolution-gender-identity-change-efforts.pdf>). The transgender treatment industry maintains emotional chaos in these vulnerable patients, giving rise to a continuing “need” for irreversible, sterilizing, unproven, controversial “transitioning” treatments.

#### **D. The Existence of the “Watchful Waiting” Model of Care**

75. Plaintiffs’ expert witnesses failed to acknowledge even the very existence of the “watchful waiting” model of care.

76. Historically, Gender Identity Disorder (now called Gender Dysphoria) was recognized as a sub-category of Obsessive Compulsive Disorder where the child has a persistent, intrusive thought that they are the wrong sex. This makes sense because the content of the thought meets the three criteria of a delusional thought: It is 1) held with absolute certainty, 2) unpersuadable by contrary evidence, and 3) impossible. In the case of the gender discordant child, the content of the delusional thought relates to their sexed self. These children typically presented in pre-puberty, and care were directed at several important issues: Experiences or perceptions that have provoked fear or anxiety (e.g. child abuse including sexual assault) that might be causing

the child to seek safety in the opposite sex presentation; misinterpretation of family dynamics that may have caused a desire to be the other sex; actual abuse events that may have provoked and habituated the obsessive thought.

77. Individual and family counseling directs the child's thoughts and coping processes in the direction of the truth of their nature, which includes their biological sex. Historically, this "watchful waiting" approach resulted in a complete resolution of symptoms in 80% of children by mid-adolescence, and over 90% resolution by early adulthood. (See Psychosexual outcome of gender-dysphoric children. Madeleine S. C. Wallien, P. Cohen-Kettenis 2008 Psychology, Medicine Journal of the American Academy of Child and Adolescent Psychiatry 10.1097/CHI.0b013e31818956b9; and A Follow-up Study of Girls with Gender Identity Disorder, Kelley D Drummond 1, Susan J Bradley 2, Michele Peterson-Badali 1, Kenneth J Zucker; Dev Psychol. 2008 Jan;44(1):34-45. doi: 10.1037/0012-1649.44.1.34).

78. The "watchful waiting" approach is based upon a recognition that at the heart of the transgender process lies a psychological problem, and this perspective finds strong support in both its natural history (80+% resolution without medical or surgical intervention), and the fact that no objective test, having known error rates, has yet been found that can affirm or reject a "transgender" diagnosis.

79. In contrast to the highly successful results of "watchful waiting," we have the presently regnant "affirmation" model. Under the "affirmation" model, the treating physician is essentially forbidden to consider the transgender condition to be a psychological disturbance apart from the unhappiness and associated impaired social functioning caused by the discordance between their objective biological sex and their interior sense of their gender. Treating profes-

sionals, including pediatricians, endocrinologists, psychologists, and surgeons are strongly discouraged from examining alternate theories concerning the diagnosis and causes, such as clinical anxiety apart from gender discordance, major depression, or the social contagion model of causation. The affirmation model proposes that the child's interior sense of their gender is "their true self," and that the problem demands that the appearance of the body must be radically changed so that it "aligns" with the child's subjective sense of being the opposite sex.

80. The startling difference in outcomes between "watchful waiting" and "affirmation" provides a compelling counter argument to the WPATH guidelines. As stated above, "watchful waiting," which includes individual and family counseling, yields successful resolution of gender discordance by natural maturation in over 80% of children by mid adolescence, and over 90% by young adulthood. This is in stark contrast, with "affirmation care" where we find that children who are enrolled in gender clinics are nearly 100% likely to persist in their cross-sex self-identification through childhood into adulthood. Essentially, at least 80% of affected children who would have resolved their problem and gone onto gender congruence, are instead trapped in the transgender treatment enterprise. The proponents of "affirmation care" have no proven test, with known error rates, by which to distinguish the 90% that will resolve their problem from the 10% that will experience persistence of symptoms into adulthood. The probability of misdiagnosis — the error rate for this process — is 90%. This places the transgender treatment enterprise, including endocrinologists and surgeons, in the category of gross malpractice.

81. Plaintiffs' experts claim that in the case of transgender patients, it would be unethical to randomize patients into control groups and treatment groups, given the high rate of self-harm. This is a specious argument for two reasons. First, randomized case/control studies are



not the only alternative to unreliable, retrospective, biased collected case reports with short follow up on which the transgender industry rests. Longitudinal, population based, long term data is available in the world literature that allows us to evaluate the claims made by the gender affirmation treatment model. (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 <https://doi.org/10.1371/journal.pone.0016885>). In fact, that long-term population based data is very the reason why the Tavistock Institute in London and the Karolinska Institute Hospital in Sweden — in a dramatic change — have *restricted* the use of puberty blockers, cross-sex hormones, and transgender surgery in minors. The famed Swedish hospital’s new patient protections require the involvement of research monitoring to protect children from “transitioning” experimental procedures. (See detailed citations in the “Notes” section of this report below).

82. Essentially, the “control group” already exists in the world literature, however the transgender treatment industry ignores this control group, and continues to publish low-quality case-collection studies without controls, with short follow up and massive self-selection biases.

83. Secondly, there is a very long history of results from the “watchful waiting” model against which the “affirmation model” can be compared. But Plaintiffs’ experts entirely ignore this data which shows that the historically proven “watchful waiting” model has a “cure” rate of approximately 90%. The “affirmation care” model hasn’t even proven basic efficacy, much less high rates of efficacy, given the low to very low quality evidence that they continue to rely on. Its proponents publish only subjective results to which they assign numerical values using unproven test instruments that have no known error rates or predictive value. (E.g., as noted

above, the historic Branstrom study and recantation documented no reliable benefits to patients in a 10yr+ follow-up study.) (See detailed citations in the “Notes” section of this report below).

**E. Failure to Acknowledge that Relying on “Consensus Statements” is Not Relying on Evidence.**

84. As can be seen in the Complaint in this case and the plaintiffs’ expert reports, the primary supports for the “affirmative” approach are the repeated references to “consensus statements” from medical and other associations and the WPATH guidelines. It should be noted that the quality of scientific evidence in medicine can be graded based upon the methodology employed. The methodology of professional consensus seeking is in the lowest category. (See The Levels of Evidence and their role in Evidence-Based Medicine Patricia B. Burns, MPH, Rod J. Rohrich, MD, and Kevin C. Chung, MD, MS. *Plast Reconstr Surg*. 2011 Jul; 128(1): 305–310.)

85. It should further be noted that consensus statements from such organizations as the American Pediatric Association and the Endocrine Society are not obtained by polling the membership of the entire society, but are instead the product of consensus seeking methodology applied to a very small, self-selected sample of members that happen to be on that particular policy committee. Nonetheless, the “consensus statement” is incorrectly presented as though there is majority if not universal agreement by pediatricians and endocrinologists.

86. Furthermore, WPATH intentionally mis-labels its guidelines, calling them “Standards of Care” (See <http://www.wpath.org/publications/soc>). Guidelines are a suggested course of treatment that may or may not produce the desired results, and are therefore not mandatory. Labeling their document as “Standards of Care” implies that they are proven treatment methods of very high efficacy that must be adhered to in order to achieve a known and positive outcome, and that deviations from the “standards of care” has a high probability of a poor outcome, and possible legal consequences.. Given that the guidelines offer no scientifically verified

evidence that their outcomes are consistently and overwhelmingly positive, this is a clear misrepresentation of their actual value. For this reason, whenever the acronym “WPATH” is used in conjunction with the words “standards of care,” the author of such words is intentionally misleading the reader.

87. The WPATH guidelines also seek to define a “professional” in transgender health. In order to be classified as a “professional” you must simply agree with what the WPATH documents state. (See WPATH Standards of Care section VI p.13 – section VII p.33 (defining the “professional” in terms of compliance with WPATH “standards of care”)). This is more characteristic of a cult than a scientific body. Science demands unflinching, ongoing, debate and re-evaluation of hypotheses, quality of data, methodologies, and best practices. In contrast, WPATH demands consensus and compliance with a single, unproven model of care, even when the patients have wildly differing presentations (pre-pubertal vs. adult, co-morbid association with other illness such as autism spectrum etc.).

88. As it happens, among the lead authors of the WPATH guidelines, and their board members, are physicians and surgeons whose practices largely depend on the revenue stream found in transgender services. (WPATH Standards of Care. Pp.109-112 (describing the composition of the committee members, and their consensus methodology used in generating the document)). Essentially, they are saying, “mastectomy is justified in transgender teenage natal females because I said so in the WPATH document that I wrote.” This is a classic *ipse dixit* opinion.

## **VI. CONCLUDING OPINIONS**

89. There are no currently no competently conducted, long-term, peer-reviewed published, reliable and valid, research studies documenting the number or percentage of patients receiving gender affirming medical interventions who are helped by such procedures.

90. There are no long-term, peer-reviewed published, reliable and valid, research studies documenting the number or percentage of patients receiving gender affirming medical interventions who are injured or harmed by such procedures.

91. There are no long-term, peer-reviewed published, reliable and valid, research studies documenting the reliability and validity of assessing gender identity by relying solely upon the expressed desires of a patient.

92. There are no long-term, peer-reviewed published, reliable and valid, research studies documenting any valid and reliable biological, medical, surgical, radiological, psychological, or other objective assessment of gender identity or gender dysphoria.

93. A currently unknown percentage and number of patients reporting gender dysphoria suffer from mental illness(es) that complicate and may distort their judgments and perceptions of gender identity.

94. A currently unknown percentage and number of patients reporting gender dysphoria are suffering social contagion and social pressure processes brought on by a peer group, social media, YouTube role modeling, and/or family dynamics.

95. Patients suffering from gender dysphoria or related issues have a right to be protected from experimental, potentially harmful treatments lacking reliable and valid, peer reviewed, published, long-term scientific evidence of safety and effectiveness.

96. It would be a serious violation of licensing rules, ethical rules, and professional standards of care for a health care professional to provide gender transition or related procedures to any patient without first properly obtaining informed consent including informing the patient and/or guardian(s) of the lack of valid and reliable on the long-term risks and benefits of “affirmative” treatments.

97. A large percentage of children (over 80% in some studies) who questioned their gender identity will, if left alone, develop an acceptance of their natal (biological) sex.

98. Medical treatments may differ significantly by sex according to chromosomal assessment but not gender identity. Misinforming physicians of a patient's biological sex can have deleterious effects on treatment for medical conditions.

99. Affirmation medical treatments — hormones and surgery — for gender dysphoria and “transitioning” have not been accepted by the relevant scientific communities (biology, genetics, neonatology, medicine, psychology, etc.).

100. “Gender affirmation” assessments and treatments — hormones and surgery — for gender dysphoria and “transitioning” have no known, peer reviewed and published error rates.

101. Political advocates, activist physicians, and medical organizations that operate by voting methodologies (e.g., WPATH, the American Medical Association, the American Academy of Pediatrics, the American Endocrine Society) are not the relevant scientific community, they are politically active professional organizations. These organizations operate via consensus-seeking methodology (voting) and are easily swayed by political ideologies rather than evidence-based scientific methodologies.

102. Experts in legal cases have an ethical obligation to honestly, fairly, and accurately disclose and discuss the international controversies regarding the safety, effectiveness, reliability, and credibility of the gender transition industry. It is astonishing that in their expert declarations, Plaintiffs' experts failed to disclose and discuss the serious controversies, complex issues, debates, and contrary national science review recommendations in this field. It is difficult to imagine a more inaccurate summary of the state of the embattled, experimental transgender treatment industry. (See detailed citations in Notes section below).

## VII. RESEARCH NOTES

To assist in my testimony in this case, I include my notes, references and citations documenting the depth and breadth of the serious controversies in this field. Over the past few years, the glaring defects in the research foundations of the gender transition industry have been exposed for all the world to see.

See, Vrouenraets et al, Early Medical Treatment of Children and Adolescents With Gender Dysphoria: An Empirical Ethical Study, *Journal of Adolescent Health* 57 (2015) 367e373. ...”no consensus exists whether to use these early medical interventions.” The study shows that there is no agreement concerning the causes of gender dysphoria, which give rise to very different treatment strategies that are at times in diametric opposition. As a result of this confusion of explanations, “consensus” regarding treatment is ipso facto impossible. Results: Seven themes give rise to different, and even opposing, views on treatment: (1) the lack of an explanatory model for GD; (2) the unknown nature of GD (normal variation?, social construct?, or mental illness?); (3) the role of physiological puberty in developing gender identity; (4) the role of comorbidity [with severe mental illnesses] ; (5) unknown possible physical or psychological effects of (refraining from) early medical interventions; (6) child competence and decision making authority [to give truly informed consent to be sterilized for experimental procedures?]; and (7) the role of social context ...how GD is perceived. Strikingly, the guidelines are debated both for being too liberal and for being too limiting. Conclusions: As long as debate remains on these seven themes and only limited long-term data are available, there will be no consensus on treatment. Therefore, more systematic interdisciplinary and (worldwide) multi-center research is required. It is striking that plaintiffs’ experts somehow both failed to properly report this ongoing international debate within their claimed field of expertise.

See, Dhejne et al. (2011), Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden, PLOS ONE 6(2) e16885 (“Long Term”); See also, R. K. Simonsen et al. (2016), Long-Term Follow-Up of Individuals Undergoing Sex Reassignment Surgery: Psychiatric Morbidity & Mortality, Nordic J. of Psychiatry 70(4). Swedish follow-up study of patients who underwent sex-reassignment surgery over a 30-year period found a suicide rate in the post-Sex Reassignment Surgery (SRS) population 19.1 times greater — after affirmation treatment — than that of the controls; both studies demonstrated elevated mortality rates from medical and psychiatric conditions.

---

See, Carmichael P, Butler G, Masic U, et al. Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. medRxiv 2020.12.01.20241653. Self-harm did NOT improve and “no changes in psychological function,” meaning no improvement. (Also, “YSR [Youth Self Report] data at 36 months (n = 6) were not analyzed.” No significant effect on their psychological function, thoughts of self-harm, or body image, a study has found... children experienced reduced growth in height and bone strength by the time they finished their treatment at age 16. The findings, from a study of 44 children treated by the Gender Identity Development Service (GIDS) run by the Tavistock and Portman NHS Foundation Trust in London, have emerged as the trust prepares to appeal against a High Court ruling that led NHS England to pause referrals of under 16s for puberty blockers.

---

Demographics: no biological explanation. The radical change in patient demographics from early onset in boys to teen girls with rapid onset— has been termed late-, adolescent-, or

rapid-onset gender dysphoria — has now been seen in every gender clinic in the western world, and there has been a huge surge in the number of cases. "National College Health Assessment: ACHA-NCHA [s://www.acha.org/NCHA/ACHANCHA\\_Data/Publications\\_and\\_Reports/NCHA/Data/Publications\\_and\\_Reports.aspx?hkey=d5fb767c-d15d-4efc-8c41-3546d92032c5](https://www.acha.org/NCHA/ACHANCHA_Data/Publications_and_Reports/NCHA/Data/Publications_and_Reports.aspx?hkey=d5fb767c-d15d-4efc-8c41-3546d92032c5) See, Kalliala-Heino, Riittakerttu, Hannah Bergman, Marja Työläjäarvi, and Louise Frisen. "Gender Dysphoria in Adolescence: Current Perspectives." *Adolescent Health, Medicine and Therapeutics* Volume9 (March 2018): 31–41. <https://doi.org/10.2147/AHMT.S135432> See, Vries, Annelou L.C. de. "Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents." *Pediatrics* 146, no. 4 (October 2020): e2020010611. <https://doi.org/10.1542/peds.2020-010611>. See, Zucker, Kenneth J. "Adolescents with Gender Dysphoria: Reflections on Some Contemporary Clinical and Research Issues." *Archives of Sexual Behavior* 48, no. 7 (October 2019): 1983–92. <https://doi.org/10.1007/s10508-019-01518-8>.

---

**Great Britain** (NICE), Deborah Cohen and Hannah Barnes, Evidence for puberty blockers use very low, says NICE at <https://www.bbc.com/news/health-56601386> ["The evidence for using puberty blocking drugs to treat young people struggling with their gender identity is "very low", an official review has found. The National Institute of Health and Care Excellence (NICE) said existing studies of the drugs were small and "subject to bias and confounding"

---

See, Asscheman H, Giltay EJ, Megens JA, et al. A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones. *Eur J Endocrinol.* 2011;164:635-642. *"There is no evidence that transition reduces suicide when we look past 10 years, and there is some suggestion that **suicide rates may actually increase** after the transition*



*honeymoon phase is over,"* says Malone, stressing the importance of providing proper evaluation and appropriate psychological treatment for any suicidal tendencies. ( Supports the Branson conclusions after recantation and correction).

---

**Sweden** - Review of Gender dysphoria in children and adolescents: an inventory of the literature, SBU Policy Support no 307, 2019 [www.sbu.se/en](http://www.sbu.se/en) • [registrator@sbu.se](mailto:registrator@sbu.se) Contact SBU: Jan Adolfsson, Medical Advisor, Project Manager, [jan.adolfsson@sbu.se](mailto:jan.adolfsson@sbu.se), English Proofreading: Project group and Jan Adolfsson, SBU [“ No relevant randomized controlled (treatment outcome) trials in children and adolescents were found.”] ; See, also e.g., FINLAND Issues Strict Guidelines for Treating Gender Dysphoria at <https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/>. In 2020, Finland reportedly became the first country in the world to issue new guidelines for this group of patients when it concluded similarly to the UK High Court that there is a lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria.... they also issued the guideline ordering “No surgical interventions are allowed for children under the age of 18”. ). As the *methodological quality of the studies was already poor* based on the type of study, thus no actual quality assessment or determination of the degree of evidence was performed.”] ;

See, Cochrane Review (See, Haupt, C., Henke, M. et. al., Cochrane Database of Systematic Reviews Review - Intervention, Antiandrogen or estradiol treatment or both during hormone therapy in transitioning transgender women, 28 November 2020.)

---

See, Griffin, L., Clyde, K., Byng, R., Bewley, S., Sex, gender and gender identity: a re-evaluation of the evidence. BJPsych Bulletin (2020) doi:10.1192/bjb.2020.73, Cambridge University Press, 21 July 2020, the authors noted the hazardous error of mandating “affirmation treatments” — thus requiring the negligent practice of Confirmation Bias — rather than properly and carefully exploring alternative hypotheses — the standard, required ethical, medical standard of practice. As Griffin discussed, “Attempts to properly explore, formulate and treat coexisting mental illness in gender dysphoric populations, including that relating to childhood trauma, might be considered tantamount to ‘conversion therapy’. Although mental illness is overrepresented in the trans population it is important to note that gender non-conformity itself is not a mental illness or disorder. As there is evidence that many psychiatric disorders persist despite positive affirmation and medical transition, it is puzzling why transition would come to be seen as a key goal rather than other outcomes, such as improved quality of life and reduced morbidity. When the phenomena related to identity disorders and the evidence base are uncertain, it might be wiser for the profession to admit the uncertainties. Taking a supportive, exploratory (psychotherapy) approach with gender-questioning patients should not be considered conversion therapy.” In addition, Griffin et al wrote: “Transgender support groups have emphasized the risk of suicide. After controlling for coexisting mental health problems, studies show an increased risk of suicidal behaviour and self-harm in the transgender population, although underlying causality has not been convincingly demonstrated.

---

See, Dyer, C., Puberty blockers do not alleviate negative thoughts in children with gender dysphoria, finds study BMJ 2021; 372 doi: <https://doi.org/10.1136/bmj.n356> (Published 08 February 2021), BMJ 2021;372:n356 (Puberty blockers used to treat children aged 12 to 15 who

have severe and persistent gender dysphoria had no significant effect on their psychological function, thoughts of self-harm, or body image, a study has found. However, as expected, the children experienced reduced growth in height and bone strength by the time they finished their treatment at age 16)

---

See, Bränström and Panchankis long term surgical results. NO benefit (data suggests and suggests an increased risk of serious suicide attempts). See, Kalin, N.H., Reassessing Mental Health Treatment Utilization Reduction in Transgender Individuals After Gender-Affirming Surgeries: A Comment by the Editor on the Process by the Editor-in-Chief The American Journal of Psychiatry, Am J Psychiatry 2020; 177:764; doi: 10.1176/appi.ajp.2020.20060803; See also, Anckarsäter, H., and Gillberg, C., Methodological Shortcomings Undercut Statement in Support of Gender-Affirming Surgery, Am J Psychiatry 2020; 177:764–765; doi: 10.1176/appi.ajp.2020.19111117.

See, e.g., Wold, A. (M.D., Ph.D.) Gender-Corrective Surgery Promoting Mental Health in Persons With Gender Dysphoria Not Supported by Data Presented in Article, Am J Psychiatry 2020; 177:768; doi: 10.1176/appi.ajp.2020.19111170. [among the individuals examined in the Bränstrom study discussed here, the risk of being hospitalized for a suicide attempt was 2.4 times HIGHER if they had undergone gender-corrective surgery than if they had not.... the data presented in the Bränstrom article do not support the conclusion that surgery is beneficial to mental health in individuals with gender dysphoria.”]

“Therefore, ... the data in the article ... *OVERTURNS the authors’ stated conclusions, suggesting that sex reassignment surgery is in fact associated with INCREASED mental health*

*treatment* See, Ring, A. (PhD) and Malone, W. , Confounding Effects on Mental Health Observations After Sex Reassignment Surgery, Am J Psychiatry 2020; 177:768–769; doi: 10.1176/appi.ajp.2020.19111169.

See, See, Van Mol, A., Laidlaw, M. K., Grossman, M., McHugh, P., Gender-Affirmation Surgery Conclusion Lacks Evidence, Am J Psychiatry 177:8, August 2020 [ajp.psychiatryonline.org](http://ajp.psychiatryonline.org) 765. “The study confirms the strong association between psychiatric morbidity and the experience of incongruity between gender identity and biological sex. However, the study does NOT demonstrate that either hormonal treatment or surgery has ANY effect on this morbidity. It seems that the main message of this article is that the incidence of mental health problems and suicide attempts is especially HIGH in the year AFTER the completion of gender-affirming surgery [It is telling that the authors somehow ignored this most essential finding] ...” See, Curtis, D., Study of Transgender Patients: Conclusions Are Not Supported by Findings, Am J Psychiatry 2020; 177:766; doi: 10.1176/appi.ajp.2020.19111131.

See, Malone, W. and Roman, S., Calling Into Question Whether Gender-Affirming Surgery Relieves Psychological Distress, Am J Psychiatry 2020; 177:766–767; doi: 10.1176/appi.ajp.2020.19111149. “Bränström and Pachankis study on mental health treatment and suicide attempts ... is misleading because the study design is flawed.” “The authors first found what was already known ... the rate of psychiatric morbidity is much higher in persons with gender dysphoria compared with the general population (both before AND after “transitioning”). The authors then explored if the risk for mental health treatment changes as a function of years since starting HORMONAL treatment. They find NO effect (odds ratio = 1.0), but they do find a trend toward INCREASED risk of suicide attempts as a function of years since starting

[gender affirmation] HORMONAL treatment. They somehow failed to publish this essential finding.

See, Landén, M. ( M.D., Ph.D. ) The Effect of Gender-Affirming Treatment on Psychiatric Morbidity Is Still Undecided, Am J Psychiatry 2020; 177:767–768; doi: 10.1176/appi.ajp.2020.19111165. This conclusion is not supported by the data presented in the article.

See, Bränström, R. and Pachankis, J., Toward Rigorous Methodologies for Strengthening Causal Inference in the Association Between Gender-Affirming Care and Transgender Individuals 'Mental Health: Response to Letters, Am J Psychiatry 2020; 177:769–772; doi: 10.1176/appi.ajp.2020.20050599.

---

**2020 - Sweden**, following a national review of transgender science, published a new guideline that is NOT consistent with WPATH protocols nor the opinions of the plaintiffs' experts in this case. <https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/> The Swedish National Guidelines appear quite contrary to the opinions of Plaintiffs Experts and WPATH.

---


**2020 - Finland** following a review of transgender science, became the first country in the world to issue new guidelines for this group of patients when it concluded similarly to the UK High Court that *there is a* lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria. This new Finnish guidance prioritizes psychological therapy over treatment with hormones or surgery and suggests different care plans for early-onset vs late-onset childhood gender dysphoria. The 2020 Finland guidelines state "Only limited research

has been conducted on transgender identity and other gender identity conflicts, and comparative studies are very rare.”] The Finland National Guidelines appear quite contrary to the opinions of Plaintiffs Experts and WPATH.

See, <https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/> Finland Clinical Guidelines and Conclusions Three reports were created by COHERE in Finland. The report “Medical treatment methods for dysphoria associated with variations in gender identity in minors – recommendation” clarifies the roles of different healthcare providers in a situation where a minor is uncertain about their gender identity. They also produced general recommendations for the treatment of transgender people, which applies to adults. And interestingly, a third and separate set of recommendations for the treatment of gender dysphoria related to non-binary people and people with gender identities other than opposite-sex gender identities.

**I declare under penalty of perjury that the foregoing is true and correct.**

**Executed on July 8, 2021.**

  
\_\_\_\_\_  
Patrick W. Lappert, MD

## **Curriculum Vitae**

**Patrick W. Lappert, MD**  
**Board Certified in Surgery and Plastic Surgery**  
**Decatur, AL 35603**

### **Education and Training :**

— Bachelor of Arts in Biological Sciences at the University of California, Santa Barbara, 1979. Research in cell membrane physiology with Dr. Philip C. Laris, studying stoichiometry of the sodium: potassium ATPase pump.

— M.D., Doctor of Medicine degree at the Uniformed Services University of the Health Sciences, 1983 at Bethesda, Md.

— General Surgery Residency at the Naval Hospital Oakland/ UC Davis East Bay Consortium, 1987-1991

— Chief Resident, Department of Surgery, Naval Hospital Oakland, 1990-1991.

— Plastic Surgery Residency at the University of Tennessee- Memphis, 1992-1994.

### **Board Certifications in Medicine :**

— Board Certified in Surgery — American Board of Surgery, 1992, in

— Board Certified in Plastic Surgery — American Board of Plastic Surgery, 1997; American Board of Plastic Surgery, 2008.

### **Medical Staff Appointments :**

<b>EXHIBIT</b> <b>A</b>
----------------------------

— Staff General Surgeon at the Naval Hospital Oakland, CA 1991-1992

— Associate Professor of Surgery, UC Davis-East Bay, 1991-1992.

— Plastic and Reconstructive Surgeon, Naval Medical Center, Portsmouth, VA  
1994-2002

— Chairman, Department of Plastic and Reconstructive Surgery, Naval Hospital  
Portsmouth, VA 1996-2002.

— Clinical Assistant Professor, Department of Surgery, Uniformed Services University of  
the Health Sciences, 1995-2002

— Founding Director, Pediatric Cleft Palate and Craniofacial Deformities Clinic, Naval  
Hospital Portsmouth, VA 1996-20002

— Founding Director, Wound Care Center, Naval Hospital Portsmouth, VA 1995-2002.

— Staff Plastic Surgeon in Nebraska, and Alabama.

**U.S. Surgeon General Service:**

— Specialty Leader, Plastic and Reconstructive Surgery, Office of the Surgeon General-  
USN, 1997-2002

**Faculty Appointments:**

— Teaching Faculty at Eastern Virginia Medical School, Division of Plastic Surgery,  
1995-2002

**Military Service :**



- Aviation Officer Candidate, Naval Aviation Schools Command, NAS Pensacola, 1978
- Commissioned an Ensign, MC, USNR 1979 and Commissioned as a Lieutenant, MC, USN 1983 .

- Designated Naval Flight Surgeon, Naval Aerospace Medical Institute, 1985
- Flight Surgeon, Marine Fighter/ Attack Squadron-451
- Radar Intercept Officer in the Marine F-4S Phantom, accumulating 235 flight hours, and trained for qualification as an Air Combat Tactics Instructor.

- Deployed to the Western Pacific as UDP forward deployed fighter squadron in Korea, Japan, and the Philippines.

- Service in the US Navy for 24 years
- Service in the US Marine Corp. for 3 years.
- Retired with the rank of Captain, USN in 2002

**Military Awards:**

- Navy Commendation Medal - For service with Marine Fighter/Attack Squadron - 451
- Meritorious Unit Citation- 3rd award
- Humanitarian Service Medal - For service in the aftermath of the Loma Prieta earthquake.

**Publications - Peer Reviewed Medical Journals :**

- Lappert PW. Peritoneal Fluid in Human Acute Pancreatitis. Surgery. 1987 Sep;102(3):553-4

- Toth B, Lappert P. Modified Skin Incisions for Mastectomy: The Need for Plastic Surgical Input in Preoperative Planning. *J Plastic and Reconstructive Surgery*. 1991; 87: 1048-53
- Lappert P. Patch Esophagoplasty. *J Plastic and Reconstructive Surgery*. 1993; 91 (5): 967-8
- Smoot E C III, Bowen D G, Lappert P, Ruiz J A. Delayed development of an ectopic frontal sinus mucocele after pediatric cranial trauma. *J Craniofacial Surg*. 1995;6(4):327–331.
- Lappert PW. Scarless Fetal Skin Repair: “Unborn Patients” and “Fetal Material”. *J Plastic and Reconstructive Surgery*. 1996 Nov;98(6):1125
- Lappert PW, Lee JW. Treatment of an isolated outer table frontal sinus fracture using endoscopic reduction and fixation. *Plastic and Reconstructive Surgery* 1998;102(5):1642-5.

**Publications - Medical Textbooks:**

- Wound Management in the Military. Lappert PW, Weiss DD, Eriksson E. *Plastic Surgery: Indications, Operations, and Outcomes*, Vol. 1; 53-63. Mosby. St. Louis, MO 2000

**Operations and Clinical Experience - Consultations and Discussions :** As a physician and surgeon, I have treated many thousands of patients in 7 states and 4 foreign nations. My practice has included Primary Care, Family Medicine, Aerospace Medicine, General Surgery, Reconstructive Surgery for combat injured, cancer reconstructive surgeries including extensive experience with microvascular surgery, Pediatric Congenital Deformity, and the care of chronic wounds. I have practiced in rural medicine, urban trauma centers, military field hospitals, university teaching hospitals, and as a solo private practitioner. In my private practice I have had

occasion to treat many self-identified transgender patients for skin pathologies related to their use of high dose sex steroids, laser therapies for management of facial hair both in transitioners and detransitioners. I have performed breast reversal surgeries for detransitioning patients. My practice is rated as "LGBTQ friendly" on social media. I have consulted with families with children who are experiencing gender discordance. I have given many presentations to professional meetings of educators and counselors on the subject of transgender, and the present state of the science and treatment. I have discussed the scientific issues relevant to the case with many physicians and experts over a number of years and also discussed related issues with parents and others.

# **EXHIBIT 6**

**IN THE UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF ARKANSAS  
CENTRAL DIVISION**

**DYLAN BRANDT, ET AL**

**PLAINTIFFS**

**V.**

**4:21CV00450 JM**

**LESLIE RUTLEDGE, ET AL**

**DEFENDANTS**

**SUPPLEMENTAL ORDER**

After further consideration, the Court supplements the ruling made at the conclusion of the July 21, 2021 hearing to include the following findings:

On April 6, 2021, the Arkansas Legislature passed House Bill 1570, Act 626 of the 93rd General Assembly of Arkansas, to be codified at Ark. Code Ann. §§ 20-9-1501 to 20-9-1504 and 23-79-164 (“Act 626”). Act 626 prohibits a physician or other healthcare provider from providing or referring any individual under the age of 18 for “gender transition procedures.”

“Gender transition procedures” means the process in which a person goes from identifying with and living as a gender that corresponds to his or her biological sex to identifying with and living as a gender different from his or her biological sex, and may involve social, legal, or physical changes;

(6)(A) “Gender transition procedures” means any medical or surgical service, including without limitation physician's services, inpatient and outpatient hospital services, or prescribed drugs related to gender transition that seeks to:

- (i) Alter or remove physical or anatomical characteristics or features that are typical for the individual's biological sex; or
- (ii) Instill or create physiological or anatomical characteristics that resemble a sex different from the individual's biological sex, including without limitation medical services that provide puberty-blocking drugs, cross-sex hormones, or other mechanisms to promote the development of feminizing or masculinizing features in the opposite biological sex, or genital or nongenital gender reassignment surgery performed for the purpose of assisting an individual with a gender transition.

**Exhibit  
0004**

9/30/2021  
Dr. Lappert

AR LEGIS 626 (2021), 2021 Arkansas Laws Act 626 (H.B. 1570). The Defendants asserts that Arkansas has a compelling government interest in protecting the health and safety of its citizens, particularly “vulnerable” children who are gender nonconforming or who experience distress at identifying with their biological sex. *Id.*

Plaintiffs are minors, Dylan Brandt, Sabrina Jennen, Brooke Dennis, Parker Saxton (the “Patient Plaintiffs”), their parents, Joanna Brandt, Lacey and Aaron Jennen, Amanda and Shayne Dennis, Donnie Saxton (the “Parent Plaintiffs”) and their healthcare providers, Dr. Michele Hutchison, and Dr. Kathryn Stambough (the “Physician Plaintiffs”). Plaintiffs have filed suit claiming the Act violates the Equal Protection Clause, Due Process Clause, and the First Amendment. They seek a preliminary injunction to enjoin Defendants and their successors in office from enforcing Act 626 during the pendency of this litigation. Plaintiffs contend that Act 626 categorically prohibits transgender adolescents with gender dysphoria from treatment, that the patient, their parents, and their medical providers agree, is medically necessary and in the adolescent’s best interest. They allege that the Act singles out individuals in need of medically necessary gender-affirming care solely because the individual’s gender identity does not conform to their assigned sex at birth.

I. Rule 12(b)(1) Motion to Dismiss

As stated on the record, the Court finds that the Patient and Parent Plaintiffs have standing under the Equal Protection Clause to challenge Act 626’s prohibition of “gender transition procedures” as that term is defined in Ark. Code Ann. §§ 20-9-1501(6). They also have standing to challenge the Act’s authorization of private rights of action. “Where an unconstitutional statute provides for enforcement both through official acts and private suits, Plaintiffs with standing to seek an injunction against the official acts may also challenge the

constitutionality of private suits.” See *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 887-88 (1992).

The Court finds that Physician Plaintiffs have standing in their own right to challenge the Act’s unequal treatment between healthcare providers who provide gender-affirming care to transgender patients, which would be prohibited by Act 626, and other healthcare providers, who provide all other medically accepted care, including gender-affirming care to non-transgender patients, which is not prohibited. See *Am. Coll. of Obstetricians & Gynecologists v. U.S. Food & Drug Admin.*, 472 F. Supp. 3d 183, 206 (D. Md. 2020).

The Court finds that Physician Plaintiffs have third-party standing to challenge Act 626 on behalf of their patients based upon the Supreme Court’s opinion in *June Med. Serv’s. LLC v. Russo*, 140 S. Ct. 2103, 2118-2119 (2020) (“[W]e have generally permitted plaintiffs to assert third-party rights in cases where the ‘enforcement of the challenged restriction against the litigant would result indirectly in the violation of third parties’ rights.”) (quoting *Kowalski v. Tesmer*, 543 U.S. 125, 130 (2004)). Further, Physician Plaintiffs have alleged a close relationship with their patients and a hindrance to their patients’ ability to protect their interests because of the risk of discrimination and their patients’ desire to protect their privacy. See *Singleton v. Wulff*, 428 U.S. 106, 117 (1976) (patient may be “chilled” from asserting their rights “by a desire to protect the very privacy of [their] decision from the publicity of a court suit.”).

## II. Preliminary Injunction

“The primary function of a preliminary injunction is to preserve the status quo until, upon final hearing, a court may grant full, effective relief.” *Ferry-Morse Seed Co. v. Food Corn, Inc.*, 729 F.2d 589, 593 (8th Cir. 1984). The Court considers four factors in evaluating Plaintiffs’ request for a preliminary injunction: (1) the likelihood of success on the merits; (2) the likelihood

of irreparable harm in the absence of an injunction; (3) the balance of equities; and (4) the public interest. *Sanborn Mfg. Co., Inc. v. Campbell Hausfeld/Scott Fetzer Co.*, 997 F.2d 484, 485-86 (8th Cir. 1983). “When the government is a party, these last two factors merge.” *Nken v. Holder*, 556 U.S. 418, 435 (2009)).

#### A. Equal Protection

To analyze Plaintiffs’ facial challenge to Act 626, the Court must determine what level of scrutiny applies and whether Act 626 survives that scrutiny. The Court concludes that heightened scrutiny applies to Plaintiffs’ Equal Protection claims because Act 626 rests on sex-based classifications and because “transgender people constitute at least a quasi-suspect class.” *Grimm v. Gloucester Cty. Sch. Bd.*, 972 F.3d 586, 607 (8th Cir. 2020); accord *Bostock v. Clayton County*, 140 S. Ct. 1731, 1741 (2020) (discrimination for being transgender is discrimination “on the basis of sex”). Defendants argue that Act 626 does not specifically refer to transgender individuals. It does, however, refer to gender transition which is only sought by transgender individuals. See *Bray v. Alexandria Women’s Health Clinic*, 506 U.S. 263, 270 (1993) (“Some activities may be such an irrational object of disfavor that, if they are targeted, and if they also happen to be engaged in exclusively or predominantly by a particular class of people, an intent to disfavor that class can readily be presumed.”).

Under heightened scrutiny, Act 626 must be substantially related to a sufficiently important governmental interest. A policy subject to intermediate scrutiny must be supported by an “exceedingly persuasive justification.” *United States v. Virginia*, 518 U.S. 515, 531 (1996). The policy must serve important governmental objectives, and the government must show “that the discriminatory means employed are substantially related to the achievement of those objectives.” *Id.* at 533 (citation omitted).



Defendants contend that Act 626 is substantially related to the State’s important governmental objectives of protecting vulnerable children from experimental treatment and regulating the ethics of the medical profession. Defendants contend that there is a lack of credible scientific evidence that gender-transition procedures improve children’s health. They also contend that the consequences of performing these procedures on Arkansas children are too great to allow physicians and healthcare providers to continue performing them. Defendants state that the Arkansas General Assembly passed Act 626 in response to a recent judicial ruling of the U.K. High Court of Justice of England and Wales and an Arizona district court. *See Bell v. Tavistock and Portman Nat’l Health Serv. Found. Trust*, [2020] EWHC (Admin) 3274; *Hennessy-Waller v. Snyder*, 2021 WL 1192842, at \*1 (D. Ariz. Mar. 30, 2021).

In *Tavistock*, the U.K. High Court considered the “narrow” issue of whether “a child or young person under the age of 16 [can] achieve *Gillick*<sup>1</sup> competence in respect of the decision to take PBs [puberty blockers] for GD [gender dysphoria]” *Id.* at ¶133. Although Defendants argue that this case is evidence that the U.K. Court is on the forefront of ethics by banning all gender transitioning procedures, *Tavistock* does not categorically prohibit individuals from all “gender transition procedures.” The U.K. Court merely concluded that it is “unlikely” that a 13-year-old or under would be competent to give *Gillick* consent to puberty blockers and doubtful that a 14- or 15-year-old could give consent. However, a 16-year-old or older is presumed to have the ability to consent to these procedures. Act 626 prohibits anyone under the age of 18 from receiving treatment without regard to informed consent.

---

<sup>1</sup> *Gillick* refers to a U.K. High Court case where the House of Lords held by a majority that a doctor could lawfully give contraceptive advice and treatment to a girl aged under 16 if she had sufficient maturity and intelligence to understand the nature and implications of the proposed treatment and provided that certain conditions were satisfied. *See Gillick v. West Norfolk and Wisbech Health Authority* [1986] AC 112.

The Arizona district court case, *Hennessey-Waller v. Snyder*, which is on appeal to the Ninth Circuit Court of Appeals, denied plaintiffs’ motion to enjoin the director of the Arizona Health Care Cost Containment System “from further enforcement of” a regulation that excludes gender reassignment surgery from Arizona’s Medicaid coverage and to “order AHCCCS to cover male chest reconstruction surgery for D.H. and John.” *Hennessey-Waller v. Snyder*, 2021 WL 1192842, at \*1 (D. Ariz. Mar. 30, 2021). The *Hennessey-Waller* plaintiffs are not prohibited from all gender-transition treatments and their healthcare providers are not prohibited from providing gender-transition treatments to them. The Court does not find either “authority” to be persuasive or precedential.

Plaintiffs argue that Act 626 does not protect children. Instead, it bans potentially life-saving treatment to transgender adolescents given in accordance with widely accepted medical protocols for treatment of adolescent gender dysphoria.<sup>2</sup> The consensus recommendation of medical organizations is that the only effective treatment for individuals at risk of or suffering from gender dysphoria is to provide gender-affirming care.<sup>3</sup> According to the Medical Organizations, the goal of gender-affirming care is to provide patients who struggle with their gender identity the time and support they need to resolve that struggle and to mitigate the distress

---

<sup>2</sup> Wylie C. Hembree et al., *Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Soc’y Clinical Practice Guideline*, 1029110 J. Clinical Endocrinology & Metabolism, Vol. 103, Issue 11, pgs. 3869-3903 (Nov. 2017) [hereinafter “Endocrine Soc’y Clinical Guidelines”]; Eli Coleman et al., *The World Professional Association for Transgender Health. Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People* 13, 19 (7th ed. 2012), [https://www.wpath.org/media/cms/Documents/SOC%20v7/SOC%20V7\\_English2012.pdf?t=1613669341](https://www.wpath.org/media/cms/Documents/SOC%20v7/SOC%20V7_English2012.pdf?t=1613669341) [hereinafter “WPATH Standards of Care”].

<sup>3</sup> See Brief for American Medical Association, American Pediatric Society, American Academy of Pediatrics, American Academy of Child and Adolescent Psychiatry, American Psychiatric Association, American Association of Physicians for Human Rights Inc, American College of Osteopathic Pediatricians, Arkansas Chapter of the American Academy of Pediatrics, Arkansas Council on Child and Adolescent Psychiatry, Arkansas Psychiatric Society, Association of Medical School Pediatric Department Chairs, Endocrine Society, National Association of Pediatric Nurse Practitioners, Pediatric Endocrine Society, Society for Adolescent Health and Medicine, Society for Pediatric Research, Society of Pediatric Nurses, and World Professional Association for Transgender Health (the “Medical Organizations”) as Amici Curiae Supporting Plaintiffs at ECF No. 30, p.16.

that can be associated with that condition.<sup>4</sup> Gender-affirming care seeks to minimize the incongruence between a transgender person's gender identity and their sex assigned at birth, thereby minimizing or eliminating gender dysphoria. *Id.* In addition, Plaintiffs argue that the State's contention that gender transition treatments cause irreversible and dangerous consequences is belied by the fact that the same medical treatments banned for transgender adolescents for "gender transition" by Act 626 are permitted for non-transgender adolescents for any other purpose, including to bring their bodies into alignment with their gender.

At this point in the proceedings, the Court finds that Act 626 is not substantially related to protecting children in Arkansas from experimental treatment or regulating the ethics of Arkansas doctors and Defendant's purported health concerns regarding the risks of gender transition procedures are pretextual. The State's reliance on the U.K. High Court's ruling is not credible. If the State's health concerns were genuine, the State would prohibit these procedures for all patients under 18 regardless of gender identity. The State's goal in passing Act 626 was not to ban a treatment. It was to ban an outcome that the State deems undesirable. In other words, Defendants' rationale that the Act protects children from experimental treatment and the long-term, irreversible effects of the treatment, is counterintuitive to the fact that it allows the same treatment for cisgender minors as long as the desired results conform with the stereotype of their biological sex.

The Court finds the Act's ban of services and referrals by healthcare providers is not substantially related to the regulation of the ethics of the medical profession in Arkansas. Gender-affirming treatment is supported by medical evidence that has been subject to rigorous study. Every major expert medical association<sup>5</sup> recognizes that gender-affirming care for

---

<sup>4</sup> See Brief for Medical Organizations as Amici Curiae, *supra* note 3, ECF No. 30 at 16-17.

<sup>5</sup> See Brief for Medical Organizations as Amici Curiae, *supra* note 3, ECF No. 30 at 16.

transgender minors may be medically appropriate and necessary to improve the physical and mental health of transgender people. Act 626 prohibits most of these treatments. Further, the State's goal of ensuring the ethics of Arkansas healthcare providers is not attained by interfering with the patient-physician relationship, unnecessarily regulating the evidence-based practice of medicine and subjecting physicians who deliver safe, legal, and medically necessary care to civil liability and loss of licensing.<sup>6</sup> If the Act is not enjoined, healthcare providers in this State will not be able to consider the recognized standard of care for adolescent gender dysphoria. Instead of ensuring that healthcare providers in the State of Arkansas abide by ethical standards, the State has ensured that its healthcare providers do not have the ability to abide by their ethical standards which may include medically necessary transition-related care for improving the physical and mental health of their transgender patients. The Court finds that Act 626 cannot withstand heightened scrutiny and based on the record would not even withstand rational basis scrutiny if it were the appropriate standard of review. Plaintiffs are, therefore, likely to succeed on the merits of their Equal Protection claim.

Next, the Court finds that Plaintiffs will suffer irreparable harm if Act 626 is not enjoined. The Act will cause irreparable physical and psychological harms to the Patient Plaintiffs by terminating their access to necessary medical treatment. Plaintiffs who have begun puberty blocking hormones will be forced to stop the treatments which will cause them to undergo endogenous puberty. Plaintiffs who will soon enter puberty will lose access to puberty blockers. In each case, Patient Plaintiffs will have to live with physical characteristics that do not

---

<sup>6</sup> See Statement, American Academy of Family Physicians, American Academy of Pediatrics, American College of Obstetricians and Gynecologists, American College of Physicians, American Osteopathic Association, and American Psychiatric Association, *Frontline Physicians Call on Politicians to End Political Interference in the Delivery of evidence Based Medicine*, (May 15, 2019), <https://www.acog.org/news/news-releases/2019/05/frontline-physicians-call-on-politicians-to-end-political-interference-in-the-delivery-of-evidence-based-medicine>.

conform to their gender identity, putting them at high risk of gender dysphoria and lifelong physical and emotional pain. Parent Plaintiffs face the irreparable harm of having to watch their children experience physical and emotional pain or of uprooting their families to move to another state where their children can receive medically necessary treatment. Physician Plaintiffs face the irreparable harm of choosing between breaking the law and providing appropriate guidance and interventions for their transgender patients.

The Court finds that the State’s interest in enforcing Act 626 during the pendency of this litigation pales in comparison to the certain and severe harm faced by Plaintiffs. The “State has no interest in enforcing laws that are unconstitutional. . .” *Little Rock Fam. Plan. Servs. v. Rutledge*, 397 F. Supp. 3d 1213, 1322 (E.D. Ark. 2019), *aff’d in part, appeal dismissed in part and remanded*, 984 F.3d 682 (8th Cir. 2021). Because Plaintiffs have demonstrated at least at this preliminary stage that they are likely to prevail on the issue of Act 626’s unconstitutionality, an injunction preventing the State from enforcing the Act does not irreparably harm the State.

#### B. Due Process

The Due Process Clause of the Fourteenth Amendment forbids states to “deprive any person of life, liberty, or property, without due process of law....” U.S. Const. amend. XIV, § 1. The Clause also includes a substantive component that “provides heightened protection against government interference with certain fundamental rights and liberty interests.” *Washington v. Glucksberg*, 521 U.S. 702, 719-20 (1997). “The liberty interest at issue in this case—the interest of parents in the care, custody, and control of their children—is perhaps the oldest of the fundamental liberty interests recognized by this Court.” *Troxel v. Granville*, 530 U.S. 57, 65 (2000); *see also Kanuszewski v. Mich. Dep’t of Health and Human Serv’s*, 927 F.3d 396, 419 (6th Cir. 2019) (“[P]arents’ substantive due process right to make decisions concerning the care,

custody, and control of their children includes the right to direct their children's medical care.”). Parents are presumed to be acting in the best interest of their children. *Parham v. J.R.*, 442 U.S. 584, 602 (1979).

The Court finds that the Parent Plaintiffs have a fundamental right to seek medical care for their children and, in conjunction with their adolescent child's consent and their doctor's recommendation, make a judgment that medical care is necessary. So long as a parent adequately cares for his or her children, “there will normally be no reason for the State to inject itself into the private realm of the family to further question the ability of that parent to make the best decisions concerning the rearing of that parent's children.” *Troxel*, 530 U.S. at 68-69.

Strict scrutiny is the appropriate standard of review for infringement of a fundamental parental right. *Glucksberg*, 521 U.S. at 719-20. In applying strict scrutiny, the Court finds that Defendants have not met their burden of showing that Arkansas has a compelling state interest in infringing upon parents' fundamental right to seek medical care for their children, or that Act 626 is narrowly tailored to serve that interest. As stated, the State has not shown that Act 626 serves the stated goal of protecting Arkansas's children. The goal in this context is pretextual because Act 626 allows the same treatments for cisgender minors that are banned for transgender minors as long as the desired results conform with the stereotype of the minor's biological sex. Based on these findings, the State could not withstand either heightened scrutiny or rational basis review.

The Court finds that Plaintiffs have shown irreparable harm. The State suffers little harm from maintaining the status quo through the litigation of this case. The risk of irreparable harm to the Plaintiffs tips the balance of equities in favor of a preliminary injunction of Act 626.

### C. First Amendment

Plaintiffs claim that Act 626 prevents healthcare professionals from speaking, and their patients and parents from hearing, about medically accepted treatments for gender dysphoria in violation of their First Amendment rights. Defendants argue that Act 626 is not a regulation of speech but rather a regulation of professional conduct. Further, they argue that the Act does not restrict any right to receive information.

The Court finds that Act 626's ban on referrals by healthcare providers is a regulation of speech. The Supreme Court has held that "the creation and dissemination of information are speech within the meaning of the First Amendment." *Sorrell v. IMS Health Inc.*, 564 U.S. 552, 570 (2011) (citing *Bartnicki v. Vopper*, 532 U.S. 514, 527 (2001) ("[I]f the acts of 'disclosing' and 'publishing' information do not constitute speech, it is hard to imagine what does fall within that category, as distinct from the category of expressive conduct")). "[A] State may not, under the guise of prohibiting professional misconduct, ignore constitutional rights." *Nat'l Ass'n for Advancement of Colored People v. Button*, 371 U.S. 415, 439 (1963); *see also Nat'l Inst. of Fam. & Life Advocs. v. Becerra*, 138 S. Ct. 2361, 2371–72 (2018) ("[T]his Court has not recognized 'professional speech' as a separate category of speech. Speech is not unprotected merely because it is uttered by 'professionals.'").

The Court further finds that Act 626 is a content and viewpoint-based regulation because it restricts healthcare professionals only from making referrals for "gender transition procedures," not for other purposes. As such, it is "presumptively unconstitutional" and is subject to strict scrutiny. *Reed v. Town of Gilbert*, 576 U.S. 155, 163 (2015). To meet the strict scrutiny standard, Defendants assert that Arkansas has a compelling interest in protecting children from experimental gender-transition procedures and safeguarding medical ethics.

However, the Supreme Court has held that the government does not have a legitimate interest in protecting against the “fear that people [will] make bad decisions if given truthful information.” *Thompson v. W. States Med. Ctr.*, 535 U.S. 357, 374 (2002); *see also Brown v. Entm’t. Merch. Ass’n*, 564 U.S. 786, 794 (2011) (while states can protect children from harm, that “does not include a free-floating power to restrict the ideas to which children may be exposed”). In this case, the State believes that a transgender adolescent who, along with their parents and health care providers, decides to receive gender transition treatment is making a bad decision. The State believes it can keep these individuals from getting this treatment if healthcare providers are not allowed to refer their patients to providers in other states who can prescribe the treatment. Because the Court finds that Act 626 cannot survive strict scrutiny or even rational scrutiny, Plaintiffs are likely to succeed on the merits of their First Amendment claim.

The Court also finds that Plaintiffs will suffer irreparable harm if Act 626 is not enjoined. “It is well-established that “[t]he loss of First Amendment freedoms, for even minimal periods of time, unquestionably constitutes irreparable injury.” *Powell v. Noble*, 798 F.3d 690, 702 (8th Cir. 2015) (*Elrod v. Burns*, 427 U.S. 347, 373 (1976)). The balance of equities so favors the Plaintiffs that justice requires the Court to preserve the status quo until the merits of the case are determined.

### III. Rule 12(b)(6) Motion to Dismiss

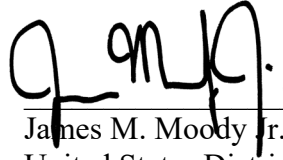
As for the Defendants motion to dismiss for failure to state a claim, it is inherent in the Court’s decision to grant the preliminary injunction that the Plaintiffs have stated claims for violations of their Equal Protection, Due Process, and First Amendment rights.



IV. Conclusion

Defendants and successors in office are enjoined from enforcing any provision of House Bill 1570, Act 626 of the 93rd General Assembly of Arkansas, to be codified at Ark. Code Ann. §§ 20-9-1501 to 20-9-1504 and 23-79-164 during the pendency of the litigation of this case.

IT IS SO ORDERED this 2nd day of August, 2021.



James M. Moody Jr.  
United States District Judge

# EXHIBIT 7

# Levels of Evidence in Plastic and Reconstructive Surgery Research: Have We Improved Over the Past 10 Years?

Conor M. Sugrue, FRCS  
Cormac W. Joyce, FRCS  
Sean M. Carroll, FRCS, MD

**Exhibit  
0017**

9/30/2021  
Dr. Lappert

**Summary:** Levels of evidence (LOE) aid in the critical appraisal of evidence by ranking studies based on limitation of its design. Analyzing LOE provides insight into application of evidence-based medicine. The aim of this study is to determine if the quality of evidence in plastic surgery research has improved over the past 10 years. Systematic review of research published in *Plastics and Reconstructive Surgery* journal over the years, 10-year period (2008, 2013, 2018), was performed. LOE for each article was determined using the American Society of Plastic Surgeons (ASPS) guidelines. Each level was calculated as percentage of publications per year and compared yearly and between different topics. Eight hundred eighty-four studies were included in the final analysis. The LOE of the research improved over the study period. Level 4 evidence was the most frequent published (50.6%, 447/884), with a decline from 63.2% in 2008 to 41.3% in 2018. Level 1 evidence improved each year and accounted for 2.1% of all research in 2018. Aesthetic surgery was the most frequent published topic with upper limb research demonstrating an 18.5% increase in high-quality evidence over the study period. Increased awareness of evidence-based medicine has improved the quality of plastic surgery research over the past decade. It is vital this continues to provide gold standard patient care. (*Plast Reconstr Surg Glob Open* 2019;7:e2408; doi: [10.1097/GOX.0000000000002408](https://doi.org/10.1097/GOX.0000000000002408); Published online 30 September 2019.)

## INTRODUCTION

Advances in technology, improved understanding of disease pathogenesis, and superior interventions have enhanced plastic surgery patients' outcomes over the past decade.<sup>1,2</sup> To support these advancements, up to date research endeavors are mandatory. The resultant increase in studies has generated an overwhelming amount of evidence. To assist clinicians in critical appraisal of this evidence, a conceptual tool known as evidence-based medicine (EBM) was developed.<sup>3</sup>

Levels of evidence (LOE) is the foundation of EBM. It is a hierarchical appraisal system which grades research (levels 1–5) based on inherent limitations of study methodology.<sup>4</sup> LOE enables clinicians to rapidly appraise evidence before translating into clinical practice.<sup>5</sup> It is also

a reliable method of evaluating the quality of evidence published. High-quality research is a prerequisite in maintaining optimal patient care. The aim of this study is to determine if the quality of evidence in plastic surgery research has improved over the past 10 years.

## METHODOLOGY

A systematic review of published research articles was performed in *Plastic and Reconstructive Surgery* (PRS) journal. Articles were selected from this journal, as it is the highest impact factor plastic surgery journal, publishing on a wide variety of plastic surgery topics. To evaluate any trends, articles were initially reviewed from 3 years, covering a 10-year period (2008, 2013, 2018). Editorials, letters, announcements, reflections, book reviews, Continuing Medical Education (CME) articles were excluded from this study. Review articles and laboratory studies (animal, cadaver, basic science) were included in the initial review but excluded from the final analysis, as no LOE can be allocated to these studies.

Each clinical article was allocated an LOE based upon published American Society of Plastic Surgeons (ASPS) guidelines.<sup>6</sup> First, the research aim was broadly divided into 3 categories: therapeutic, risk, and diagnostic. Within these

From the Department of Plastic & Reconstructive Surgery, St Vincent's University Hospital, Dublin, Ireland.

Received for publication June 4, 2019; accepted June 26, 2019.

Copyright © 2019 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

DOI: [10.1097/GOX.0000000000002408](https://doi.org/10.1097/GOX.0000000000002408)

**Disclosure:** The authors have no financial interest to declare in relation to the content of this article.

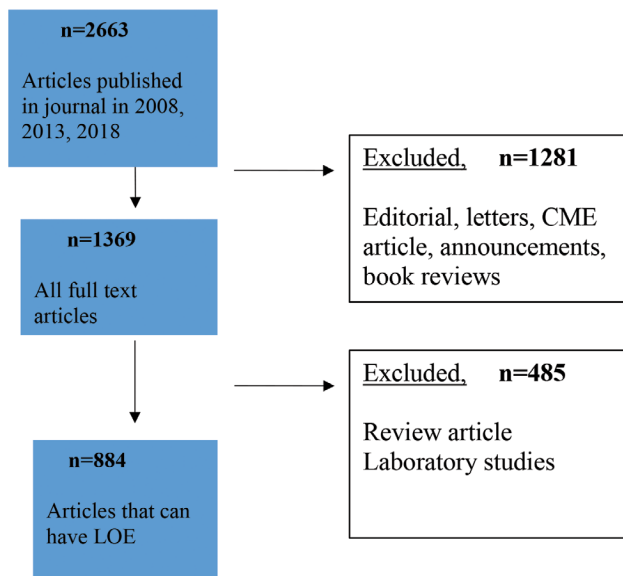
categories, evidence was ranked from 1 to 5 mirroring the hierarchal research pyramid. This ranking is based upon the probability that the research design has reduced the potential bias. Highest quality evidence (level 1) is produced from randomized control trials or systematic reviews/meta-analysis of these. Articles of limited study design with biases, such as expert opinions, are ranked the lowest (level 5).

Two authors (C.M.S., C.W.J.) independently evaluated published research articles. Discrepancies in the assignment of LOE were discussed with the senior author (S.M.C.). Information obtained from the articles included year of publication, topic, study design, and LOE. Each LOE was expressed as percentage of the overall publications that year and to the other years. Study design was also assessed. Further analysis on the different topics published in the journal was performed. The percentage of higher-level evidence (levels 1 and 2) was calculated for each topic and compared over the 10-year period.

## RESULTS

Two thousand six hundred sixty-four articles were published in the PRS journal in the years 2008, 2013, 2018. By applying the inclusion criteria, a total of 1,369 articles were reviewed. Review articles and laboratory studies accounted for 14.7% and 20.7% of the remaining articles. These were excluded from the final analysis as they are not part of LOE hierarchy. A LOE rank was applied to 884 articles (2008 = 313, 2013 = 291, 2018 = 280) (Fig. 1).

Therapeutic studies were the most frequent research aim, accounting for 83.6% of all research. Level 4 evidence was the greatest level published across the years (50.6%, 447/884). There was a decline in the percentage of level 4 evidence from 63.2% in 2008 to 41.3% in 2018. Twelve publications accounted for level 1 evidence, with 11 of these published in the past 5 years (Table 1).



**Fig. 1.** Flow diagram of study methodology. CME indicates continuing medical education; LOE, levels of evidence.

**Table 1. Percentage of Each Level of Evidence Published per Year**

Levels of Evidence	2008	2013	2018
1	0.3	1.7	2.1
2	6.3	11.3	13.6
3	19.6	33.3	34.5
4	63.2	45.5	41.7
5	11.3	8.5	7.9

**Table 2. Evaluation of Each Study Methodology Used in Research, per Year**

	2008 n (%)	2013 n (%)	2018 n (%)
Systematic review/meta analysis	5 (1.1)	21 (4.6)	15 (3.2)
Randomized control trials	8 (1.7)	5 (1.1)	18 (3.8)
Cohort study	4 (0.9)	10 (2.2)	8 (1.7)
Case-control	44 (9.7)	75 (16.7)	93 (19.9)
Case series	219 (48.3)	156 (34.7)	123 (26.3)
Case report	10 (2.2)	9 (2.0)	9 (1.2)
Expert opinion	25 (5.5)	15 (1.1)	12 (2.1)
Review article	45 (9.3)	61 (15.8)	99 (22.2)
Laboratory study	96 (21.1)	97 (21.6)	90 (19.3)
	n = 453	n = 449	n = 467

**Table 3. Percentage Comparison of High-quality Evidence (Levels 1 and 2) per Plastic Surgery Topic, per Year**

Topics	2008	2013	2018
Aesthetics	6.3	6.2	15.3
Breast	19.2	13.7	18.7
Craniofacial	1.5	8.3	8.5
Upper limb	11.5	11.1	25

Case series was the most common study design (36.4%, 498/1,369). This study designed decreased over time from 48.3% in 2008 to 25.5% in 2018. Case-control studies increased from 9.7 % to 19.9% (Table 2).

Aesthetic (21.6%), breast (17.3%), craniofacial (4.2%), and upper limb surgery were the most frequently published topics in PRS journal. The percentage of higher LOE (levels 1 and 2) published in these topics over the years is seen in Table 3. The largest percentage increase over the 10-year period was demonstrated by upper limb surgery (18.5%).

## DISCUSSION

The application of EBM involves merging individual clinical experience with the best scientific evidence.<sup>7</sup> The interrogation of EBM into plastic surgery practice has been limited.<sup>8</sup> By evaluating trends in LOE of published research, the utilization of EBM principles can be measured. This study has shown that the LOE in plastic surgery research has improved over the past decade. There has been a growth in levels 1, 2, and 3 evidence, with a reduction in the publication in lower-quality evidence. In 2018, high-quality evidence (levels 1 and 2) accounted for 15.7% of all plastic surgery research. This was marginally lower than orthopedic literature (21.6%),<sup>9</sup> but higher than neurosurgical (10.3%)<sup>10</sup> and maxillofacial research (2%).<sup>11</sup> Within the PRS journal, up-

per limb and aesthetics surgery demonstrated the largest increase in high-quality evidence over the 10-year period.

Case series are the backbone of surgical research. By evaluating a similar group of patients undergoing a common intervention, this study design replicates everyday surgical practice.<sup>12</sup> The absence of a control group justifiably ranks this design at the lower end of the evidence pyramid. Despite this, case series are vital. They may be the only feasible and ethical study methodology obtainable, as seen with craniofacial surgery.<sup>13</sup> In our study, craniofacial research accounted for the lowest percentage publication (8.4%) of high-quality evidence, with no improvement over the past 5 years. The rarity of craniofacial pathology coupled with a small number of patients makes it difficult to produce higher quality research. Case-control studies are an upgrade from case series, with the addition of a control group significantly reducing study bias.<sup>14</sup> Case-control studies increased in our study period. In a specialty where obtaining high-quality evidence is challenging, the evolution from case series to case-control studies is an important indicator of EBM application.

The concept of LOE was originally described 50 years ago.<sup>15</sup> Yet, its application in plastic surgery research has been underwhelming,<sup>16</sup> with lack of awareness a probable reason.<sup>17</sup> To overcome this, PRS journal, in 2011, made it mandatory for authors submitting manuscripts to attach an LOE rating. This is then displayed as a small pyramidal graphic on the abstract page, providing immediate context for the reader. This editorial policy could account for the greater increase in LOE between 2008 and 2013, in comparison to the past 5 years of this study. Other journals have a similar requirement, but the LOE is allocated by the editorial board, out of fear of authors over infiltrating their own research.<sup>18</sup> However, good interobserver and intraobserver reliability has been reported when grading LOE.<sup>19</sup> By placing the responsibility of LOE ranking with the submitting author, knowledge of EBM has improved along with the quality of evidence published.

Conor M. Sugrue, FRCS

Department of Plastic & Reconstructive Surgery  
St Vincent's Hospital  
Elm Park  
Dublin, Ireland  
E-mail: [conormsugrue@rcsi.ie](mailto:conormsugrue@rcsi.ie)

## REFERENCES

1. Grunwald T, Krummel T, Sherman R. Advanced technologies in plastic surgery: how new innovations can improve our training and practice. *Plast Reconstr Surg*. 2004;114:1556–1567.
2. Hernandez-Boussard T, McDonald KM, Rhoads KF, et al. Patient safety in plastic surgery: identifying areas for quality improvement efforts. *Ann Plast Surg*. 2015;74:597–602.
3. Sackett DL, Rosenberg WM, Gray JA, et al. Evidence based medicine: what it is and what it isn't. *BMJ*. 1996;312:71–72.
4. Evans D. Hierarchy of evidence: a framework for ranking evidence evaluating healthcare interventions. *J Clin Nurs*. 2003;12:77–84.
5. Poolman RW, Kerkhoffs GM, Struijs PA, et al. Don't be misled by the orthopedic literature: tips for critical appraisal. *Acta Orthop*. 2007;78:162–171.
6. ASPS Evidence Rating Scales. Available at: <https://www.plastic-surgery.org/documents/medical-professionals/health-policy/evidence-practice/ASPS-Rating-Scale-March-2011.pdf>. Accessed June 25, 2019.
7. Sackett DL, Richardson WS, Rosenberg W, et al. *Evidence-Based Medicine: How to Practice and Teach*. 2nd ed. Edinburgh, Scotland: Churchill-Livingstone; 2000.
8. Burns PB, Rohrich RJ, Chung KC. The levels of evidence and their role in evidence-based medicine. *Plast Reconstr Surg*. 2011;128:305–310.
9. Little Z, Newman S, Dodds A, et al. Increase in quality and quantity of orthopaedic studies from 2002 to 2012. *J Orthop Surg (Hong Kong)*. 2015;23:375–378.
10. Yarasavitch BA, Chuback JE, Almenawer SA, et al. Levels of evidence in the neurosurgical literature: more tribulations than trials. *Neurosurgery*. 2012;71:1131–1137; discussion 1137.
11. Lau SL, Samman N. Levels of evidence and journal impact factor in oral and maxillofacial surgery. *Int J Oral Maxillofac Surg*. 2007;36:1–5.
12. Coroneos CJ, Ignacy TA, Thoma A. Designing and reporting case series in plastic surgery. *Plast Reconstr Surg*. 2011;128:361e–368e.
13. Drolet BC, Lorenzi NM. Registries and evidence-based medicine in craniofacial and plastic surgery. *J Craniofac Surg*. 2012;23:301–303.
14. Song JW, Chung KC. Observational studies: cohort and case-control studies. *Plast Reconstr Surg*. 2010;126:2234–2242.
15. The periodic health examination. Canadian task force on the periodic health examination. *Can Med Assoc J*. 1979;121:1193–254.
16. Loiselle F, Mahabir RC, Harrop AR. Levels of evidence in plastic surgery research over 20 years. *Plast Reconstr Surg*. 2008;121:207e–211e.
17. Grol R, Wensing M. What drives change? Barriers to and incentives for achieving evidence-based practice. *Med J Aust*. 2004;180(Suppl 6):S57–S60.
18. Stewart MG. Reporting levels of evidence. *Laryngoscope*. 2014;124:358.
19. Cashin MS, Kelley SP, Douziech JR, et al. The levels of evidence in pediatric orthopaedic journals: where are we now? *J Pediatr Orthop*. 2011;31:721–725.

# **EXHIBIT 8**



# AMERICAN SOCIETY OF PLASTIC SURGEONS

**Exhibit****0007**9/30/2021  
Dr. LappertAdvocacy / Advocacy News

## State Focus on Gender Affirmation Intensifies

Thursday, February 25, 2021

Policy around transgender care has recently gained considerable attention amid a growing trend of legislation carrying serious professional, financial or criminal penalties for the provision of gender affirmation care. Conversely, although less extensively, efforts to expand coverage for transgender services among both public and third-party payer programs are also taking place.

This period of focused conversation centered on transgender care has been marked by both significant challenges and notable gains in the fight for full access to medically necessary affirming health care.

### Background

Gender affirmation is a developing field of medical and surgical practice in which plastic surgeons play a pivotal role, leading the field in many of the physical transformative procedures often involved in gender affirmation.

Like many conditions, gender dysphoria and the process of gender affirmation requires a multidisciplinary approach. Physical, psychological and psychosocial treatment are all components of the gender affirmation process. These components of care – and particularly psychological assessment of gender dysphoria – often begin in childhood and early adolescence. Legislation that seeks to criminalize gender therapy targets this part of the care continuum.

### A growing legislative trend

State legislation designed to criminalize gender affirming care first emerged in 2016. The frequency of such bills increased in the years that followed, but 2020 was a particularly active year, seeing six states with bills introduced on the issue. The volume and intent of the legislation between 2016 and 2020 resulted in transgender advocacy groups classifying the bills as "hostile." Last year was also notable because it marked the first instance in which one of the aforementioned bills successfully passed a state legislative chamber.

In 2020, the South Dakota House of Representatives passed legislation prohibiting gender-affirming care for minors and leveling serious consequences for physicians found in violation of the law, including possible jail time. The state's Senate ultimately defeated the bill and prevented it from being enacted into law, but the relative success of the legislation was concerning and may have inspired a number of similar bills that would soon follow.

Less than three months into 2021, 11 pieces of legislation attempting to criminalize gender affirmation therapies have been introduced in 10 states. Alabama, Indiana, Iowa, Mississippi, Missouri, Montana, New Hampshire, Oklahoma, Texas and Utah have each introduced bills seeking to regulate the practice of medicine by banning certain procedures for minors and criminalizing the actions of health care providers who elect to administer gender affirmation care.

While the legislative concepts vary by state, the common threads include a prohibition of gender affirmation care for minors, identification of specific procedures and therapies that cannot be performed by the state's health care practitioners and a stipulation that it is illegal for a minor's parents or guardians to consent to the procedures. Penalties for health care providers, guardians and even school counselors found in violation of the laws vary widely and range from a fine of up to \$500,000, to notifying child protective services and even classification of the guilty party as a felon.

## Efforts to expand coverage

Contrary to the disturbing trend of legislation looking so severely at limiting gender-affirming care that it seeks to make criminals out of some of those involved, concerted efforts are also underway to expand coverage for the transgender community.

In one notable example, Aetna announced in January the expansion of its coverage for gender-affirming surgeries for transgender women. The insurer now covers gender-affirming breast augmentation in most plans, bringing coverage for the procedure into alignment with coverage for other surgeries common in transgender patients, such as breast removal or gender-reassignment.

Additionally, several states have worked to expand gender affirmation coverage. On February 12, ASPS wrote a letter in support of an emergency rule from the Wisconsin Department of Health Services that would repeal current restrictions and expand coverage for transgender Medicaid members. Similar amendments were proposed to the Washington Administrative Code and received the support of the Society via public comment in late January after ASPS involvement in the development of the policy that dates back to 2018.

## ASPS involvement



ASPS firmly believes that plastic surgery services can help gender dysphoria patients align their bodies with whom they know themselves to be and improve their overall mental health and well-being. In 2021, the Society has actively opposed legislation seeking to criminalize actions by physicians and guardians when minors receive gender affirmation surgery in Missouri, Montana and Alabama and is readying engagement in other states where the issue has emerged. ASPS will continue its efforts to advocate across state legislatures for full access to medically necessary transition care.

## RELATED

- ▶ [ASPS Maintains Support for ELSA in 117th Congress](#)
- ▶ [Attacks on MOC Reemerge](#)
- ▶ [Register Today: 2021 ASPS Virtual Advocacy Summit](#)
- ▶ [ASPS Responds to a Wave of Scope of Practice Expansion Bills](#)
- ▶ [ASPS Executive Committee Approves 2021 Policy Priorities](#)

ADVERTISEMENT

Copyright © 2021 American Society of Plastic Surgeons

# **EXHIBIT 9**

## Corporate Medical Policy

### Gender Affirmation Surgery and Hormone Therapy

**File Name:** gender\_affirmation\_surgery\_and\_hormone\_therapy  
**Origination:** 7/2011  
**Last CAP Review:** 5/2020  
**Next CAP Review:** 5/2021  
**Last Review:** 3/2021

#### Description of Procedure or Service

---

Gender Dysphoria (GD) is the formal diagnosis used by professionals to describe persons who experience significant gender dysphoria (discontent with their biological sex and/or birth gender). Although it is a psychiatric classification, GD is not medically classified as a mental illness.

In the U.S., the American Psychiatric Association (APA) permits a diagnosis of gender dysphoria in adolescents and adults if the diagnostic criteria in the Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> Edition, (DSM-5™) are met. The criteria are:

- A. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least six month's duration, as manifested by at least **two** of the following:
  - 1. A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics (or in young adolescents, the anticipated secondary sex characteristics); **OR**
  - 2. A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender (or in young adolescents, a desire to prevent the development of the anticipated secondary sex characteristics); **OR**
  - 3. A strong desire for the primary and/or secondary sex characteristics of the other gender; **OR**
  - 4. A strong desire to be of the other gender (or some alternative gender different from one's assigned gender); **OR**
  - 5. A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender); **OR**
  - 6. A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender); **AND**
- B. The condition is associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Gender dysphoria is a medical condition when the elements of the condition noted above are present. Gender affirmation surgery is one treatment option. Gender Affirmation Surgery is not a single procedure, but part of a complex process involving multiple medical, psychiatric, and surgical modalities performed in conjunction with each other to help the candidate for gender affirmation achieve successful behavioral and medical outcomes. Before undertaking gender affirmation surgery, candidates need to undergo important medical and psychological evaluations, and begin medical/hormonal therapies and behavioral trials to confirm that surgery is the most appropriate treatment choice. Gender affirmation surgery presents significant medical and psychological risks, and the results are irreversible.

**\*\*\*Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your provider.**

# Gender Affirmation Surgery and Hormone Therapy

## Policy

---

Services for gender affirmation surgery and hormone therapy may be considered medically necessary when the criteria below are met.

Please see the following section “Benefits Application” regarding specific benefit and medical management requirements.

## Benefits Application

---

Gender affirmation surgery and hormone therapy may be specifically excluded under some health benefit plans. Please refer to the Member’s Benefit Booklet for availability of benefits.

When benefits for gender affirmation surgery and hormone therapy are available, coverage may vary according to benefit design. Some benefit designs for gender affirmation surgery may include benefits for pelvic and/or breast reconstruction. Member benefit language specific to gender affirmation should be reviewed before applying the terms of this medical policy. This medical policy relates only to the services or supplies described herein.

Prior review and certification are required by most benefit plans, and when required, must be obtained or services will not be covered. Some benefit plans provide coverage without a requirement for prior approval or medical necessity review. Please refer to the Member’s Benefit Booklet for specific prior approval or medical necessity review requirements.

If prior authorization and medical necessity review are required for hormone therapy, and related surgical procedures for the treatment of gender dysphoria, the medical criteria and guidelines shown below will be utilized to determine the medical necessity for the requested procedure or treatment.

## When Gender Affirmation Surgery and Hormone Therapy is covered

---

Gender affirmation surgery and hormone therapy may be considered medically necessary when all the following candidate criteria are met and supporting provider documentation is provided:

### Candidate Criteria for Adults and Adolescents age 18 years and Older for Gender Affirmation Surgery

1. The candidate is at least 18 years of age; and
2. Has been diagnosed with gender dysphoria, including meeting all of the following indications:
  - a. A strong conviction to live as some alternative gender different from one’s assigned gender.
    - Typically accompanied by the desire to make the physical body as congruent as possible with the identified sex through surgery and hormone treatment; and
  - b. The new gender identity has been present for at least 6 months; and
  - c. If significant medical or mental health concerns are present, they must be reasonably well-controlled; and
  - d. The gender dysphoria causes clinical or social distress or impairment in social, occupational, or other important areas of functioning.
3. For those candidates without a medical contraindication, the candidate has undergone a minimum of 12 months of continuous hormonal therapy that is (Note: for those candidates requesting female to male surgery see item 4. below):
  - a. Recommended by a mental health professional and

# Gender Affirmation Surgery and Hormone Therapy

- b. Provided under the supervision of a physician; and the supervising physician indicates that the patient has taken the hormones as directed.
4. For candidates requesting female to male surgery only:
  - a. When the initial requested surgery is solely a mastectomy, the treating physician may indicate that no hormonal treatment (as described in criteria 3. above) is required prior to performance of the mastectomy. In this case, the 12 month requirement for hormonal treatment will be waived only when all other criteria contained in this policy and in the member's health benefit plan are met.
5. The candidate has completed a minimum of 12 months of successful continuous full time real-life experience in their new gender, with no returning to their original gender. This requirement must be demonstrated by living in their new gender while:
  - a. Maintaining part- or full-time employment; or
  - b. Functioning as a student in an academic setting; or
  - c. Functioning in a community-based volunteer activity as applicable. (For those candidates not meeting this criteria, see item 6. below.)
6. If the candidate does not meet the 12 month time frame criteria as noted in item 5. above, then the treating clinician must submit information indicating why it would be clinically inappropriate to require the candidate to meet these criteria. When submitted, the criteria in item 5. will be waived unless the criteria noted in item 5. above are specified as required in the candidate's health benefit plan.

## **Provider Documentation Criteria for Gender Affirmation Surgery:**

The treating clinicians must provide the following documentation. The documentation must be provided in letters from the appropriate clinicians and contain the information noted below.

1. The letters must attest to the psychological aspects of the candidate's gender dysphoria.
  - a. One of the letters must be from a licensed behavioral health professional with an appropriate degree (Ph.D., M.D., L.C.S.W., Ed.D., D.Sc., D.S.W., psychiatric physician assistant, Psy.D, or psychiatric nurse practitioner under the supervision of a psychiatrist) with established competence and clinical expertise in the assessment and treatment of gender dysphoria, who is capable of adequately evaluating if the candidate has any co-morbid psychiatric conditions. When patients with gender dysphoria are also diagnosed with severe psychiatric disorders and impaired reality testing (e.g., psychotic episodes, bipolar disorder, dissociative identity disorder, borderline personality disorder) an effort must be made to improve these conditions with psychotropic medications and/or psychotherapy before surgery is contemplated. Reevaluation by a mental health professional qualified to assess and manage psychotic conditions should be conducted prior to surgery, describing the patient's mental status and readiness for surgery. It is preferable that this mental health professional be familiar with the patient. No surgery should be performed while a patient is actively psychotic.
  - b. One of the letters must be from the candidate's established physician or behavioral health provider. The letter or letters must document the following:
    1. Whether the author of the letter is part of a gender dysphoria treatment team and/or follows current WPATH Standards of Care or Endocrine Society Guidelines for the Endocrine Treatment of Gender-Dysphoric/ Gender-Incongruent Persons for evaluation and treatment of gender dysphoria; and
    2. The initial and evolving gender, sexual, and other psychiatric diagnoses (if applicable); and
    3. The duration of their professional relationship including the type evaluation that the candidate underwent; and
    4. The eligibility criteria that have been met by the candidate according to the above Standards of Care; and
    5. The physician or mental health professional's rationale for hormone therapy and/or surgery; and
    6. The degree to which the candidate has followed the treatment and experiential requirements to date and the likelihood of future compliance; and

# Gender Affirmation Surgery and Hormone Therapy

7. The extent of participation in psychotherapy throughout the 12 month real-life trial, (if such therapy is recommended by a treating medical or behavioral health practitioner) and
8. That during the 12 month, real-life experience (for candidates not meeting the 12 month candidate criteria as noted in 6 and 7, the letter should still comment on the candidates ability to function and experience in the desired gender role), persons other than the treating therapist were aware of the candidate's experience in the desired gender role and could attest to the candidate's ability to function in the new role.
9. Demonstrable progress on the part of the candidate in consolidating the new gender identity, including improvements in the ability to handle:
  - Work, family, and interpersonal issues
  - Behavioral health issues, should they exist.
- c. If the letters specified in 1a and 1b above come from the same clinician, then a letter from a second physician or behavioral health provider familiar with the candidate corroborating the information provided by the first clinician is required.
- d. For members requesting surgical treatment, a letter of documentation must be received from the treating surgeon. If one of the previously described letters is from the treating surgeon, then it must contain the documentation noted in the section below. All letters from a treating surgeon must confirm that:
  1. The candidate meets the "candidate criteria" listed in this policy and
  2. The treating surgeon feels that the candidate is likely to benefit from surgery and
  3. The surgeon has personally communicated with the treating mental health provider or physician treating the candidate, and
  4. The surgeon has personally communicated with the candidate and the candidate understands the ramifications of surgery, including:
    - The required length of hospitalizations,
    - Possible complications of the surgery, and
    - The post-surgical rehabilitation requirements of the various surgical approaches and the planned surgery.

## **Candidate Criteria for Children and Adolescents under Age 18 years**

Pubertal delay and gender affirming hormone therapy may be considered medically necessary when all the following candidate criteria are met and supporting provider documentation is provided:

### **Candidate Criteria (based on World Professional Association for Transgender Health (WPATH) Standards of Care):**

1. The patient has been diagnosed with gender dysphoria, including meeting all of the following indications:
  - a. A strong conviction to live as some alternative gender different from one's assigned gender,
    - Typically accompanied by the desire to make the physical body as congruent as possible with the identified sex through surgery and hormone treatment; and
  - b. Any co-existing psychological, medical, or social problems that could interfere with treatment (e.g., that may compromise treatment adherence) have been addressed, such that the adolescent's situation and functioning are stable enough to start treatment; and
  - c. The gender dysphoria causes clinical or social distress or impairment in social, occupational, or other important areas of functioning.
2. The candidate has completed a minimum of 12 months of successful continuous full time real-life experience in their new gender, with no returning to their original gender. This requirement must be demonstrated by living in their new gender while:
  - a. Maintaining part- or full-time employment; or
  - b. Functioning as a student in an academic setting; or
  - c. Functioning in a community-based volunteer activity as applicable. (For those candidates not meeting this criteria, see item 3. below.)

# Gender Affirmation Surgery and Hormone Therapy

3. If the candidate does not meet the 12 month time frame criteria as noted in item 2. above, then the treating clinician must submit information indicating why it would be clinically inappropriate to require the candidate to meet these criteria. When submitted, the criteria in item 2. will be waived unless the criteria noted in item 2. above are specified as required in the candidate's health benefit plan.

## **Provider Documentation Criteria for Pubertal Delay and Gender Affirming Hormonal Therapy:**

The treating clinicians must provide the following documentation. The documentation must be provided in letters from the appropriate clinicians and contain the information noted below.

1. The letters must attest to the psychological aspects of the candidate's gender dysphoria
  - a. One of the letters must be from a licensed behavioral health professional with an appropriate degree (Ph.D., M.D., Ed.D., D.Sc., D.S.W., psychiatric physician assistant, Psy.D, or psychiatric nurse practitioner under the supervision of a psychiatrist) with established competence and clinical expertise in the assessment and treatment of gender dysphoria, who is capable of adequately evaluating if the candidate has any co-morbid psychiatric conditions.
  - b. One of the letters must be from the candidate's established physician or behavioral health provider. The letter or letters must document the following:
    1. Whether the author of the letter is part of a gender dysphoria treatment team and/or follows current WPATH Standards of Care or Endocrine Society Guidelines for the Endocrine Treatment of Gender-Dysphoric/ Gender-Incongruent Persons for evaluation and treatment of gender dysphoria; and
    2. The initial and evolving gender, sexual, and other psychiatric diagnoses (if applicable); and
    3. The duration of their professional relationship including the type evaluation that the candidate underwent; and
    4. The eligibility criteria that have been met by the candidate according to the above Standards of Care; and
    5. The physician or mental health professional's rationale for hormone therapy; and
    6. The degree to which the candidate has followed the treatment and experiential requirements to date and the likelihood of future compliance; and
    7. The extent of participation in psychotherapy throughout the 12 month real-life trial, (if such therapy is recommended by a treating medical or behavioral health practitioner); and
    8. That during the 12 month, real-life experience (for candidates not meeting the 12 month candidate criteria as noted in 6 and 7, the letter should still comment on the candidates ability to function and experience in the desired gender role), persons other than the treating therapist were aware of the candidate's experience in the desired gender role and could attest to the candidate's ability to function in the new role.

## **Prepubertal children do not require medical or surgical treatment, but do require mental health services as listed above.**

### **Criteria for Adolescents Entering Puberty**

Adolescents, having reached puberty (tanner 2), and who have met eligibility and readiness criteria can be treated with GnRH analogues.

The definition of puberty is having reached Tanner stage 2/5 and/or having LH, estradiol levels or testosterone levels, within the pubertal range. These LH, estradiol and testosterone ranges are well-known and published and are broken down by biological male vs. biological female Tanner stage, and nocturnal and diurnal levels.

Adolescents are *eligible* for GnRH treatment, (for suppression of puberty) by these eligibility criteria: (same for adults)

1. Have an established diagnosis for GD based on DSM V or ICD-10 criteria;
2. Have experienced puberty to at least Tanner stage 2, which can be confirmed by pubertal levels of LH, estrogen or testosterone;
3. Have experienced pubertal changes that resulted in an increase of their gender dysphoria;
4. Do not suffer from psychiatric comorbidity (that interferes with the diagnostic work-up or treatment);

# Gender Affirmation Surgery and Hormone Therapy

5. Have adequate psychological and social support during treatment, to include having parental/guardian consent;
6. Demonstrate knowledge and understanding of the expected outcomes of GnRH analogue treatment, cross-sex hormone treatment, and gender affirmation surgeries, as well as the medical and social risks and benefits of gender affirmation; and have been counseled regarding fertility options.

## **Criteria for Postpubertal Adolescents under the Age of 18 Years**

Post-pubertal adolescents under age 18 must meet the same criteria and documentation requirements for treatment as listed above for adults. If those criteria are met, they are eligible for gender affirmation hormonal treatment and treatment for menstrual suppression when gender affirming hormones are not successful in eliminating menses.

Gender affirmation surgery is rarely appropriate for patients under the age of 18. Requests for mastectomy for female to male transgender individuals age 17 or older may be considered only in exceptional circumstances on an individual consideration basis.

A limited number of electrolysis or laser hair removal sessions are considered medically necessary to prepare for approved genital surgery when the surgeon makes a recommendation documented in the medical record.

## **When Gender Affirmation Surgery and Hormone Therapy are not covered**

---

Gender Affirmation Surgery and hormone therapy are non-covered benefits when the member does not have benefits for the services requested contained in their health benefit plan.

Gender Affirmation Surgery and hormonal therapy are considered not medically necessary for plans offering gender affirmation services when the candidate criteria and provider documentation criteria are not met.

### Gender Affirmation Surgery Exclusions:

Services and procedures that are considered Cosmetic in all benefit plans are considered non-covered benefits, including but not limited to:

- o Cosmetic services that may be used for gender affirmation, including, but not limited to, procedures such as: plastic surgery of the nose; face lift; lip enhancement; facial bone reduction; plastic surgery of the eyelids; liposuction of the waist; reduction of the thyroid cartilage; hair removal ; hair transplants; and surgery of the larynx, including shortening of the vocal cords; chin implants; nose implants, and lip reduction.
- o Fertility preservation, including but not limited to: sperm banking and embryonic freezing.

Autologous tissue flap breast reconstructions are considered not medically necessary for gender affirmation surgery.

## **Policy Guidelines**

---

Gender affirmation surgery and hormone therapy candidate criteria and care standards are based, in part, on the World Professional Association for Transgender Health (WPATH) and Endocrine Society Guidelines for Endocrine Treatment of Gender-Dysphoric/ Gender-Incongruent Persons.

## **Billing/Coding/Physician Documentation Information**

---

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the



# Gender Affirmation Surgery and Hormone Therapy

Blue Cross Blue Shield of North Carolina web site at [www.bcbsnc.com](http://www.bcbsnc.com). They are listed in the Category Search on the Medical Policy search page.

*ICD-10 diagnosis codes: F64.0, Z87.890*

*Applicable codes: 17380, 19304, 19316, 19318, 19324, 19325, 19340, 54400, 54401, 54405, 54406, 54408, 54410, 54411, 54415, 54416, 54417, 54660, 55175, 55180, 55970, 55980, 56800, 56805, 57291, 57292, 57295, 57296, 57335, C1813, C2622, J1950, J3315, J9217, J9219, J9226.*

*Applicable non-covered procedure codes, including, but not limited to: 11950, 11951, 11952, 11954, 15775, 15776, 15780, 15781, 15782, 15783, 15786, 15787, 15788, 15789, 15792, 15793, 15820, 15821, 15822, 15823, 15824, 15825, 15826, 15828, 15829, 15830, 15832, 15833, 15834, 15835, 15836, 15837, 15838, 15839, 15876, 15877, 15878, 15879, 21120, 21121, 21122, 21123, 21125, 21127, 21208, 21210, 21270, 30400, 30410, 30420, 30430, 30435, 30450, 67900, 92507, 92508.*

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

## Scientific Background and Reference Sources

---

Diagnostic and Statistical Manual of Mental Disorders Fourth Edition. Text Revision (DSM-IV-TR). American Psychiatric Association. American Psychiatric Association, Inc. July 2000

Harry Benjamin International Gender Dysphoria Association, Inc (2001). Standards of Care for Gender Identity Disorders—Sixth Version. *International Journal of Transgenderism 5 (1)*. Available at: [http://www.symposion.com/ijt/soc\\_2001/index.htm](http://www.symposion.com/ijt/soc_2001/index.htm)

Day P. Trans-gender Reassignment Surgery. Tech Brief Series. New Zealand Health Technology Assessment. NZHTA Report February 2002, volume 1, Number 1. Available at: [http://nzhta.chmeds.ac.nz/publications/trans\\_gender.pdf](http://nzhta.chmeds.ac.nz/publications/trans_gender.pdf)

Medical Director review, July 2011

The World Professional Association for Transgender Health; Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People; 7<sup>th</sup> Version; July 2012. Accessed at [http://www.wpath.org/site\\_page.cfm?pk\\_association\\_webpage\\_menu=1351&pk\\_association\\_webpage=4655](http://www.wpath.org/site_page.cfm?pk_association_webpage_menu=1351&pk_association_webpage=4655) on 9/21/2016.

Specialty Matched Consultant Advisory Panel 12/2012

American Psychiatric Association (APA). Gender dysphoria. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5™)*. Arlington, VA: American Psychiatric Publishing; 2013: 451-459.

American College of Obstetricians and Gynecologists (ACOG). Healthcare for transgender individuals. Committee Opinion. No 512. December 2011. *Obstet Gynecol* 2011; 118:1454-8.

Hembree WC, Cohen-Kettenis P, et al. Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab*. September 2009, 94(9):3132–3154. Accessed at <http://press.endocrine.org/doi/pdf/10.1210/jc.2009-0345> on 9/21/2016.

Specialty Matched Consultant Advisory Panel 11/2014

# Gender Affirmation Surgery and Hormone Therapy

Specialty Matched Consultant Advisory Panel 11/2015

Specialty Matched Consultant Advisory Panel 9/2016

Senior Medical Director review 9/2016

Specialty Matched Consultant Advisory Panel 5/2017

Specialty Matched Consultant Advisory Panel 5/2018

Specialty Matched Consultant Advisory Panel 6/2019

The World Professional Association for Transgender Health; Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People; 7<sup>th</sup> Version; July 2012. Accessed at [https://www.wpath.org/media/cms/Documents/SOC%20v7/Standards%20of%20Care\\_V7%20Full%20Book\\_English.pdf](https://www.wpath.org/media/cms/Documents/SOC%20v7/Standards%20of%20Care_V7%20Full%20Book_English.pdf) on 4/27/2020

Specialty Matched Consultant Advisory Panel 5/2020

Medical Director review 7/2020

Medical Director review 9/2020

Hembree WC, Cohen-Kettenis P, et al. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab. November 2017; 102(11):3869-3903. Accessed at <https://academic.oup.com/jcem/article/102/11/3869/4157558> on 9/25/2020.

Medical Director review 3/2021

## Policy Implementation/Update Information

---

- |          |  |
|----------|--|
| 7/19/11  | New policy developed. When benefits for gender reassignment surgery are available, coverage may vary. Some benefit plans provide coverage without a requirement for prior approval or medical necessity review. Benefits for upper and/or lower body gender reassignment procedures vary by benefit plan. If prior authorization and medical necessity review are required for hormone therapy, breast augmentation surgery (mammoplasty), and mastectomy for the treatment of gender identity disorders, the medical criteria and guidelines outlined in the policy will be utilized to determine the medical necessity for the requested procedure or treatment. (adn) |
| 9/18/12  | Added diagnosis codes 302.0, 302.5, 302.50 – 302.53, 302.6, 302.85, 302.9, 313.82, 752.7 to Billing/Coding section. (sk)   |
| 1/1/13   | Reference added. Specialty Matched Consultant Advisory Panel review 12/4/12. No change to policy statement. (sk)   |
| 7/1/13   | ICD-10 diagnosis codes added to Billing/Coding section. (sk)   |
| 10/29/13 | Reference added. Replaced DSM-IV TR criteria with DSM-5™ criteria. Removed “Sex change surgical procedures other than breast augmentation surgery (mammoplasty) and mastectomy” from the When Not Covered section. Added “pelvic reconstruction” to the When Covered section. Applicable Service Codes removed from Billing/Coding section. Senior Medical Director review. (sk)   |

# Gender Affirmation Surgery and Hormone Therapy

- 7/1/14 Removed ICD-10 effective date from Billing/Coding section. (sk)
- 12/9/14 Reference added. Specialty Matched Consultant Advisory Panel review 11/24/14. No change to policy statement. (sk)
- 12/30/15 Specialty Matched Consultant Advisory Panel review 11/18/2015. (sk)
- 9/30/16 Specialty Matched Consultant Advisory Panel review 9/2016. Policy re-titled to Gender Confirmation Surgery and Hormone Therapy. Information regarding coverage of services for adolescents added to the “When Covered” section. Fertility preservation, including but not limited to: sperm banking and embryonic freezing added to Non-covered section. ICD 9 codes removed from Billing/Coding section. ICD 10 codes, covered codes and non-covered codes added to Billing/Coding section. Policy noticed 10/1/2016 for policy effective date 1/1/2017. (sk)
- 6/30/17 Specialty Matched Consultant Advisory Panel review 5/31/2017. (sk)
- 6/29/18 Specialty Matched Consultant Advisory Panel review 5/23/2018. (sk)
- 7/16/19 Specialty Matched Consultant Advisory Panel review 6/28/2019. (sk)
- 6/23/20 Reference added. Specialty Matched Consultant Advisory Panel review 5/20/2020. (sk)
- 8/25/20 Medical Director review. Provider Documentation Criteria updated to include “licensed” behavioral health professional, and “with established competence and clinical expertise in the assessment and treatment of gender dysphoria”. (sk)
- 11/10/20 Medical Director review. Policy title changed from “Gender Confirmation Surgery and Hormone Therapy” to “Gender Affirmation Surgery and Hormone Therapy”. The word “confirmation” changed to “affirmation” throughout the policy. In the When Covered section, Candidate Criteria for Adults and Adolescents age 18 years and older, criteria 2, wording changed from “the desire to live and be accepted as a member of the opposite sex” to “A strong conviction to live as some alternative gender different from one’s assigned gender”. In the When Covered section, Candidate Criteria for Children and Adolescents under age 18 years, criteria 1a, wording changed from “the desire to live and be accepted as a member of the opposite sex” to “A strong conviction to live as some alternative gender different from one’s assigned gender”. When Covered section updated to include information on medically necessary hair removal prior to genital surgery. References updated. (sk)
- 3/23/21 Medical Director review. Removed “That the candidate has, intends to, or is in the process of acquiring a legal gender-identity appropriate name change and” from the list of Provider Documentation Criteria for Gender Affirmation Surgery. (sk)

---

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.

# **EXHIBIT 10**

--&gt;

[\(https://www.aetna.com/\)](https://www.aetna.com/)

# Gender Affirming Surgery

[Clinical Policy Bulletins](#) | [Medical Clinical Policy Bulletins](#)**Number: 0615**

## Policy

Aetna considers gender affirming surgery medically necessary when all of the following criteria are met:

### I. Requirements for breast removal:

- A. Single letter of referral from a qualified mental health professional (see Appendix); *and*
- B. Persistent, well-documented gender dysphoria (see Appendix); *and*
- C. Capacity to make a fully informed decision and to consent for treatment; *and*
- D. For members less than 18 years of age, completion of one year of testosterone treatment; *and*
- E. If significant medical or mental health concerns are present, they must be reasonably well controlled.

**Note:** A trial of hormone therapy is not a pre-requisite to qualifying for a mastectomy in adults.

### II. Requirements for breast augmentation (implants/lipofilling):

## Policy History

[Last Review](#)

01/12/2021

Effective: 05/14/2002

Next Review: 06/24/2021

[Review History](#) [Definitions](#)

## Additional Information

[Clinical Policy Bulletin](#)[Notes](#)

## State Information

[California](#) **Exhibit  
0030**9/30/2021  
Dr. Lappert

- A. Single letter of referral from a qualified mental health professional (see Appendix); *and*
- B. Persistent, well-documented gender dysphoria (see Appendix); *and*
- C. Capacity to make a fully informed decision and to consent for treatment; *and*
- D. Member is 18 years of age or older; *and*
- E. Completion of one year of feminizing hormone therapy prior to breast augmentation surgery (unless the member has a medical contraindication or is otherwise medically unable to take hormones); *and*
- F. If significant medical or mental health concerns are present, they must be reasonably well controlled.

**Note:** More than one breast augmentation is considered not medically necessary. This does not include the medically necessary replacement of breast implants (see [CPB 0142 - Breast Implant Removal \(. /100\\_199/0142.html\)](#))).

III. Requirements for gonadectomy (hysterectomy and oophorectomy or orchiectomy):

- A. Two referral letters from qualified mental health professionals, one in a purely evaluative role (see appendix); *and*
- B. Persistent, well-documented gender dysphoria (see Appendix); *and*
- C. Capacity to make a fully informed decision and to consent for treatment; *and*
- D. Age 18 years or older; *and*
- E. If significant medical or mental health concerns are present, they must be reasonably well controlled; *and*
- F. Twelve months of continuous hormone therapy as appropriate to the member's gender goals (unless the member has a medical contraindication or is otherwise unable or unwilling to take hormones).

IV. Requirements for genital reconstructive surgery (i.e., vaginectomy, urethroplasty, metoidioplasty, phalloplasty, scrotoplasty, placement of a testicular prosthesis and erectile prosthesis,

penectomy, vaginoplasty, labiaplasty, and clitoroplasty)

- A. Two referral letters from qualified mental health professionals, one in a purely evaluative role (see appendix); *and*
- B. Persistent, well-documented gender dysphoria (see Appendix); *and*
- C. Capacity to make a fully informed decision and to consent for treatment; *and*
- D. Age 18 years and older; *and*
- E. If significant medical or mental health concerns are present, they must be reasonably well controlled; *and*
- F. Twelve months of continuous hormone therapy as appropriate to the member's gender goals (unless the member has a medical contraindication or is otherwise unable or unwilling to take hormones); *and*
- G. Twelve months of living in a gender role that is congruent with their gender identity (real life experience).

**Note on gender specific services for the transgender community:**

Gender-specific services may be medically necessary for transgender persons appropriate to their anatomy. Examples include:

1. Breast cancer screening may be medically necessary for transmasculine persons who have not undergone chest masculinization surgery;
2. Prostate cancer screening may be medically necessary for transfeminine persons who have retained their prostate.

Aetna considers gonadotropin-releasing hormone medically necessary to suppress puberty in trans identified adolescents if they meet World Professional Association for Transgender Health (WPATH) criteria (see [CPB 0501 - Gonadotropin-Releasing Hormone Analogs and Antagonists \(../500\\_599/0501.html\)](#)).

Aetna considers reversal of gender affirming surgery for gender dysphoria not medically necessary.

Aetna considers the following procedures that may be performed as a component of a gender transition as cosmetic (not an all-inclusive list) (see also [CPB 0031 - Cosmetic Surgery \(./1\\_99/0031.html\)](#)):

- Abdominoplasty
- Blepharoplasty
- Body contouring (liposuction of waist)
- Brow lift
- Calf implants
- Cheek/malar implants
- Chin/nose implants
- Collagen injections
- Construction of a clitoral hood
- Drugs for hair loss or growth
- Face lifting
- Facial bone reduction
- Facial feminization and masculinization surgery
- Feminization of torso
- Forehead lift
- Jaw reduction (jaw contouring)
- Hair removal (e.g., electrolysis, laser hair removal) (Exception:  
A limited number of electrolysis or laser hair removal sessions are considered medically necessary for skin graft preparation for genital surgery)
- Hair transplantation
- Lip enhancement
- Lip reduction
- Liposuction
- Masculinization of torso
- Mastopexy
- Neck tightening
- Nipple reconstruction
- Nose implants
- Pectoral implants
- Pitch-raising surgery
- Removal of redundant skin
- Rhinoplasty
- Skin resurfacing (dermabrasion/chemical peel)



- Tracheal shave (reduction thyroid chondroplasty)
- Voice modification surgery (laryngoplasty, cricothyroid approximation or shortening of the vocal cords)
- Voice therapy/voice lessons.

## Background

Gender dysphoria refers to discomfort or distress that is caused by a discrepancy between an individual's gender identity and the gender assigned at birth (and the associated gender role and/or primary and secondary sex characteristics). A diagnosis of gender dysphoria requires a marked difference between the individual's expressed/experienced gender and the gender others would assign him or her, and it must continue for at least six months. This condition may cause clinically significant distress or impairment in social, occupational or other important areas of functioning.

Gender affirming surgery is performed to change primary and/or secondary sex characteristics. For transfeminine (assigned male at birth) gender transition, surgical procedures may include genital reconstruction (vaginoplasty, penectomy, orchidectomy, clitoroplasty), breast augmentation (implants, lipofilling), and cosmetic surgery (facial reshaping, rhinoplasty, abdominoplasty, thyroid chondroplasty (laryngeal shaving), voice modification surgery (vocal cord shortening), hair transplants) (Day, 2002). For transmasculine (assigned female at birth) gender transition, surgical procedures may include mastectomy, genital reconstruction (phalloplasty, genitoplasty, hysterectomy, bilateral oophorectomy), mastectomy, and cosmetic procedures to enhance male features such as pectoral implants and chest wall recontouring (Day, 2002).

The criterion noted above for some types of genital surgeries – i.e., that patients engage in 12 continuous months of living in a gender role that is congruent with their gender identity – is based on expert clinical consensus that this experience provides ample opportunity for patients to experience and socially adjust in their desired gender role, before undergoing irreversible surgery (Coleman, et al., 2011).

It is recommended that transfeminine persons undergo feminizing hormone therapy (minimum 12 months) prior to breast augmentation surgery. The purpose is to maximize breast growth in order to obtain better surgical (aesthetic) results.

In addition to hormone therapy and gender affirming surgery, psychological adjustments are necessary in affirming sex. Treatment should focus on psychological adjustment, with hormone therapy and gender affirming surgery being viewed as confirmatory procedures dependent on adequate psychological adjustment. Mental health care may need to be continued after gender affirming surgery. The overall success of treatment depends partly on the technical success of the surgery, but more crucially on the psychological adjustment of the trans identified person and the support from family, friends, employers and the medical profession.

Nakatsuka (2012) noted that the third versions of the guideline for treatment of people with gender dysphoria (GD) of the Japanese Society of Psychiatry and Neurology recommends that feminizing/masculinizing hormone therapy and genital surgery should not be carried out until 18 years old and 20 years old, respectively. On the other hand, the sixth (2001) and the seventh (2011) versions of the standards of care for the health of transsexual, transgender, and gender non-conforming people of World Professional Association for Transgender Health (WPATH) recommend that transgender adolescents (Tanner stage 2, [mainly 12 to 13 years of age]) are treated by the endocrinologists to suppress puberty with gonadotropin-releasing hormone (GnRH) agonists until age 16 years old, after which gender-affirming hormones may be given. A questionnaire on 181 people with GID diagnosed in the Okayama University Hospital (Japan) showed that female to male (FTM) trans identified individuals hoped to begin masculinizing hormone therapy at age of 15.6 +/- 4.0 (mean +/- S.D.) whereas male to female (MTF) trans identified individuals hoped to begin feminizing hormone therapy as early as age 12.5 +/- 4.0, before presenting secondary sex characters. After confirmation of strong and persistent trans gender identification, adolescents with GD should be treated with gender-affirming hormone or puberty-delaying hormone to prevent developing undesired sex

characters. These treatments may prevent transgender adolescents from attempting suicide, suffering from depression, and refusing to attend school.

Spack (2013) stated that GD is poorly understood from both mechanistic and clinical standpoints. Awareness of the condition appears to be increasing, probably because of greater societal acceptance and available hormonal treatment. Therapeutic options include hormone and surgical treatments but may be limited by insurance coverage because costs are high. For patients seeking MTF affirmation, hormone treatment includes estrogens, finasteride, spironolactone, and GnRH analogs. Surgical options include feminizing genital and facial surgery, breast augmentation, and various fat transplantations. For patients seeking a FTM gender affirmation, medical therapy includes testosterone and GnRH analogs and surgical therapy includes mastectomy and phalloplasty. Medical therapy for both FTM and MTF can be started in early puberty, although long-term effects are not known. All patients considering treatment need counseling and medical monitoring.

Leinung and colleagues (2013) noted that the Endocrine Society's recently published clinical practice guidelines for the treatment of transgender persons acknowledged the need for further information on transgender health. These investigators reported the experience of one provider with the endocrine treatment of transgender persons over the past 2 decades. Data on demographics, clinical response to treatment, and psychosocial status were collected on all transgender persons receiving gender-affirming hormone therapy since 1991 at the endocrinology clinic at Albany Medical Center, a tertiary care referral center serving upstate New York. Through 2009, a total 192 MTF and 50 FTM transgender persons were seen. These patients had a high prevalence of mental health and psychiatric problems (over 50 %), with low rates of employment and high levels of disability. Mental health and psychiatric problems were inversely correlated with age at presentation. The prevalence of gender affirming surgery was low (31 % for MTF). The number of persons seeking treatment has increased substantially in recent years. Gender-affirming hormone therapy achieves very good results in FTM persons and is most successful in MTF persons when initiated at younger ages. The authors concluded that transgender persons seeking hormonal therapy are being seen with increasing

frequency. The dysphoria present in many transgender persons is associated with significant mood disorders that interfere with successful careers. They stated that starting therapy at an earlier age may lessen the negative impact on mental health and lead to improved social outcomes.

Meyer-Bahlburg (2013) summarized for the practicing endocrinologist the current literature on the psychobiology of the development of gender identity and its variants in individuals with disorders of sex development or with transgenderism. Gender reassignment remains the treatment of choice for strong and persistent gender dysphoria in both categories, but more research is needed on the short-term and long-term effects of puberty-suppressing medications and cross-sex hormones on brain and behavior.

### Irreversible Surgical Interventions for Minors

The World Professional Association for Transgender Health (WPATH) recommendations version 7 (Coleman, et al., 2011) states, regarding irreversible surgical interventions, that "[g]enital surgery should not be carried out until (i) patients reach the legal age of majority in a given country, and (ii) patients have lived continuously for at least 12 months in the gender role that is congruent with their gender identity. The age threshold should be seen as a minimum criterion and not an indication in and of itself for active intervention." The WPATH guidelines state that "Chest surgery in FtM patients could be carried out earlier, preferably after ample time of living in the desired gender role and after one year of testosterone treatment. The intent of this suggested sequence is to give adolescents sufficient opportunity to experience and socially adjust in a more masculine gender role, before undergoing irreversible surgery. However, different approaches may be more suitable, depending on an adolescent's specific clinical situation and goals for gender identity expression."

### Note on Breast Reduction/Mastectomy and Nipple Reconstruction

The CPT codes for mastectomy (CPT codes 19303 and 19304) are for breast cancer, and are not appropriate to bill for reduction mammoplasty for female to male (transmasculine) gender affirmation surgery. CPT 2020

states that "Mastectomy procedures (with the exception of gynecomastia [19300]) are performed either for treatment or prevention of breast cancer." CPT 2020 also states that "Code 19303 describes total removal of ipsilateral breast tissue with or without removal of skin and/or nipples (eg, nipple-sparing), for treatment or prevention of breast cancer." There are important differences between a mastectomy for breast cancer and a mastectomy for gender reassignment. The former requires careful attention to removal of all breast tissue to reduce the risk of cancer. By contrast, careful removal of all breast tissue is not essential in mastectomy for gender reassignment. In mastectomy for gender reassignment, the nipple areola complex typically can be preserved.

Some have tried to justify routinely billing CPT code 19350 for nipple reconstruction at the time of mastectomy for gender reassignment based upon the frequent need to reduce the size of the areola to give it a male appearance. However, the nipple reconstruction as defined by CPT code 19350 describes a much more involved procedure than areola reduction. The typical patient vignette for CPT code 19350, according to the AMA, is as follows: "The patient is measured in the standing position to ensure even balanced position for a location of the nipple and areola graft on the right breast. Under local anesthesia, a Skate flap is elevated at the site selected for the nipple reconstruction and constructed. A full-thickness skin graft is taken from the right groin to reconstruct the areola. The right groin donor site is closed primarily in layers."

The AMA vignette for CPT code 19318 (reduction mammoplasty) clarifies that this CPT code includes the work that is necessary to reposition and reshape the nipple to create an aesthetically pleasing result, as is necessary in female to male breast reduction. "The physician reduces the size of the breast, removing wedges of skin and breast tissue from a female patient. The physician makes a circular skin incision above the nipple, in the position to which the nipple will be elevated. Another skin incision is made around the circumference of the nipple. Two incisions are made from the circular cut above the nipple to the fold beneath the breast, one on either side of the nipple, creating a keyhole shaped skin and breast incision. Wedges of skin and breast tissue are removed until the desired size is achieved. Bleeding vessels may be ligated or cauterized. The physician elevates the nipple and its pedicle of subcutaneous tissue to its new position and sutures the nipple pedicle

with layered closure. The remaining incision is repaired with layered closure" (EncoderPro, 2019). CPT code 19350 does not describe the work that that is being done, because that code describes the actual construction of a new nipple.

Thus, Aetna considers nipple reconstruction, as defined by CPT code 19350, as cosmetic/not medically necessary for mastectomy for transmasculine gender reassignment, and that CPT code 19318 includes the extra work that may be necessary to reshape the nipple and create an aesthetically pleasing male chest.

### **Vulvoplasty versus Vaginoplasty as Gender-Affirming Genital Surgery for Transgender Women**

Jiang and colleagues (2018) noted that gender-affirming vaginoplasty aims to create the external female genitalia (vulva) as well as the internal vaginal canal; however, not all patients desire nor can safely undergo vaginal canal creation. These investigators described the factors influencing patient choice or surgeon recommendation of vulvoplasty (creation of the external appearance of female genitalia without creation of a neovaginal canal) and evaluated the patient's satisfaction with this choice. Gender-affirming genital surgery consults were reviewed from March 2015 until December 2017, and patients scheduled for or who had completed vulvoplasty were interviewed by telephone. These investigators reported demographic data and the reasons for choosing vulvoplasty as gender-affirming surgery for patients who either completed or were scheduled for surgery, in addition to patient reports of satisfaction with choice of surgery, satisfaction with the surgery itself, and sexual activity after surgery. A total of 486 patients were seen in consultation for trans-feminine gender-affirming genital surgery: 396 requested vaginoplasty and 39 patients requested vulvoplasty; 30 Patients either completed or are scheduled for vulvoplasty. Vulvoplasty patients were older and had higher body mass index (BMI) than those seeking vaginoplasty. The majority (63 %) of the patients seeking vulvoplasty chose this surgery despite no contraindications to vaginoplasty. The remaining patients had risk factors leading the surgeon to recommend vulvoplasty. Of those who completed surgery, 93 % were satisfied with the surgery and their decision for vulvoplasty. The authors concluded that this was the first study of factors impacting a patient's choice of or a

surgeon's recommendation for vulvoplasty over vaginoplasty as gender-affirming genital surgery; it also was the first reported series of patients undergoing vulvoplasty only.

Drawbacks of this study included its retrospective nature, non-validated questions, short-term follow-up, and selection bias in how vulvoplasty was offered. Vulvoplasty is a form of gender-affirming feminizing surgery that does not involve creation of a neovagina, and it is associated with high satisfaction and low decision regret.

#### Autologous Fibroblast-Seeded Amnion for Reconstruction of Neovagina in Transfeminine Reassignment Surgery

Seyed-Foroootan and colleagues (2018) stated that plastic surgeons have used several methods for the construction of neo-vaginas, including the utilization of penile skin, free skin grafts, small bowel or recto-sigmoid grafts, an amnion graft, and cultured cells. These researchers compared the results of amnion grafts with amnion seeded with autograft fibroblasts. Over 8 years, these investigators compared the results of 24 male-to-female transsexual patients retrospectively based on their complications and levels of satisfaction; 16 patients in group A received amnion grafts with fibroblasts, and the patients in group B received only amnion grafts without any additional cellular lining. The depths, sizes, secretions, and sensations of the vaginas were evaluated. The patients were monitored for any complications, including over-secretion, stenosis, stricture, fistula formation, infection, and bleeding. The mean age of group A was  $28 \pm 4$  years and group B was  $32 \pm 3$  years. Patients were followed-up from 30 months to 8 years (mean of  $36 \pm 4$ ) after surgery.

The depth of the vaginas for group A was 14 to 16 and 13 to 16 cm for group B. There was no stenosis in neither group. The diameter of the vaginal opening was 34 to 38 mm in group A and 33 to 38 cm in group B.

These researchers only had 2 cases of stricture in the neo-vagina in group B, but no stricture was recorded for group A. All of the patients had good and acceptable sensation in the neo-vagina; 75 % of patients had sexual experience and of those, 93.7 % in group A and 87.5% in group B expressed satisfaction. The authors concluded that the creation of a neo-vaginal canal and its lining with allograft amnion and seeded autologous fibroblasts is an effective method for imitating a normal vagina. The size of neo-vagina, secretion, sensation, and orgasm was good and proper.

More than 93.7 % of patients had satisfaction with sexual intercourse.

They stated that amnion seeded with fibroblasts extracted from the patient's own cells will result in a vagina with the proper size and moisture that can eliminate the need for long-term dilatation. The constructed vagina has a 2-layer structure and is much more resistant to trauma and laceration. No cases of stenosis or stricture were recorded. Level of Evidence = IV. These preliminary findings need to be validated by well-designed studies.

### Pitch-Raising Surgery in Transfeminine Persons

Van Damme and colleagues (2017) reviewed the evidence of the effectiveness of pitch-raising surgery performed in male-to-female transsexuals. These investigators carried out a search for studies in PubMed, Web of Science, Science Direct, EBSCOhost, Google Scholar, and the references in retrieved manuscripts, using as keywords "transsexual" or "transgender" combined with terms related to voice surgery. They included 8 studies using cricothyroid approximation, 6 studies using anterior glottal web formation, and 6 studies using other surgery types or a combination of surgical techniques, leading to 20 studies in total. Objectively, a substantial rise in post-operative fundamental frequency was identified. Perceptually, mainly laryngeal web formation appeared risky for decreasing voice quality. The majority of patients appeared satisfied with the outcome. However, none of the studies used a control group and randomization process. The authors concluded that future research needs to investigate long-term effects of pitch-raising surgery using a stronger study design.

Azul and associates (2017) evaluated the currently available discursive and empirical data relating to those aspects of trans-masculine people's vocal situations that are not primarily gender-related, and identified restrictions to voice function that have been observed in this population, and made suggestions for future voice research and clinical practice. These researchers conducted a comprehensive review of the voice literature. Publications were identified by searching 6 electronic databases and bibliographies of relevant articles. A total of 22 publications met inclusion criteria. Discourses and empirical data were analyzed for factors and practices that impact on voice function and for indications of voice function-related problems in trans-masculine people.



The quality of the evidence was appraised. The extent and quality of studies investigating trans-masculine people's voice function was found to be limited. There was mixed evidence to suggest that trans-masculine people might experience restrictions to a range of domains of voice function, including vocal power, vocal control/stability, glottal function, pitch range/variability, vocal endurance, and voice quality. The authors concluded that more research into the different factors and practices affecting trans-masculine people's voice function that took account of a range of parameters of voice function and considered participants' self-evaluations is needed to establish how functional voice production can be best supported in this population.

### Facial Feminization Surgery

Raffaini and colleagues (2016) stated that gender dysphoria refers to the discomfort and distress that arise from a discrepancy between a person's gender identity and sex assigned at birth. The treatment plan for gender dysphoria varies and can include psychotherapy, hormone treatment, and gender affirmation surgery, which is, in part, an irreversible change of sexual identity. Procedures for transformation to the female sex include facial feminization surgery, vaginoplasty, clitoroplasty, and breast augmentation. Facial feminization surgery can include forehead re-modeling, rhinoplasty, mentoplasty, thyroid chondroplasty, and voice alteration procedures. These investigators reported patient satisfaction following facial feminization surgery, including outcome measurements after forehead slippage and chin re-modeling. A total of 33 patients between 19 and 40 years of age were referred for facial feminization surgery between January of 2003 and December of 2013, for a total of 180 procedures. Surgical outcome was analyzed both subjectively through questionnaires administered to patients and objectively by serial photographs. Most facial feminization surgery procedures could be safely completed in 6 months, barring complications. All patients showed excellent cosmetic results and were satisfied with their procedures. Both frontal and profile views achieved a loss of masculine features. The authors concluded that patient satisfaction following facial feminization surgery was high; they stated that the reduction of gender dysphoria had psychological and social benefits and significantly affected patient outcome. The level of evidence of this study was IV.

Morrison and associates (2018) noted that facial feminization surgery encompasses a broad range of cranio-maxillofacial surgical procedures designed to change masculine facial features into feminine features. The surgical principles of facial feminization surgery could be applied to male-to-female transsexuals and anyone desiring feminization of the face.

Although the prevalence of these procedures is difficult to quantify, because of the rising prevalence of transgenderism (approximately 1 in 14,000 men) along with improved insurance coverage for gender-confirming surgery, surgeons versed in techniques, outcomes, and challenges of facial feminization surgery are needed. These researchers appraised the current facial feminization surgery literature. They carried out a comprehensive literature search of the Medline, PubMed, and Embase databases was conducted for studies published through October 2014 with multiple search terms related to facial feminization. Data on techniques, outcomes, complications, and patient satisfaction were collected. A total of 15 articles were selected and reviewed from the 24 identified, all of which were either retrospective or case series/reports. Articles covered a variety of facial feminization procedures. A total of 1,121 patients underwent facial feminization surgery, with 7 complications reported, although many articles did not explicitly comment on complications. Satisfaction was high, although most studies did not use validated or quantified approaches to address satisfaction. The authors concluded that facial feminization surgery appeared to be safe and satisfactory for patients. These researchers stated that further studies are needed to better compare different techniques to more robustly establish best practices; prospective studies and patient-reported outcomes are needed to establish quality-of-life (QOL) outcomes for patients.

### Reversal of Gender Affirming Surgery for Gender Dysphoria

The WPATH Standards of Care (SOC) for the Health of Transsexual, Transgender, and Gender Nonconforming Peoples describe reversible and irreversible interventions, and the ideal order and timing of these approaches. Surgery as an intervention is considered irreversible by WPATH.

## Appendix

### DSM 5 Criteria for Gender Dysphoria in Adults and Adolescents

- I. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months duration, as manifested by two or more of the following:
  - A. A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics (or, in young adolescents, the anticipated secondary sex characteristics)
  - B. A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender (or, in young adolescents, a desire to prevent the development of the anticipated secondary sex characteristics)
  - C. A strong desire for the primary and/or secondary sex characteristics of the other gender
  - D. A strong desire to be of the other gender (or some alternative gender different from one's assigned gender)
  - E. A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender)
  - F. A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender)
- II. The condition is associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning.

### Format for referral letters from Qualified Health Professional: (From SOC-7)

1. Client's general identifying characteristics; *and*
2. Results of the client's psychosocial assessment, including any diagnoses; *and*
3. The duration of the mental health professional's relationship with the client, including the type of evaluation and therapy or counseling to date; *and*

4. An explanation that the WPATH criteria for surgery have been met, and a brief description of the clinical rationale for supporting the patient's request for surgery; *and*
5. A statement about the fact that informed consent has been obtained from the patient; *and*
6. A statement that the mental health professional is available for coordination of care and welcomes a phone call to establish this.

**Note:** There is no minimum duration of relationship required with mental health professional. It is the professional's judgment as to the appropriate length of time before a referral letter can appropriately be written. A common period of time is three months, but there is significant variation in both directions. When two letters are required, the second referral is intended to be an evaluative consultation, not a representation of an ongoing long-term therapeutic relationship, and can be written by a medical practitioner of sufficient experience with gender dysphoria.

**Note:** Evaluation of candidacy for gender affirmation surgery by a mental health professional is covered under the member's medical benefit, unless the services of a mental health professional are necessary to evaluate and treat a mental health problem, in which case the mental health professional's services are covered under the member's behavioral health benefit. Please check benefit plan descriptions.

#### Characteristics of a Qualified Mental Health Professional: (From SOC-7)

1. Master's degree or equivalent in a clinical behavioral science field granted by an institution accredited by the appropriate national accrediting board. The professional should also have documented credentials from the relevant licensing board or equivalent; *and*
2. Competence in using the Diagnostic Statistical Manual of Mental Disorders and/or the International Classification of Disease for diagnostic purposes; *and*
3. Ability to recognize and diagnose co-existing mental health concerns and to distinguish these from gender dysphoria; *and*
4. Knowledgeable about gender nonconforming identities and expressions, and the assessment and treatment of gender dysphoria; *and*

5. Continuing education in the assessment and treatment of gender dysphoria. This may include attending relevant professional meetings, workshops, or seminars; obtaining supervision from a mental health professional with relevant experience; or participating in research related to gender nonconformity and gender dysphoria.

## CPT Codes / HCPCS Codes / ICD-10 Codes

*Information in the [brackets] below has been added for clarification purposes. Codes requiring a 7th character are represented by "+".*

Code	Code Description
CPT codes covered if selection criteria are met:	
<i>Laser hair removal - no specific code</i>	
17380	Electrolysis epilation, each 30 minutes
19318	Reduction mammoplasty
19324 - 19325	Mammoplasty, augmentation
19340	Immediate insertion of breast prosthesis following mastopexy, mastectomy or in reconstruction
19342	Delayed insertion of breast prosthesis following mastopexy, mastectomy or in reconstruction
53430	Urethroplasty, reconstruction of female urethra
54125	Amputation of penis; complete
54400 - 54417	Penile prosthesis
54520	Orchiectomy, simple (including subcapsular), with or without testicular prosthesis, scrotal or inguinal approach
54660	Insertion of testicular prosthesis (separate procedure)
54690	Laparoscopic, surgical; orchiectomy
55175	Scrotoplasty; simple
55180	complicated
55970	Intersex surgery; male to female [a series of staged procedures that includes male genitalia removal, penile dissection, urethral transposition, creation of vagina and labia with stent placement]

Code	Code Description
55980	female to male [a series of staged procedures that include penis and scrotum formation by graft, and prostheses placement]
56625	Vulvectomy simple; complete
56800	Plastic repair of introitus
56805	Clitoroplasty for intersex state
56810	Perineoplasty, repair of perineum, nonobstetrical (separate procedure)
57106 - 57107, 57110 - 57111	Vaginectomy
57291 - 57292	Construction of artificial vagina
57335	Vaginoplasty for intersex state
58150, 58180, 58260 - 58262, 58275 - 58291, 58541 - 58544, 58550 - 58554	Hysterectomy
58570 - 58573	Laparoscopy, surgical, with total hysterectomy
58661	Laparoscopy, surgical; with removal of adnexal structures (partial or total oophorectomy and/or salpingectomy)
58720	Salpingo-oophorectomy, complete or partial, unilateral or bilateral
CPT codes not covered for indications listed in the CPB [considered cosmetic]:	
<i>Tracheal shave</i> - no specific code:	
11950 - 11954	Subcutaneous injection of filling material (e.g., collagen)
15200	Full thickness graft, free, including direct closure of donor site, trunk; 20 sq cm or less [nipple reconstruction]
15775	Punch graft for hair transplant; 1 to 15 punch grafts
15776	Punch graft for hair transplant; more than 15 punch grafts
15780 - 15787	Dermabrasion

Code	Code Description
15788 - 15793	Chemical peel
15820 - 15823	Blepharoplasty
15824 - 15828	Rhytidectomy [face-lifting]
15830 - 15839	Excision, excessive skin and subcutaneous tissue (includes lipectomy); abdomen, infraumbilical panniculectomy
15876 - 15879	Suction assisted lipectomy
17380	Electrolysis epilation, each 30 minutes
19301	Mastectomy, partial (eg, lumpectomy, tylectomy, quadrantectomy, segmentectomy)
19303	Mastectomy, simple, complete
19316	Mastopexy
19350	Nipple/areola reconstruction
21087	Nasal prosthesis
21120 - 21123	Genioplasty
21125 - 21127	Augmentation, mandibular body or angle; prosthetic material or with bone graft, onlay or interpositional (includes obtaining autograft)
21193	Reconstruction of mandibular rami, horizontal, vertical, C, or L osteotomy; without bone graft
21194	with bone graft (includes obtaining graft)
21195	Reconstruction of mandibular rami and/or body, sagittal split; without internal rigid fixation
21196	with internal rigid fixation
21208	Osteoplasty, facial bones; augmentation (autograft, allograft, or prosthetic implant)
21210	Graft, bone; nasal, maxillary or malar areas (includes obtaining graft)
21270	Malar augmentation, prosthetic material
30400 - 30420	Rhinoplasty; primary
30430 - 30450	Rhinoplasty; secondary

Code	Code Description
67900	Repair of brow ptosis (supraciliary, mid-forehead or coronal approach)
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual
92508	Treatment of speech, language, voice, communication, and/or auditory processing disorder; group, two or more individuals
<b>Other CPT codes related to the CPB:</b>	
11980	Subcutaneous hormone pellet implantation (implantation of estradiol and/or testosterone pellets beneath the skin)
+90785	Interactive complexity (List separately in addition to the code for primary procedure)
90832 - 90838	Psychotherapy
96372	Therapeutic, prophylactic, or diagnostic injection (specify substance of drug); subcutaneous or intramuscular
<b>HCPCS codes covered if selection criteria are met:</b>	
C1813	Prosthesis, penile, inflatable
C2622	Prosthesis, penile, non-inflatable
J1071	Injection, testosterone cypionate, 1 mg
J3121	Injection, testosterone enanthate, 1 mg
J3145	Injection, testosterone undecanoate, 1 mg
J1950	Injection, leuprolide acetate (for depot suspension), per 3.75 mg
J9202	Goserelin acetate implant, per 3.6 mg
J9217	Leuprolide acetate (for depot suspension), 7.5 mg
J9218	Leuprolide acetate, per 1 mg
J9219	Leuprolide acetate implant, 65 mg
S0189	Testosterone pellet, 75 mg
<b>HCPCS codes not covered for indications listed in the CPB:</b>	
G0153	Services performed by a qualified speech-language pathologist in the home health or hospice setting, each 15 minutes
S9128	Speech therapy, in the home, per diem
<b>ICD-10 codes covered if selection criteria are met:</b>	
F64.0 - F64.1	Transsexualism and dual role transvestism



Code	Code Description
F64.8	Other gender identity disorders
F64.9	Gender identity disorder, unspecified
Z87.890	Personal history of sex reassignment
ICD-10 codes not covered for indications listed in the CPB:	
F64.2	Gender identity disorder of childhood

### The above policy is based on the following references:

1. Almazan AN, Boskey ER, Labow B, Ganor O. Insurance policy trends for breast surgery in cisgender women, cisgender men, and transgender men. *Plast Reconstr Surg*. 2019;144(2):334e-336e.
2. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Arlington, VA: American Psychiatric Publishing; 2013.
3. Azul D, Nygren U, Södersten M, Neuschaefer-Rube C. Transmasculine people's voice function: A review of the currently available evidence. *J Voice*. 2017;31(2):261.e9-261.e23.
4. Bowman C, Goldberg J. *Care of the Patient Undergoing Sex Reassignment Surgery*. Vancouver, BC: Vancouver Coastal Health, Transcend Transgender Support & Education Society, and the Canadian Rainbow Health Coalition; January 2006.
5. Buncamper ME, Honselaar JS, Bouman MB, et al. Aesthetic and functional outcomes of neovaginoplasty using penile skin in male-to-female transsexuals. *J Sex Med*. 2015;12(7):1626-1634.
6. Byne W, Bradley SJ, Coleman E, et al.; American Psychiatric Association Task Force on Treatment of Gender Identity Disorder. Report of the American Psychiatric Association Task Force on Treatment of Gender Identity Disorder. *Arch Sex Behav*. 2012;41(4):759-796.
7. Claes KEY, D'Arpa S, Monstrey SJ. Chest surgery for transgender and gender nonconforming individuals. *Clin Plast Surg*. 2018;45(3):369-380.

8. Colebunders B, Brondeel S, D'Arpa S, et al. An update on the surgical treatment for transgender patients. *Sex Med Rev.* 2017;5(1):103-109.
9. Coleman E, Adler R, Bockting W, et al. Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People. Version 7. Minneapolis, MN: World Professional Association for Transgender Health (WPATH); 2011.
10. Coleman E, Bockting W, Botzer M, et al. Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People, Version 7. *Int J Transgend.* 2011;13:165-232.
11. Day P. Trans-gender reassignment surgery. NZHTA Tech Brief Series. Christchurch, New Zealand: New Zealand Health Technology Assessment (NZHTA); 2002;1(1).
12. Djordjevic ML, Bizic MR, Duisin D, et al. Reversal surgery in regretful male-to-female transsexuals after sex reassignment surgery. *J Sex Med.* 2016;13(6):1000-1007.
13. Gooren LJG, Tangpricha V. Treatment of transsexualism. UpToDate [serial online]. Waltham, MA: UpToDate; reviewed April 2014.
14. Guan X, Bardawil E, Liu J, Kho R. Transvaginal natural orifice transluminal endoscopic surgery as a rescue for total vaginal hysterectomy. *J Minim Invasive Gynecol.* 2018;25(7):1135-1136.
15. Hembree et al. Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab.* 2009; 94(9):3132-3154.
16. Horbach SE, Bouman MB, Smit JM, et al. Outcome of vaginoplasty in male-to-female transgenders: A systematic review of surgical techniques. *J Sex Med.* 2015;12(6):1499-1512.
17. Jiang D, Witten J, Berli J, Dugi D 3rd. Does depth matter? Factors affecting choice of vulvoplasty over vaginoplasty as gender-affirming genital surgery for transgender women. *J Sex Med.* 2018;15(6):902-906.
18. Kaariainen M, Salonen K, Helminen M, Karhunen-Enckell U. Chest-wall contouring surgery in female-to-male transgender patients: A one-center retrospective analysis of applied surgical techniques and results. *Scand J Surg.* 2016;106 (1):74-79.
19. Lawrence AA, Latty EM, Chivers ML, Bailey JM. Measurement of sexual arousal in postoperative male-to-female transsexuals

- using vaginal photoplethysmography. *Arch Sex Behav*. 2005;34(2):135-145.
20. Lawrence AA. Factors associated with satisfaction or regret following male-to-female sex reassignment surgery. *Arch Sex Behav*. 2003;32(4):299-315.
21. Lee YL, Hsu TF, Jiang LY, et al. Transvaginal natural orifice transluminal endoscopic surgery for female-to-male transgender men. *J Minim Invasive Gynecol*. 2019;26(1):135-142.
22. Leinung MC, Urizar MF, Patel N, Sood SC. Endocrine treatment of transsexual persons: Extensive personal experience. *Endocr Pract*. 2013;19(4):644-650.
23. Meriggiola MC, Jannini EA, Lenzi A, et al. Endocrine treatment of transsexual persons: An Endocrine Society Clinical Practice Guideline: Commentary from a European perspective. *Eur J Endocrinol*. 2010;162(5):831-833.
24. Meyer-Bahlburg HF. Sex steroids and variants of gender identity. *Endocrinol Metab Clin North Am*. 2013;42(3):435-452.
25. Miller TJ, Wilson SC, Massie JP, et al. Breast augmentation in male-to-female transgender patients: Technical considerations and outcomes. *JPRAS Open*. 2019;21:63-74.
26. Morrison SD, Vyas KS, Motakef S, et al. Facial feminization: Systematic review of the literature. *Plast Reconstr Surg*. 2016;137(6):1759-1770.
27. Nakatsuka M. [Adolescents with gender identity disorder: Reconsideration of the age limits for endocrine treatment and surgery]. *Seishin Shinkeigaku Zasshi*. 2012;114(6):647-653.
28. Ngaage LM, Knighton BJ, McGlone KL, et al. Health insurance coverage of gender-affirming top surgery in the United States. *Plast Reconstr Surg*. 2019;144(4):824-833.
29. Olson-Kennedy J, Warus J, Okonta V, et al. Chest reconstruction and chest dysphoria in transmasculine minors and young adults: Comparisons of nonsurgical and postsurgical cohorts. *JAMA Pediatr*. 2018;172(5):431-436.
30. Patel H, Arruvarana V, Yao L, et al. Effects of hormones and hormone therapy on breast tissue in transgender patients: A concise review. *Endocrine*. 2020 Feb 17. [Epub ahead of print]
31. Raffaini M, Magri AS, Agostini T. Full facial feminization surgery: Patient satisfaction assessment based on 180 procedures

- involving 33 consecutive patients. *Plast Reconstr Surg*. 2016;137(2):438-448..
32. Rafferty J; Committee on Psychosocial Aspects of Child and Family Health; Committee on Adolescence; Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness. Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents. *Pediatrics*. 2018;142(4).
33. Salgado CJ, Fein LA. Breast augmentation in transgender women and the lack of adherence amongst plastic surgeons to professional standards of care. *J Plast Reconstr Aesthet Surg*. 2015;68(10):1471-1472.
34. Sarikaya S, Ralph DJ. Mystery and realities of phalloplasty: A systematic review. *Turk J Urol*. 2017;43(3):229-236.
35. Schechter LS. Gender confirmation surgery: An update for the primary care provider. *Transgender Health*. 2016;1.1:32-40.
36. Seyed-Forootan K, Karimi H, Seyed-Forootan NS. Autologous fibroblast-seeded amnion for reconstruction of neo-vagina in male-to-female reassignment surgery. *Aesthetic Plast Surg*. 2018;42(2):491-497.
37. Smith YL, Cohen L, Cohen-Kettenis PT. Postoperative psychological functioning of adolescent transsexuals: A Rorschach study. *Arch Sex Behav*. 2002;31(3):255-261.
38. Spack NP. Management of transgenderism. *JAMA*. 2013;309(5):478-484.
39. Sutcliffe PA, Dixon S, Akehurst RL, et al. Evaluation of surgical procedures for sex reassignment: A systematic review. *J Plast Reconstr Aesthet Surg*. 2009;62(3):294-306; discussion 306-308.
40. Tonseth KA, Bjark T, Kratz G, et al. Sex reassignment surgery in transsexuals. *Tidsskr Nor Laegeforen*. 2010;130(4):376-379.
41. Tugnet N, Goddard JC, Vickery RM, et al. Current management of male-to-female gender identity disorder in the UK. *Postgrad Med J*. 2007;83(984):638-642.
42. UK National Health Service (NHS), Oxfordshire Primary Care Trust, South Central Priorities Committee. Treatments for gender dysphoria. Policy Statement 18c. Ref TV63. Oxford, UK: NHS; updated September 2009.
43. Van Damme S, Cosyns M, Deman S, et al. The effectiveness of pitch-raising surgery in male-to-female transsexuals: A systematic review. *J Voice*. 2017;31(2):244.e1-244.e5.

44. Wesp LM, Deutsch MB. Hormonal and surgical treatment options for transgender women and transfeminine spectrum persons. Psychiatr Clin North Am. 2017;40(1):99-111.



Copyright Aetna Inc. All rights reserved. Clinical Policy Bulletins are developed by Aetna to assist in administering plan benefits and constitute neither offers of coverage nor medical advice. This Clinical Policy Bulletin contains only a partial, general description of plan or program benefits and does not constitute a contract. Aetna does not provide health care services and, therefore, cannot guarantee any results or outcomes. Participating providers are independent contractors in private practice and are neither employees nor agents of Aetna or its affiliates. Treating providers are solely responsible for medical advice and treatment of members. This Clinical Policy Bulletin may be updated and therefore is subject to change.

Copyright © 2001-2021 Aetna Inc.

Language services can be provided by calling the number on your member ID card. For additional language assistance: [Español](#) | [中文](#) | [Tiếng Việt](#) | [한국어](#) | [Tagalog](#) | [Русский](#) | [العربية](#) | [Kreyòl](#) | [Français](#) | [Polski](#) | [Português](#) | [Italiano](#) | [Deutsch](#) | [日本語](#) | [فارسی](#) | [Other Languages...](#) | [Ⓜ \(http://www.aetna.com/individuals-families/contact-aetna/information-in-other-languages.html\)](http://www.aetna.com/individuals-families/contact-aetna/information-in-other-languages.html)

# **EXHIBIT 11**

# Medical Coverage Policy



Effective Date..... 5/18/2021  
Next Review Date..... 3/15/2022  
Coverage Policy Number ..... 0266

## Treatment of Gender Dysphoria

### Table of Contents

Overview .....	2
Coverage Policy.....	2
General Background.....	5
Medicare Coverage Determinations .....	7
Coding/Billing Information.....	8
References .....	12

### Related Coverage Resources

[Blepharoplasty, Reconstructive Eyelid Surgery, and Brow Lift - \(0045\)](#)  
[Breast Reconstruction Following Mastectomy or Lumpectomy - \(0178\)](#)  
[Dermabrasion and Chemical Peels - \(0505\)](#)  
[Endometrial Ablation - \(0013\)](#)  
[Histrelin Acetate Subcutaneous Implant - \(IP0133\)](#)  
[Infertility Injectables - \(1012\)](#) (e.g., Lupron)  
[Infertility Services](#)  
[Male Sexual Dysfunction Treatment: Non-pharmacologic - \(0403\)](#)  
[Oncology Medications - \(1403\)](#) (e.g., Lupron, Supprelin LA, Vantas, Zoladex)  
[Panniculectomy and Abdominoplasty - \(0027\)](#)  
[Pharmacy Prior Authorization - \(1407\)](#) (e.g., Lupron, Zoladex)  
[Preventive Care Services - \(A004\)](#)  
[Breast Reduction - \(0152\)](#)  
[Rhinoplasty, Vestibular Stenosis Repair and Septoplasty - \(0119\)](#)  
[Redundant Skin Surgery - \(0470\)](#)  
[Speech Therapy - \(0177\)](#)  
[Testosterone Therapy \(Injectables and Implantable Pellets\) - \(1503\)](#)  
[Triptorelin Pamoate - \(IP0134\)](#) (Triptodol)

### INSTRUCTIONS FOR USE

The following Coverage Policy applies to health benefit plans administered by Cigna Companies. Certain Cigna Companies and/or lines of business only provide utilization review services to clients and do not make coverage determinations. References to standard benefit plan language and coverage determinations do not apply to those clients. Coverage Policies are intended to provide guidance in interpreting certain standard benefit plans administered by Cigna Companies. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement, Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document always supersedes the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Each coverage request should be reviewed on its own merits. Medical directors are expected to exercise clinical judgment and have discretion in making individual coverage determinations. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations.

## Overview

This Coverage Policy addresses treatment of gender dysphoria. Gender dysphoria is defined as discomfort or distress that is caused by a discrepancy between a person's gender identity and the person's assigned sex at birth (World Professional Association for Transgender Health, [WPATH], 2012).

## Coverage Policy

**Coverage for treatment of gender dysphoria varies across plans. Coverage of drugs for hormonal therapy, as well as whether the drug is covered as a medical or a pharmacy benefit, varies across plans. Refer to the customer's benefit plan document for coverage details. In addition, coverage for treatment of gender dysphoria, including gender reassignment surgery and related services may be governed by state and/or federal mandates.<sup>1</sup>**

**Unless otherwise specified in a benefit plan, the following conditions of coverage apply for treatment of gender dysphoria and/or gender reassignment surgery and related procedures, including all applicable benefit limitations, precertification, or other medical necessity criteria.**

**Medically necessary treatment for an individual with gender dysphoria may include ANY of the following services, when services are available in the benefit plan:**

- Behavioral health services, including but not limited to, counseling for gender dysphoria and related psychiatric conditions (e.g., anxiety, depression)
- Hormonal therapy, including but not limited to androgens, anti-androgens, GnRH analogues\*, estrogens, and progestins (Prior authorization requirements may apply).  
    **\*Note:** If use in adolescents, individual should have reached Tanner stage 2 of puberty prior to receiving GnRH agonist therapy.
- Laboratory testing to monitor prescribed hormonal therapy
- Age-related, gender-specific services, including but not limited to preventive health, as appropriate to the individual's biological anatomy (e.g., cancer screening [e.g., cervical, breast, prostate]; treatment of a prostate medical condition)
- Gender reassignment and related surgery (see below).

### Gender Reassignment Surgery

**Gender reassignment surgery is considered medically necessary treatment of gender dysphoria when the individual is age 18 years or older and when the following criteria are met.**

**Note: For New York regulated benefit plans (e.g., insured): case-by-case review by a medical director for individuals under the age of 18 years of age will be given.**

- **For reconstructive chest surgery (i.e., initial mastectomy, breast augmentation):** one letter of support from a qualified mental health professional

**NOTE:** The Women's Health and Cancer Rights Act (WHCRA), 29 U.S. Code § 1185b requires coverage of certain post-mastectomy services related to breast reconstruction and treatment of physical complications from mastectomy including nipple-areola reconstruction.

- **For hysterectomy, salpingo-oophorectomy, orchiectomy:**
  - documentation of at least 12 months of continuous hormonal sex reassignment therapy, AND recommendation for sex reassignment surgery (i.e., genital surgery) by two qualified mental health professionals with written documentation submitted to the physician performing the genital surgery. If the first referral is from the individual's psychotherapist, the second referral should be from a person who has only had an evaluative role with the individual. Two separate letters, or one letter signed by both [for example, if practicing within the same clinic] are required.

---

<sup>1</sup> New York regulated benefit plans do not include exclusions or plan language that limit coverage.



- **For reconstructive genital surgery:**
  - documentation of at least 12 months of continuous hormonal sex reassignment therapy, AND
  - recommendation for sex reassignment surgery (i.e., genital surgery) by two qualified mental health professionals with written documentation submitted to the physician performing the genital surgery (If the first referral is from the individual's psychotherapist, the second referral should be from a person who has only had an evaluative role with the individual. Two separate letters, or one letter signed by both [for example, if practicing within the same clinic] are required AND
  - documentation the individual has lived for at least 12 continuous months in a gender role that is congruent with their gender identity

**Table 1: Gender Reassignment Surgery: Covered Under Standard Benefit Plan Language**

The procedures listed below are considered medically necessary under standard benefit plan language when the above listed criteria for gender reassignment surgery have been met, unless specifically excluded in the benefit plan language.

Procedure	CPT / HCPCS codes (This list may not be all inclusive)
<b>Female to Male reconstructive genital surgery:</b>	55980
Vaginectomy**/colpectomy	57110
Vulvectomy	56625
Metoidioplasty	58999
Phalloplasty	58999
Electrolysis of donor site tissue to be used for phalloplasty	17380
Penile prosthesis (noninflatable / inflatable), including surgical correction of malfunctioning pump, cylinders, or reservoir	54400, 54401, 54405, C1813, C2622
Urethroplasty /urethromeatoplasty	53430, 53450
Hysterectomy and salpingo-oophorectomy	58150, 58260, 58262, 58291, 58552, 58554, 58571, 58573, 58661
Scrotoplasty	55175, 55180
Insertion of testicular prosthesis	54660
Replacement of tissue expander with permanent prosthesis	11970
testicular insertion	11960, 11970, 11971, 54660
Testicular expanders, including replacement with prosthesis, testicular prosthesis	
<b>Female to Male reconstructive chest surgery:</b>	
Initial mastectomy	19303
Nipple-areola reconstruction (related to mastectomy or post mastectomy reconstruction)	19350*
Breast reduction	19318
Pectoral implants	L8600, 17999
<b>Male to Female reconstructive genital surgery:</b>	55970
Vaginoplasty**, (e.g, construction of vagina with/without graft, colovaginoplasty)	57291, 57292, 57335
Electrolysis of donor site tissue to be used to line the vaginal canal for vaginoplasty	17380
Penectomy	54125
Vulvoplasty, (e.g., labiaplasty, clitoroplasty, penile skin inversion)	56620, 56805
Repair of introitus	56800
	44145, 55899

Coloproctostomy Orchiectomy	54520, 54690
<b>Male to Female reconstructive chest surgery:</b>  Initial breast reconstruction including augmentation with implants	15771-15772 (when specific to breast), 19325, 19340, 19342, C1789

**\*Note:** CPT 19318 (breast reduction) includes the work necessary to reposition and reshape the nipple and areola. Therefore, CPT 19350 (nipple and areola reconstruction) is considered integral to CPT 19318. Thus, these two codes cannot be billed together for “mastectomy” for the purpose of gender reassignment. However, 19350 would be covered if requested along with 19303 as per the federal mandate.

**\*\*Note:** For individuals considering hysterectomy/salpingo-oophorectomy, orchiectomy, vaginectomy or vaginoplasty procedures a total of 12 months continuous hormonal sex reassignment therapy is required.

**Table 2: Gender Reassignment Surgery: Other Procedures**

The procedures listed below are considered not medically necessary under standard benefit plan language. However, some benefit plans may expressly cover some or all of the procedures listed below for gender reassignment surgery.

**Note:** For New York regulated benefit plans (e.g., insured): The procedures listed below will be further reviewed on a case-by-case basis by a medical director with particular consideration given to whether the proposed procedure(s) advance an individual’s ability to properly present and function in the identified gender role.

Facial Feminization/Masculinization Procedures	CPT/HCPCS Code
Blepharoplasty	15820, 15821, 15822, 15823
Brow lift	67900
Cheek/malar implants	17999
Chin/nose implants, chin recontouring	21210, 21270, 30400, 30410, 30420, 30430 30435, 30450
Collagen injections	11950, 11951, 11952, 11954
Face lift	15824, 15825, 15826, 15828, 15829
Forehead reduction and contouring	21137
Facial bone reduction (osteoplasty)	21209
Hair removal/hair transplantation	15775, 15776, 17380
Jaw reduction, contouring, augmentation	21120, 21121, 21122, 21123, 21125, 21127
Laryngoplasty	31599
Lip lift and lip filling	40799
Rhinoplasty	21210, 21270, 30400, 30410, 30420, 30430, 30435, 30450
Skin resurfacing (e.g., dermabrasion, chemical peels)	15780, 15781, 15782, 15783, 15786, 15787, 15788, 15789, 15792, 15793
Thyroid reduction chondroplasty	31750
Neck tightening	15825
Electrolysis, other than when performed pre-vaginoplasty as outlined above	17380
Removal of redundant skin when performed as part of facial reconstruction	15830, 15832, 15833, 15834, 15835, 15836 15837, 15838, 15839
Suction assisted lipoplasty, lipofilling, and/or liposuction	15830, 15832, 15833, 15834, 15835, 15836, 15837, 15838, 15839, 15876, 15877, 15878, 15879
Voice therapy/voice lessons	92507
Voice modification surgery	31599, 31899

## General Background

The causes of gender dysphoria and the developmental factors associated with them are not well-understood. Treatment of individuals with gender dysphoria varies, with some treatments involving a change in gender expression or body modification. The term “transsexual” refers to an individual whose gender identity is not congruent with their genetic and/or assigned sex and usually seeks hormone replacement therapy (HRT) and possibly gender-affirmation surgery to feminize or masculinize the body and who may live full-time in the crossgender role. Transsexualism is a form of gender dysphoria. Other differential diagnoses include, but are not limited to, partial or temporary disorders as seen in adolescent crisis, transvestitism, refusal to accept a homosexual orientation, psychotic misjudgments of gender identity and severe personality disorders (Becker, et al., 1998). Individuals that are transsexual, transgender, or gender nonconforming (i.e., gender identity differs from the cultural norm) may experience gender dysphoria.

Treatment of gender dysphoria is unique to each individual and may or may not involve body modification. Some individuals require only psychotherapy, some require a change in gender roles/expression, and others require hormone therapy and/or surgery to facilitate a gender transition.

### **Behavioral Health Services**

Licensing requirements and scope of practice vary by state for healthcare professionals. The recommended minimum credentials for a mental health professional to be qualified to evaluate or treat adult individuals with gender dysphoria has been defined in the literature. There is some consensus that in addition to general licensing requirements, a minimum of a Master's or more advanced degree from an accredited institution, an ability to recognize and diagnose coexisting mental health concerns, and an ability to distinguish such conditions from gender dysphoria is required.

Mental health professionals play a strong role in working with individuals with gender dysphoria as they need to diagnose the gender disorder and any co-morbid psychiatric conditions accurately, counsel the individual regarding treatment options, and provide psychotherapy (as needed) and assess eligibility and readiness for hormone and surgical therapy. For children and adolescents, the mental health professional should also be trained in child and adolescent developmental psychopathology.

Once the individual is evaluated, the mental health professional provides documentation and formal recommendations to medical and surgical specialists. Documentation for hormonal and/or surgery should be comprehensive and include the extent to which eligibility criteria have been met (i.e., confirmed gender dysphoria, capacity to make a fully informed decision, age ≥ 18 years or age of majority, and other significant medical or behavioral health concerns are well-controlled), in addition to the following:

- individual's general identifying characteristics
- the initial and evolving gender, sexual and psychiatric diagnoses
- details regarding the type and duration of psychotherapy or evaluation the individual received
- the mental health professional's rationale for hormone therapy or surgery
- the degree to which the individual has followed recommended medical management and likelihood of continued compliance
- whether or not the mental health professional is a part of a gender team

Psychiatric care may need to continue for several years after gender reassignment surgery, as major psychological adjustments may continue to be necessary. Other providers of care may include a family physician or internist, endocrinologist, urologist, plastic surgeon, general surgeon and gynecologist. The overall success of the surgery is highly dependent on psychological adjustment and continued support.

After diagnosis, the therapeutic approach is individualized but generally includes three elements: sex hormone therapy of the identified gender, real life experience in the desired role, and surgery to change the genitalia and other sex characteristics.

### **Hormonal Therapy**

For both adults and adolescents, hormonal treatment for gender dysphoria must be administered and monitored by a qualified healthcare practitioner as therapy requires ongoing medical management, including physical

examination and laboratory evaluation studies to manage dosage, side effects, etc. Lifelong maintenance is usually required.

**Adults:** Prior to and following gender reassignment surgery, individuals undergo hormone replacement therapy, unless medically contraindicated. Biological males are treated with estrogens and anti-androgens to increase breast size, redistribute body fat, soften skin, decrease body hair, and decrease testicular size and erections. Biological females are treated with androgens such as testosterone to deepen voice, increase muscle and bone mass, decrease breast size, increase clitoris size, and increase facial and body hair. In both sexes hormone replacement therapy (HRT) may be effective in reducing the adverse psychologic impact of gender dysphoria. Hormone therapy is usually initiated upon referral from a qualified mental health professional or a health professional competent in behavioral health and gender dysphoria treatment specifically. Twelve months of continuous hormone therapy (gender appropriate) is required prior to hysterectomy and salpingo-oophorectomy and orchiectomy.

**Adolescents:** For some adolescents the onset of puberty may worsen gender dysphoria. For these individuals puberty-suppressing hormones (e.g., GnRH analogues) may be provided to individuals who have reached at least Tanner stage 2 of sexual development (Hembree, et al., 2009; World Professional Association for Transgender health [WPATH], 2012). Consistent with adult hormone therapy, treatment of adolescents involves a multidisciplinary team, however when treating an adolescent a pediatric endocrinologist should be included as a part of the team. Pre-pubertal hormone suppression differs from hormone therapy used in adults and may not be without consequence; some pharmaceutical agents may cause negative physical side effects (e.g., height, bone growth).

#### **Gender Reassignment Surgery**

The term "gender reassignment surgery," also known as sexual reassignment surgery, gender confirming surgery or gender affirmation surgery, may be part of a treatment plan for gender dysphoria. The terms may be used to refer to either the reconstruction of male or female genitalia specifically, or the reshaping by any surgical procedure of a male body into a body with female appearance, or vice versa in order for an individual to function socially in the role to which they identify. Such procedures that tend to display outward appearance generally include facial procedures, chest reconstructive procedures as well as some genital reconstructive procedures (e.g., phalloplasty).

Gender identity disorder does not persist into adolescence in most children (Hembree, et al., 2009). Evidence suggests that 75-80% of prepubertal children do not turn out to be transgender in adolescence (Hembree, et al., 2009). According to WPATH (2007) persistence of gender dysphoria from adolescence into adulthood is much higher. Performing gender reassignment surgery prior to age 18, or the legal age to give consent, is not recommended by professional societies (American College of Obstetricians and Gynecology [ACOG], 2017; WPATH, 2012; American Psychiatric Association (APA), 2012, Endocrine Society, 2009). Gender reassignment surgery is intended to be a permanent change (non-reversible), establishing congruency between an individual's gender identity and physical appearance. Therefore, a careful and accurate diagnosis is essential for treatment and can be made only as part of a long-term diagnostic process involving a multidisciplinary specialty approach that includes an extensive case history; gynecological, endocrine and urological examination; and a clinical psychiatric/psychological examination. Individuals who choose to undergo gender reassignment surgery must be fully informed regarding treatment options with confirmation from the mental health professional that the individual is considered a candidate for surgical treatment.

Twelve months of continuous hormone therapy is required prior to irreversible genital surgery unless medically contraindicated. Contraindications to hormonal therapy include but are not limited to hypercoagulability conditions, known coronary artery disease, liver disease, and venous thromboembolism.

In addition, prior to surgery the individual identified with gender dysphoria must undergo a "real life experience". During this time the individual adopts the new or evolving gender role and lives in that role for at least 12 continuous months as part of the transition pathway. This process assists in confirming the person's desire for gender role change, ability to function in this role long-term, as well as the adequacy of his/her support system. During the real life experience a person would be expected to maintain their baseline functional lifestyle, participate in community activities, and provide an indication that others are aware of the change in gender role. Some individuals may not be able to continuously live in the gender role for which they identify, for example, concerns surrounding one's employment environment may preclude an individual from meeting this requirement.

In such instances the clinician must confirm the individual has had a satisfactory social role change prior to surgery.

#### **Other Associated Surgical Procedures**

**Services Otherwise Medically Necessary:** Age appropriate gender-specific services that would otherwise be considered medically necessary remain medically necessary services for transgender individuals, as appropriate to their biological anatomy. Examples include (but are not limited to):

- for female to male transgender individuals (e.g., who have not undergone a mastectomy, breast cancer screening)
- for male to female transgender individuals who have retained their prostate cancer screening or treatment of a prostate condition.

**Reversal of Gender Reassignment:** Gender reassignment surgery is considered an irreversible intervention. Although infrequent, surgery to reverse a partially or fully completed gender reassignment (reversal of surgery to revise secondary sex characteristics), may be necessary as a result of a complication (i.e., infection) or other medical condition necessitating surgical intervention.

**Masculinization/Feminization Procedures:** Various other surgical procedures may be performed as part of gender reassignment surgery, for example masculinization or feminization procedures. When performed as part of gender reassignment surgery some procedures are performed to assist with improving culturally appropriate male or female appearance characteristics and may be considered not medically necessary. Please refer to the applicable benefit plan document for terms, conditions, and limitations of coverage in addition to the applicable Cigna Medical Coverage Policy for conditions of coverage.

#### **Professional Society/Organization**

**American College of Obstetricians and Gynecologists (ACOG):** ACOG published a Committee Opinion in 2017 for the care of transgender adolescents. Within this document regarding surgical management ACOG notes transgender male patients may undergo phalloplasty when one reaches the age of majority, and a transgender female patient may undergo vaginoplasty when one reaches the age of majority. In addition the authors acknowledge the Endocrine Society guidelines (Hembree, et al., 2009) which state that an individual is at least age 18 years for genital reconstructive surgery (ACOG, 2017).

**American Psychiatric Association (APA):** In 2012 the APA published a task force report on treatment of gender identity disorder. Within this document, regarding adolescents specifically, the authors state the evidence is inadequate to develop a guideline regarding the timing of sex reassignment surgery. However the task force acknowledges the Endocrine Society guidelines (Hembree, et al., 2009) and that given the irreversible nature of surgery, for adolescents most clinicians advise waiting until the individual has attained the age of legal consent and a degree of independence (APA, 2012).

**WPATH Standards of Care:** The World Professional Association for Transgender Health (WPATH) promotes standards of health care for individuals through the articulation of "Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People" (WPATH, 2012, Version 7). Although there is no recent update, WPATH standards of care are based on scientific evidence and expert consensus and are commonly utilized as a clinical guide for individuals seeking treatment of gender disorders.

**Endocrine Society:** In 2009 the Endocrine Society published a clinical practice guideline for endocrine treatment of transsexual persons (Hembree, et al., 2009). As part of this guideline, the endocrine society recommends that transsexual persons consider genital sex reassignment surgery only after both the physician responsible for endocrine transition therapy and the mental health professional find surgery advisable; that surgery be recommended only after completion of at least one year of consistent and compliant hormone treatment; and that the physician responsible for endocrine treatment medically clear the individual for sex reassignment surgery and collaborate with the surgeon regarding hormone use during and after surgery.

**Use Outside of the US:** Several other countries including the United Kingdom offer treatment options for individuals with gender dysphoria. Treatments are similar to those offered in the United States.

## **Medicare Coverage Determinations**



	Contractor	Policy Name/Number	Revision Effective Date
NCD	National	No National Coverage Determination	
LCD		No Local Coverage Determination	

Note: Please review the current Medicare Policy for the most up-to-date information.

## Coding/Billing Information

**Note:** 1) This list of codes may not be all-inclusive.

2) Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

**Table 1: Gender Reassignment Surgery: Covered Under Standard Benefit Plan Language**

### Intersex Surgery: Female to Male

**Considered Medically Necessary when criteria in the applicable policy statements listed above are met:**

CPT®* Codes	Description
55980	Intersex surgery, female to male
11960	Insertion of tissue expander(s) for other than breast, including subsequent expansion
11970	Replacement of tissue expander with permanent implant
11971	Removal of tissue expander without insertion of implant
17380†	Electrolysis epilation, each 30 minutes
17999††	Unlisted procedure, skin, mucous membrane and subcutaneous tissue
19303	Mastectomy, simple, complete
19318	Breast reduction
19350†††	Nipple/areola reconstruction
53430	Urethroplasty, reconstruction of female urethra
53450	Urethromeatoplasty, with mucosal advancement
54400	Insertion of penile prosthesis; non-inflatable (semi-rigid)
54401	Insertion of penile prosthesis; inflatable (self-contained)
54405	Insertion of multi-component, inflatable penile prosthesis, including placement of pump, cylinders, and reservoir
54660	Insertion of testicular prosthesis (separate procedure)
55175	Scrotoplasty; simple
55180	Scrotoplasty; complicated
56625	Vulvectomy simple; complete
57110	Vaginectomy, complete removal of vaginal wall
58150	Total abdominal hysterectomy (corpus and cervix), with or without removal of tube(s), with or without removal of ovary(s)
58260	Vaginal hysterectomy, for uterus 250 g or less
58262	Vaginal hysterectomy, for uterus 250 g or less; with removal of tube(s), and/or ovary(s)
58291	Vaginal hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)
58552	Laparoscopy, surgical, with vaginal hysterectomy, for uterus 250 g or less; with removal of tube(s) and/or ovary(s)
58554	Laparoscopy, surgical, with vaginal hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)
58571	Laparoscopy, surgical, with total hysterectomy, for uterus 250 g or less; with removal of tube(s) and/or ovary(s)
58573	Laparoscopy, surgical, with total hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)
58661	Laparoscopy, surgical; with removal of adnexal structures (partial or total oophorectomy and/or salpingectomy)
58999††††	Unlisted procedure, female genital system (nonobstetrical)

**†Note:** Considered medically necessary when performed as electrolysis of donor site tissue to be used for phalloplasty.

**††Note:** Considered medically necessary when used to represent pectoral implants.

**†††Note:** Considered medically necessary when performed as part of a mastectomy or breast reconstruction procedure following a mastectomy. Considered integral and/or not covered when performed with reduction mammoplasty.

**††††Note:** Considered medically necessary when used to report metoidioplasty with phalloplasty.

HCCPS Codes	Description
C1813	Prosthesis, penile, inflatable
C2622	Prosthesis, penile, non-inflatable
L8600	Implantable breast prosthesis, silicone or equal

#### **Intersex Surgery: Male to Female**

**Considered Medically Necessary when criteria in the applicable policy statements listed above are met:**

CPT®* Codes	Description
55970	Intersex surgery; male to female
15771†	Grafting of autologous fat harvested by liposuction technique to trunk, breasts, scalp, arms, and/or legs; 50 cc or less injectate
15772†	Grafting of autologous fat harvested by liposuction technique to trunk, breasts, scalp, arms, and/or legs; each additional 50 cc injectate, or part thereof (List separately in addition to code for primary procedure)
17380††	Electrolysis epilation, each 30 minutes
19325	Breast augmentation with implant
19340	Insertion of breast implant on same day of mastectomy (ie, immediate)
19342	Insertion or replacement of breast implant on separate day from mastectomy
44145	Colectomy, partial; with coloproctostomy (low pelvic anastomosis)
54125	Amputation of penis; complete
54520	Orchiectomy, simple (including subcapsular), with or without testicular prosthesis, scrotal or inguinal approach
54690	Laparoscopy, surgical; orchiectomy
55899†††	Unlisted procedure, male genital system
56620	Vulvectomy simple; partial
56800	Plastic repair of introitus
56805	Clitoroplasty for intersex state
57291	Construction of artificial vagina; without graft
57292	Construction of artificial vagina; with graft
57335	Vaginoplasty for intersex state

HCCPS Codes	Description
C1789	Prosthesis, breast (implantable)

**†Note:** Considered medically necessary when used to report liposuction techniques specific to breast augmentation.

**††Note:** Considered medically necessary when performed as electrolysis of donor site tissue to be used to line the vaginal canal for vaginoplasty.

†††**Note:** Considered medically necessary when used to report coloproctostomy.

ICD-10-CM Diagnosis Codes	Description
F64.0	Transsexualism
F64.1	Dual role transvestism
F64.2	Gender identity disorder of childhood
F64.8	Other gender identity disorders
F64.9	Gender identity disorder, unspecified
Z87.890	Personal history of sex reassignment

**Table 2: Gender Reassignment Surgery: Other Procedures**

Generally considered not medically necessary when performed as a component of gender reassignment even when coverage for gender reassignment surgery exists, unless subject to a coverage mandate or specifically listed as available in the applicable benefit plan document.

**Note:** For New York regulated benefit plans (e.g., insured): Subject to case by case review by a medical director.

CPT® Codes	Description
11950	Subcutaneous injection of filling material (eg, collagen); 1 cc or less
11951	Subcutaneous injection of filling material (eg, collagen); 1.1 to 5.0 cc
11952	Subcutaneous injection of filling material (eg, collagen); 5.1 to 10.0 cc
11954	Subcutaneous injection of filling material (eg, collagen); over 10.0 cc
15775	Punch graft for hair transplant; 1 to 15 punch grafts
15776	Punch graft for hair transplant; more than 15 punch grafts
15780	Dermabrasion; total face (eg, for acne scarring, fine wrinkling, rhytids, general keratosis)
15781	Dermabrasion; segmental, face
15782	Dermabrasion; regional, other than face
15783	Dermabrasion; superficial, any site (eg, tattoo removal)
15786	Abrasion; single lesion (eg, keratosis, scar)
15787	Abrasion; each additional 4 lesions or less (List separately in addition to code for primary procedure)
15788	Chemical peel, facial; epidermal
15789	Chemical peel, facial; dermal
15792	Chemical peel, nonfacial; epidermal
15793	Chemical peel, nonfacial; dermal
15820	Blepharoplasty, lower eyelid
15821	Blepharoplasty, lower eyelid with extensive herniated fat pad
15822	Blepharoplasty, upper eyelid
15823	Blepharoplasty, upper eyelid; with excessive skin weighting down lid
15824	Rhytidectomy, forehead
15825	Rhytidectomy; neck with platysmal tightening (platysmal flap, P-flap)
15826	Rhytidectomy; glabellar frown lines
15828	Rhytidectomy; cheek, chin, and neck
15829	Rhytidectomy; superficial musculoaponeurotic system (SMAS) flap
15830	Excision, excessive skin and subcutaneous tissue (includes lipectomy); abdomen, infraumbilical panniculectomy
15832	Excision, excessive skin and subcutaneous tissue (includes lipectomy); thigh
15833	Excision, excessive skin and subcutaneous tissue (includes lipectomy); leg
15834	Excision, excessive skin and subcutaneous tissue (includes lipectomy); hip
15835	Excision, excessive skin and subcutaneous tissue (includes lipectomy); buttock
15836	Excision, excessive skin and subcutaneous tissue (includes lipectomy); arm
15837	Excision, excessive skin and subcutaneous tissue (includes lipectomy); forearm or hand



<b>CPT®* Codes</b>	<b>Description</b>
15838	Excision, excessive skin and subcutaneous tissue (includes lipectomy); submental fat pad
15839	Excision, excessive skin and subcutaneous tissue (includes lipectomy); other area
15847	Excision, excessive skin and subcutaneous tissue (includes lipectomy), abdomen (eg, abdominoplasty) (includes umbilical transposition and fascial plication) (List separately in addition to code for primary procedure)
15876	Suction assisted lipectomy; head and neck
15877	Suction assisted lipectomy; trunk
15878	Suction assisted lipectomy; upper extremity
15879	Suction assisted lipectomy; lower extremity
17380	Electrolysis epilation, each 30 minutes
17999†	Unlisted procedure, skin, mucous membrane and subcutaneous tissue
19324	Mammoplasty, augmentation; without prosthetic implant (Code deleted 12/31/2020)
21120	Genioplasty; augmentation (autograft, allograft, prosthetic material)
21121	Genioplasty; sliding osteotomy, single piece
21122	Genioplasty; sliding osteotomies, 2 or more osteotomies (eg, wedge excision or bone wedge reversal for asymmetrical chin)
21123	Genioplasty; sliding, augmentation with interpositional bone grafts (includes obtaining autografts)
21125	Augmentation, mandibular body or angle; prosthetic material
21127	Augmentation, mandibular body or angle; with bone graft, onlay or interpositional (includes obtaining autograft)
21137	Reduction forehead; contouring only
21209	Osteoplasty, facial bones; reduction
21210	Graft, bone; nasal, maxillary or malar areas (includes obtaining graft)
21270	Malar augmentation, prosthetic material
30400	Rhinoplasty, primary; lateral and alar cartilages and/or elevation of nasal tip
30410	Rhinoplasty, primary; complete, external parts including bony pyramid, lateral and alar cartilages, and/or elevation of nasal tip
30420	Rhinoplasty, primary; including major septal repair
30430	Rhinoplasty, secondary; minor revision (small amount of nasal tip work)
30435	Rhinoplasty, secondary; intermediate revision (bony work with osteotomies)
30450	Rhinoplasty, secondary; major revision (nasal tip work and osteotomies)
31599††	Unlisted procedure, larynx
31750	Tracheoplasty; cervical
31899†††	Unlisted procedure, trachea, bronchi
40799††††	Unlisted procedure, lips
67900	Repair of brow ptosis (supraciliary, mid-forehead or coronal approach)
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual

**†Note:** Generally not medically necessary when used to report cheek and malar implants or fat transfers performed in conjunction with gender reassignment surgery, even when coverage for gender reassignment surgery exists.

**††Note:** Generally not medically necessary when used to report laryngoplasty and/or voice modification surgery performed in conjunction with gender reassignment surgery, even when coverage for gender reassignment surgery exists.

**†††Note:** Generally not medically necessary when used to report voice modification surgery performed in conjunction with gender reassignment surgery, even when coverage for gender reassignment surgery exists.

**††††Note:** Generally not medically necessary when used to report lip reduction/enhancement performed in conjunction with gender reassignment surgery, even when coverage for gender reassignment surgery exists.

## References

1. American Academy of Pediatrics (AAP). Ensuring Comprehensive care and support for transgender and gender diverse children and adolescents. Policy statement. Pediatrics. Volume 142(4): October 2018.
2. American College of Obstetricians and Gynecologists (ACOG). Healthcare for Transgender Individuals. Committee Opinion. Number 512, December 2011. Obstet Gynecol 2011;118:1454-8
3. American Psychiatric Association (APA). Report of the APA task force on treatment of gender identity disorder. Am J Psychiatry 169:8, August 2012.
4. Becker S, Bosinski HAG, Clement U, Eicher WM, Goerlich TM, Hartmann U, et al. (1998) German standards for the treatment and diagnostic assessment of transsexuals. IJT 2/4. Accessed November 19, 2014. Available at URL address: <http://www.iiav.nl/ezines/web/IJT/97-03/numbers/symposion/ijtc0603.htm>
5. Centers for Medicare and Medicaid Services. Proposed Decision Memo for Gender Dysphoria and Gender Reassignment Surgery (CAG-00446N). June 2016. Accessed March 5, 2019. Available at URL address: <https://www.cms.gov/medicare-coverage-database/details/nca-proposed-decision-memo.aspx?NCAId=282>
6. Committee on Adolescent Health Care. Committee Opinion No. 685: Care for Transgender Adolescents. Obstet Gynecol. 2017 Jan;129(1):e11-e16.
7. Day P. Trans-gender Reassignment Surgery. Tech Brief Series. New Zealand Health Technology Assessment. NZHTA Report February 2002, Volume 1, Number 1. Accessed March 5, 2019. Available at URL address: <http://nzhta.chmeds.ac.nz/index.htm#tech>
8. Diagnostic and Statistical Manual of Mental Disorders Fourth Edition. Text Revision (DSM-IV -TR). American Psychiatric Association. American Psychiatric Association, Incorporated. July 2000.
9. Hayes, Inc. Hayes Medical Technology Directory Report. Sex Reassignment Surgery for the Treatment of Gender Dysphoria. Landsdale, PA: Hayes, Inc.; August 2018
10. Hayes, Inc. Hayes Medical Technology Directory Report. Ancillary Procedures and Services for the Treatment of Gender Dysphoria. Landsdale, PA: Hayes, Inc.; May 2014.
11. Hayes, Inc. Hayes Medical Technology Directory Report. Hormone Therapy for the Treatment of Gender Dysphoria. Landsdale, PA: Hayes, Inc. August 2018.
12. Hayes, Inc. Search and Summary. Suppression of Puberty in Adolescents with Gender Dysphoria. Landsdale, PA: Hayes, Inc.; March 2017.
13. Hembree WC, Cohen-Kettenis P, Delemarre-van de Waal HA, Gooren LJ, Meyer WJ 3<sup>rd</sup>, Spack NP, Tangpricha V, Montori VM; Endocrine Society. Endocrine treatment of transsexual persons: an Endocrine Society clinical practice guideline. J Clin Endocrinol Metab. 2009 Sep;94(9):3132-54.
14. Landen M, Walinder J, Lambert G, Lundstrom B. Factors predictive of regret in sex reassignment. Acta Psychiatr Scand. 1998 Apr;97(4):284-9.
15. Lawrence AA. Factors associated with satisfaction or regret following male-to-female sex reassignment surgery. Arch Sex Behav. 2003 Aug;32(4):299-315.
16. Maharaj NR, Dhali A, Wiersma R, Moodley J. Intersex conditions in children and adolescents: surgical, ethical, and legal considerations. J Pediatr Adolesc Gynecol. 2005 Dec;18(6):399-402.

17. Milrod C, Karasic DH. Age Is Just a Number: WPATH-Affiliated Surgeons' Experiences and Attitudes Toward Vaginoplasty in Transgender Females Under 18 Years of Age in the United States. *J Sex Med*. 2017 Apr;14(4):624-634.
18. Moore E, Wisniewski A, Dobs A. Endocrine treatment of transsexual people: a review of treatment regimens, outcomes, and adverse effects. *J Clin Endocrinol Metab*. 2003 Aug;88(8):3467-73.
19. Smith YL, van Goozen SH, Cohen-Kettenis PT. Adolescents with gender identity disorder who were accepted or rejected for sex reassignment surgery: a prospective follow-up study. *J Am Acad Child Adolesc Psychiatry*. 2001 Apr;40(4):472-81.
20. Sutcliffe PA, Dixon S, Akehurst RL, Wilkinson A, Shippam A, White S, Richards R, Caddy CM. Evaluation of surgical procedures for sex reassignment: a systematic review. *J Plast Reconstr Aesthet Surg*. 2009 Mar;62(3):294-306; discussion 306-8.
21. The Women's Health and Cancer Rights Act of 1998 (WHCRA), 29 U.S. Code § 1185b - Required coverage for reconstructive surgery following mastectomies.
22. World Professional Association for Transgender Health (WPATH). Position on rapid onset gender dysphoria. 9/4/2018. Accessed June 20, 2019. Available at URL Address: <https://www.wpath.org/publications/soc>
23. World Professional Association for Transgender Health (WPATH). Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People. 7<sup>th</sup> version. Approved September 14, 2011. Accessed January 26, 2018. Available at URL address: <https://www.wpath.org/publications/soc>
24. World Professional Association for Transgender Health (WPATH). The Harry Benjamin International Gender Dysphoria Association. Standards of Care for Gender Identity Disorders. 6<sup>th</sup> version. 2001 Feb. Accessed November 30, 2010. Available at URL address: <https://www.wpath.org/publications/soc>
25. Zucker KJ. Intersexuality and gender identity disorder. *J Pediatr Adolesc Gynecol*. 2002 Feb;15(1):3-13.

---

"Cigna Companies" refers to operating subsidiaries of Cigna Corporation. All products and services are provided exclusively by or through such operating subsidiaries, including Cigna Health and Life Insurance Company, Connecticut General Life Insurance Company, Cigna Behavioral Health, Inc., Cigna Health Management, Inc., QualCare, Inc., and HMO or service company subsidiaries of Cigna Health Corporation. The Cigna name, logo, and other Cigna marks are owned by Cigna Intellectual Property, Inc. © 2021 Cigna.

# **EXHIBIT 12**

# Gender Dysphoria Treatment

Policy Number: 2021T0580J  
Effective Date: April 1, 2021

 [Instructions for Use](#)

Table of Contents	Page
<a href="#">Coverage Rationale</a>	1
<a href="#">Documentation Requirements</a>	3
<a href="#">Definitions</a>	4
<a href="#">Applicable Codes</a>	5
<a href="#">Description of Services</a>	9
<a href="#">Benefit Considerations</a>	9
<a href="#">Clinical Evidence</a>	10
<a href="#">U.S. Food and Drug Administration</a>	15
<a href="#">References</a>	15
<a href="#">Policy History/Revision Information</a>	16
<a href="#">Instructions for Use</a>	17

## Related Commercial Policies

- [Blepharoplasty, Blepharoptosis and Brow Ptosis Repair](#)
- [Botulinum Toxins A and B](#)
- [Cosmetic and Reconstructive Procedures](#)
- [Gonadotropin Releasing Hormone Analogs](#)
- [Habilitative Services and Outpatient Rehabilitation Therapy](#)
- [Panniculectomy and Body Contouring Procedures](#)
- [Rhinoplasty and Other Nasal Surgeries](#)

## Community Plan Policy

- [Gender Dysphoria Treatment](#)

## Coverage Rationale

 See [Benefit Considerations](#)

### Notes:

- This Medical Policy does not apply to individuals with ambiguous genitalia or disorders of sexual development.
- This Medical Policy does not apply to self-funded and fully insured group policies in California. Refer to the Benefit Interpretation Policy titled [Gender Dysphoria \(Gender Identity Disorder\) Treatment: CA](#).

Surgical treatment for Gender Dysphoria may be indicated for individuals who provide the following documentation:

- For breast surgery, a written psychological assessment from at least one [Qualified Behavioral Health Provider](#) experienced in treating Gender Dysphoria\* is required. The assessment must document that an individual meets all of the following criteria:
  - Persistent, well-documented [Gender Dysphoria](#)
  - Capacity to make a fully informed decision and to consent for treatment
  - Must be at least 18 years of age (age of majority)
  - Favorable psychosocial-behavioral evaluation to provide screening and identification of risk factors or potential postoperative challenges
- For genital surgery, a written psychological assessment from at least two [Qualified Behavioral Health Providers](#) experienced in treating Gender Dysphoria\*, who have independently assessed the individual, is required. The assessment must document that an individual meets all of the following criteria:
  - Persistent, well-documented [Gender Dysphoria](#)
  - Capacity to make a fully informed decision and to consent for treatment
  - Must be at least 18 years of age (age of majority)
  - Favorable psychosocial-behavioral evaluation to provide screening and identification of risk factors or potential postoperative challenges
  - Complete at least 12 months of successful continuous full-time real-life experience in the desired gender

- Complete 12 months of continuous cross-sex hormone therapy appropriate for the desired gender (unless medically contraindicated)
- Treatment plan that includes ongoing follow-up and care by a [Qualified Behavioral Health Provider](#) experienced in treating Gender Dysphoria\*

When the above criteria are met, the following surgical procedures to treat Gender Dysphoria are medically necessary and covered as a proven benefit:

- Bilateral mastectomy or breast reduction\*
- Clitoroplasty (creation of clitoris)
- Hysterectomy (removal of uterus)
- Labiaplasty (creation of labia)
- Laser or electrolysis hair removal in advance of genital reconstruction prescribed by a physician for the treatment of Gender Dysphoria
- Metoidioplasty (creation of penis, using clitoris)
- Orchiectomy (removal of testicles)
- Penectomy (removal of penis)
- Penile prosthesis
- Phalloplasty (creation of penis)
- Salpingo-oophorectomy (removal of fallopian tubes and ovaries)
- Scrotoplasty (creation of scrotum)
- Testicular prostheses
- Urethroplasty (reconstruction of female urethra)
- Urethroplasty (reconstruction of male urethra)
- Vaginectomy (removal of vagina)
- Vaginoplasty (creation of vagina)
- Vulvectomy (removal of vulva)

\*When bilateral mastectomy or breast reduction is performed as a stand-alone procedure, without genital reconstruction procedures, completion of hormone therapy prior to the breast procedure is not required.

Certain ancillary procedures, including but not limited to the following, are considered cosmetic and not medically necessary, when performed as part of surgical treatment for Gender Dysphoria:

Refer to the [Benefit Considerations](#) section as member specific benefit plan language may vary.

Note: For fully insured group policies in New York, refer to the [Benefit Considerations](#) section for more information.

- Abdominoplasty (also refer to the Coverage Determination Guideline titled [Panniculectomy and Body Contouring Procedures](#))
- Blepharoplasty (also refer to the Coverage Determination Guideline titled [Blepharoplasty, Blepharoptosis and Brow Ptosis Repair](#))
- Body contouring (e.g., fat transfer, lipoplasty, panniculectomy) (also refer to the Coverage Determination Guideline titled [Panniculectomy and Body Contouring Procedures](#))
- Breast enlargement, including augmentation mammoplasty and breast implants
- Brow lift
- Calf implants
- Cheek, chin and nose implants
- Injection of fillers or neurotoxins (also refer to the Medical Benefit Drug Policy titled [Botulinum Toxins A and B](#))
- Face/forehead lift and/or neck tightening
- Facial bone remodeling for facial feminization
- Laser or electrolysis hair removal not related to genital reconstruction
- Hair transplantation
- Lip augmentation
- Lip reduction

- Liposuction (suction-assisted lipectomy) (also refer to the Coverage Determination Guideline titled [Panniculectomy and Body Contouring Procedures](#))
- Mastopexy
- Pectoral implants for chest masculinization
- Rhinoplasty (also refer to the Coverage Determination Guideline titled [Rhinoplasty and Other Nasal Surgeries](#))
- Skin resurfacing (e.g., dermabrasion, chemical peels, laser)
- Thyroid cartilage reduction/reduction thyroid chondroplasty/trachea shave (removal or reduction of the Adam's apple)
- Voice modification surgery (e.g., laryngoplasty, glottoplasty or shortening of the vocal cords)
- Voice lessons and voice therapy

## Documentation Requirements

Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The documentation requirements outlined below are used to assess whether the member meets the clinical criteria for coverage but do not guarantee coverage of the service requested.

CPT Codes*	Required Clinical Information
<b>Gender Dysphoria Treatment</b>	
14000, 14000, 14001, 14041, 15734, 15738, 15750, 15757, 15758, 15820, 15821, 15822, 15823, 15830, 15847, 15877, 17999, 19303, 19316, 19318, 19325, 19340, 19342, 19350, 21121, 21123, 21125, 21127, 21137, 21138, 21139, 21172, 21175, 21179, 21180, 21208, 21209, 21210, 30400, 30410, 30420, 30430, 30435, 30450, 53410, 53430, 54125, 54520, 54660, 54690, 55175, 55180, 55970, 55980, 56625, 56800, 56805, 57110, 57335, 58150, 58180, 58260, 58262, 58290, 58291, 58541, 58542, 58543, 58544, 58550, 58552, 58553, 58554, 58570, 58571, 58572, 58573, 58661, 58720, 58940, 64856, 64892, 64896, 67900	<p>Medical notes documenting the following:</p> <ul style="list-style-type: none"> <li>• The history of medical conditions requiring treatment or surgical intervention</li> <li>• A well-defined physical/physiologic abnormality resulting in a medical condition that requires treatment</li> <li>• Recurrent or persistent functional deficit caused by the abnormality</li> <li>• Clinical studies/tests addressing the physical/physiologic abnormality confirming its presence and degree to which it causes impairment</li> <li>• Color photos, where applicable, of the physical and/or physiological abnormality</li> <li>• Physician plan of care with proposed procedures and whether this request is part of a staged procedure; indicate how the procedure will improve and/or restore function</li> <li>• For CPT codes 58260, 58262, 58290 and 58291, provide the additional information: <ul style="list-style-type: none"> <li>○ The history of medical conditions requiring treatment or surgical intervention</li> <li>○ Physician plan of care with proposed procedures and whether this request is part of a staged procedure</li> <li>○ A written psychological assessment from at least two <a href="#">Qualified Behavioral Health Providers</a> experienced in treating Gender Dysphoria, who have independently assessed the individual. The assessment should include all of the following: <ul style="list-style-type: none"> <li>▪ The member is capable to make a fully informed decision and to consent for treatment</li> <li>▪ The member must be at least 18 years of age (age of majority)</li> <li>▪ If significant medical or mental health concerns are present, they must be reasonably well controlled</li> <li>▪ The member has completed at least 12 months of successful continuous full-time real-life experience in the desired gender</li> <li>▪ The member has completed 12 months of continuous cross-sex hormone therapy appropriate for the desired gender (unless medically contraindicated)</li> </ul> </li> <li>○ A treatment plan that includes ongoing follow-up and care by a <a href="#">Qualified Behavioral Health Provider</a> experienced in treating Gender Dysphoria</li> </ul> </li> </ul>

\*For code descriptions, see the [Applicable Codes](#) section.



## Definitions

**Gender Dysphoria in Adolescents and Adults:** A disorder characterized by the following diagnostic criteria (Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> edition [DSM-5]):

- A. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration, as manifested by at least two of the following:
  - 1. A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics [(or in young adolescents, the anticipated secondary sex characteristics)].
  - 2. A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender [(or in young adolescents, a desire to prevent the development of the anticipated secondary sex characteristics)].
  - 3. A strong desire for the primary and/or secondary sex characteristics of the other gender.
  - 4. A strong desire to be of the other gender (or some alternative gender different from one's assigned gender).
  - 5. A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender).
  - 6. A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender).
- B. The condition is associated with clinically significant distress or impairment in social, occupational or other important areas of functioning.

**Gender Dysphoria in Children:** A disorder characterized by the following diagnostic criteria (Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> edition [DSM-5]):

- A. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration, as manifested by at least six of the following (one of which must be criterion A1):
  - 1. A strong desire to be of the other gender or an insistence that one is the other gender (or some alternative gender different from one's assigned gender).
  - 2. In boys (assigned gender), a strong preference for cross-dressing or simulating female attire; or in girls (assigned gender), a strong preference for wearing only typical masculine clothing and a strong resistance to the wearing of typical feminine clothing.
  - 3. A strong preference for cross-gender roles in make-believe play or fantasy play.
  - 4. A strong preference for the toys, games or activities stereotypically used or engaged in by the other gender.
  - 5. A strong preference for playmates of the other gender.
  - 6. In boys (assigned gender), a strong rejection of typically masculine toys, games and activities and a strong avoidance of rough-and-tumble play; or in girls (assigned gender), a strong rejection of typically feminine toys, games and activities.
  - 7. A strong dislike of one's sexual anatomy.
  - 8. A strong desire for the primary and/or secondary sex characteristics that match one's experienced gender.
- B. The condition is associated with clinically significant distress or impairment in social, school or other important areas of functioning.

### Qualified Behavioral Health Provider:

- Recommended minimum credentials for behavioral health providers working with adults presenting with gender dysphoria (World Professional Association for Transgender Health [WPATH] Guidelines, version 7, 2012):
  - A minimum of a master's degree or its equivalent in a clinical behavioral science field. This degree should be granted by an institution accredited by the appropriate national or regional accrediting board. The behavioral health provider should have documented credentials from a relevant licensing board;
  - Competence in using the current version of the Diagnostic Statistical Manual of Mental Disorders (DSM) and/or the International Classification of Diseases (ICD) for assessment and diagnostic purposes;
  - Ability to recognize and diagnose coexisting mental health concerns and to distinguish these from gender dysphoria;
  - Documented supervised training and competence in psychotherapy or counseling;
  - Knowledgeable about gender nonconforming identities and expressions, and the evaluation and treatment of gender dysphoria;
  - Continuing education in the assessment and treatment of gender dysphoria;
  - Develop and maintain cultural competence to facilitate their work with transsexual, transgender, and gender nonconforming clients.



- Recommended minimum credentials for behavioral health providers working with children or adolescents presenting with gender dysphoria (WPATH Guidelines, version 7, 2012):
  - Meet the competency requirements for behavioral health providers working with adults, as outlined above;
  - Trained in childhood and adolescent developmental psychopathology;
  - Competent in diagnosing and treating the ordinary problems of children and adolescents.

## Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CPT Code	Description
11950	Subcutaneous injection of filling material (e.g., collagen); 1 cc or less
11951	Subcutaneous injection of filling material (e.g., collagen); 1.1 to 5.0 cc
11952	Subcutaneous injection of filling material (e.g., collagen); 5.1 to 10.0 cc
11954	Subcutaneous injection of filling material (e.g., collagen); over 10.0 cc
14000	Adjacent tissue transfer or rearrangement, trunk; defect 10 sq cm or less
14001	Adjacent tissue transfer or rearrangement, trunk; defect 10.1 sq cm to 30.0 sq cm
14041	Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; defect 10.1 sq cm to 30.0 sq cm
15734	Muscle, myocutaneous, or fasciocutaneous flap; trunk
15738	Muscle, myocutaneous, or fasciocutaneous flap; lower extremity
15750	Flap; neurovascular pedicle
15757	Free skin flap with microvascular anastomosis
15758	Free fascial flap with microvascular anastomosis
15769	Grafting of autologous soft tissue, other, harvested by direct excision (e.g., fat, dermis, fascia)
15771	Grafting of autologous fat harvested by liposuction technique to trunk, breasts, scalp, arms, and/or legs; 50 cc or less injectate
15772	Grafting of autologous fat harvested by liposuction technique to trunk, breasts, scalp, arms, and/or legs; each additional 50 cc injectate, or part thereof (List separately in addition to code for primary procedure)
15773	Grafting of autologous fat harvested by liposuction technique to face, eyelids, mouth, neck, ears, orbits, genitalia, hands, and/or feet; 25 cc or less injectate
15774	Grafting of autologous fat harvested by liposuction technique to face, eyelids, mouth, neck, ears, orbits, genitalia, hands, and/or feet; each additional 25 cc injectate, or part thereof (List separately in addition to code for primary procedure)
15775	Punch graft for hair transplant; 1 to 15 punch grafts
15776	Punch graft for hair transplant; more than 15 punch grafts
15780	Dermabrasion; total face (e.g., for acne scarring, fine wrinkling, rhytids, general keratosis)
15781	Dermabrasion; segmental, face
15782	Dermabrasion; regional, other than face
15783	Dermabrasion; superficial, any site (e.g., tattoo removal)
15788	Chemical peel, facial; epidermal
15789	Chemical peel, facial; dermal
15792	Chemical peel, nonfacial; epidermal

CPT Code	Description
15793	Chemical peel, nonfacial; dermal
15819	Cervicoplasty
15820	Blepharoplasty, lower eyelid
15821	Blepharoplasty, lower eyelid; with extensive herniated fat pad
15822	Blepharoplasty, upper eyelid
15823	Blepharoplasty, upper eyelid; with excessive skin weighting down lid
15824	Rhytidectomy; forehead
15825	Rhytidectomy; neck with platysmal tightening (platysmal flap, P-flap)
15826	Rhytidectomy; glabellar frown lines
15828	Rhytidectomy; cheek, chin, and neck
15829	Rhytidectomy; superficial musculoaponeurotic system (SMAS) flap
15830	Excision, excessive skin and subcutaneous tissue (includes lipectomy); abdomen, infraumbilical panniculectomy
15832	Excision, excessive skin and subcutaneous tissue (includes lipectomy); thigh
15833	Excision, excessive skin and subcutaneous tissue (includes lipectomy); leg
15834	Excision, excessive skin and subcutaneous tissue (includes lipectomy); hip
15835	Excision, excessive skin and subcutaneous tissue (includes lipectomy); buttock
15836	Excision, excessive skin and subcutaneous tissue (includes lipectomy); arm
15837	Excision, excessive skin and subcutaneous tissue (includes lipectomy); forearm or hand
15838	Excision, excessive skin and subcutaneous tissue (includes lipectomy); submental fat pad
15839	Excision, excessive skin and subcutaneous tissue (includes lipectomy); other area
15847	Excision, excessive skin and subcutaneous tissue (includes lipectomy), abdomen (e.g., abdominoplasty) (includes umbilical transposition and fascial plication) (List separately in addition to code for primary procedure)
15876	Suction assisted lipectomy; head and neck
15877	Suction assisted lipectomy; trunk
15878	Suction assisted lipectomy; upper extremity
15879	Suction assisted lipectomy; lower extremity
17380	Electrolysis epilation, each 30 minutes
17999	Unlisted procedure, skin, mucous membrane and subcutaneous tissue
19303	Mastectomy, simple, complete
19316	Mastopexy
19318	Breast reduction
19325	Breast augmentation with implant
19340	Insertion of breast implant on same day of mastectomy (i.e., immediate)
19342	Insertion or replacement of breast implant on separate day from mastectomy
19350	Nipple/areola reconstruction
21120	Genioplasty; augmentation (autograft, allograft, prosthetic material)
21121	Genioplasty; sliding osteotomy, single piece
21122	Genioplasty; sliding osteotomies, 2 or more osteotomies (e.g., wedge excision or bone wedge reversal for asymmetrical chin)
21123	Genioplasty; sliding, augmentation with interpositional bone grafts (includes obtaining autografts)
21125	Augmentation, mandibular body or angle; prosthetic material

CPT Code	Description
21127	Augmentation, mandibular body or angle; with bone graft, onlay or interpositional (includes obtaining autograft)
21137	Reduction forehead; contouring only
21138	Reduction forehead; contouring and application of prosthetic material or bone graft (includes obtaining autograft)
21139	Reduction forehead; contouring and setback of anterior frontal sinus wall
21172	Reconstruction superior-lateral orbital rim and lower forehead, advancement or alteration, with or without grafts (includes obtaining autografts)
21175	Reconstruction, bifrontal, superior-lateral orbital rims and lower forehead, advancement or alteration (e.g., plagiocephaly, trigonocephaly, brachycephaly), with or without grafts (includes obtaining autografts)
21179	Reconstruction, entire or majority of forehead and/or supraorbital rims; with grafts (allograft or prosthetic material)
21180	Reconstruction, entire or majority of forehead and/or supraorbital rims; with autograft (includes obtaining grafts)
21208	Osteoplasty, facial bones; augmentation (autograft, allograft, or prosthetic implant)
21209	Osteoplasty, facial bones; reduction
21210	Graft, bone; nasal, maxillary or malar areas (includes obtaining graft)
21270	Malar augmentation, prosthetic material
21899	Unlisted procedure, neck or thorax
30400	Rhinoplasty, primary; lateral and alar cartilages and/or elevation of nasal tip
30410	Rhinoplasty, primary; complete, external parts including bony pyramid, lateral and alar cartilages, and/or elevation of nasal tip
30420	Rhinoplasty, primary; including major septal repair
30430	Rhinoplasty, secondary; minor revision (small amount of nasal tip work)
30435	Rhinoplasty, secondary; intermediate revision (bony work with osteotomies)
30450	Rhinoplasty, secondary; major revision (nasal tip work and osteotomies)
31599	Unlisted procedure, larynx
31899	Unlisted procedure, trachea, bronchi
53410	Urethroplasty, 1-stage reconstruction of male anterior urethra
53430	Urethroplasty, reconstruction of female urethra
54125	Amputation of penis; complete
54400	Insertion of penile prosthesis; non-inflatable (semi-rigid)
54401	Insertion of penile prosthesis; inflatable (self-contained)
54405	Insertion of multi-component, inflatable penile prosthesis, including placement of pump, cylinders, and reservoir
54406	Removal of all components of a multi-component, inflatable penile prosthesis without replacement of prosthesis
54408	Repair of component(s) of a multi-component, inflatable penile prosthesis
54410	Removal and replacement of all component(s) of a multi-component, inflatable penile prosthesis at the same operative session
54411	Removal and replacement of all components of a multi-component inflatable penile prosthesis through an infected field at the same operative session, including irrigation and debridement of infected tissue
54415	Removal of non-inflatable (semi-rigid) or inflatable (self-contained) penile prosthesis, without replacement of prosthesis

CPT Code	Description
54416	Removal and replacement of non-inflatable (semi-rigid) or inflatable (self-contained) penile prosthesis at the same operative session
54417	Removal and replacement of non-inflatable (semi-rigid) or inflatable (self-contained) penile prosthesis through an infected field at the same operative session, including irrigation and debridement of infected tissue
54520	Orchiectomy, simple (including subcapsular), with or without testicular prosthesis, scrotal or inguinal approach
54660	Insertion of testicular prosthesis (separate procedure)
54690	Laparoscopy, surgical; orchiectomy
55175	Scrotoplasty; simple
55180	Scrotoplasty; complicated
55970	Intersex surgery; male to female
55980	Intersex surgery; female to male
56625	Vulvectomy simple; complete
56800	Plastic repair of introitus
56805	Clitoroplasty for intersex state
57110	Vaginectomy, complete removal of vaginal wall;
57335	Vaginoplasty for intersex state
58150	Total abdominal hysterectomy (corpus and cervix), with or without removal of tube(s), with or without removal of ovary(s)
58180	Supracervical abdominal hysterectomy (subtotal hysterectomy), with or without removal of tube(s), with or without removal of ovary(s)
58260	Vaginal hysterectomy, for uterus 250 g or less
58262	Vaginal hysterectomy, for uterus 250 g or less; with removal of tube(s), and/or ovary(s)
58290	Vaginal hysterectomy, for uterus greater than 250 g
58291	Vaginal hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)
58541	Laparoscopy, surgical, supracervical hysterectomy, for uterus 250 g or less
58542	Laparoscopy, surgical, supracervical hysterectomy, for uterus 250 g or less; with removal of tube(s) and/or ovary(s)
58543	Laparoscopy, surgical, supracervical hysterectomy, for uterus greater than 250 g
58544	Laparoscopy, surgical, supracervical hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)
58550	Laparoscopy, surgical, with vaginal hysterectomy, for uterus 250 g or less
58552	Laparoscopy, surgical, with vaginal hysterectomy, for uterus 250 g or less; with removal of tube(s) and/or ovary(s)
58553	Laparoscopy, surgical, with vaginal hysterectomy, for uterus greater than 250 g
58554	Laparoscopy, surgical, with vaginal hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)
58570	Laparoscopy, surgical, with total hysterectomy, for uterus 250 g or less
58571	Laparoscopy, surgical, with total hysterectomy, for uterus 250 g or less; with removal of tube(s) and/or ovary(s)
58572	Laparoscopy, surgical, with total hysterectomy, for uterus greater than 250 g
58573	Laparoscopy, surgical, with total hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)

CPT Code	Description
58661	Laparoscopy, surgical; with removal of adnexal structures (partial or total oophorectomy and/or salpingectomy)
58720	Salpingo-oophorectomy, complete or partial, unilateral or bilateral (separate procedure)
58940	Oophorectomy, partial or total, unilateral or bilateral
64856	Suture of major peripheral nerve, arm or leg, except sciatic; including transposition
64892	Nerve graft (includes obtaining graft), single strand, arm or leg; up to 4 cm length
64896	Nerve graft (includes obtaining graft), multiple strands (cable), hand or foot; more than 4 cm length
67900	Repair of brow ptosis (supraciliary, mid-forehead or coronal approach)
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual
92508	Treatment of speech, language, voice, communication, and/or auditory processing disorder; group, 2 or more individuals

*CPT® is a registered trademark of the American Medical Association*

Diagnosis Code	Description
F64.0	Transsexualism
F64.1	Dual role transvestism
F64.2	Gender identity disorder of childhood
F64.8	Other gender identity disorders
F64.9	Gender identity disorder, unspecified
Z87.890	Personal history of sex reassignment

## Description of Services

Gender Dysphoria is a condition in which there is a marked incongruence between an individual's experienced/expressed /alternative gender and assigned gender (DSM-5). Treatment options include behavioral therapy, psychotherapy, hormone therapy, and surgery for gender transformation. Surgical treatments for Gender Dysphoria may include the following: clitoroplasty, hysterectomy, labiaplasty, mastectomy, orchiectomy, penectomy, phalloplasty or metoidioplasty (alternative to phalloplasty), placement of testicular and/or penile prostheses, salpingo-oophorectomy, scrotoplasty, urethroplasty, urethroplasty, vaginectomy, vaginoplasty and vulvectomy.

Other terms used to describe surgery for Gender Dysphoria include sex transformation surgery, sex change, sex reversal, gender change, transsexual surgery, transgender surgery, and sex reassignment.

## Benefit Considerations

### Coverage Information

Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service.

This medical policy does not apply to self-funded and fully insured group policies in California. Refer to the Benefit Interpretation Policy titled [Gender Dysphoria \(Gender Identity Disorder\) Treatment: CA](#).

Unless otherwise specified, if a plan covers treatment for Gender Dysphoria, coverage includes psychotherapy, cross-sex hormone therapy, puberty suppressing medications and laboratory testing to monitor the safety of hormone therapy. This benefit also includes certain surgical treatments listed in the [Coverage Rationale](#) section. Refer to the Drug Policy titled [Gonadotropin Releasing Hormone Analogs](#).

## Limitations and Exclusions

Certain treatments and services are not covered. Examples include, but are not limited to:

- Treatment received outside of the United States
- Reproduction services, including, but not limited to, sperm preservation in advance of hormone treatment or Gender Dysphoria surgery, cryopreservation of fertilized embryos, oocyte preservation, surrogate parenting, donor eggs, donor sperm and host uterus (see the Reproduction exclusion in the member specific benefit plan document)
- Transportation, meals, lodging or similar expenses
- Cosmetic procedures (refer to the Coverage Determination Guideline titled [Cosmetic and Reconstructive Procedures](#) and the [Coverage Rationale](#) section). See below for additional information on New York fully insured group policies.
- Reversal of genital surgery or reversal of surgery to revise secondary sex characteristics

Coverage does not apply to members who do not meet the indications listed in the [Coverage Rationale](#) section above.

## For Fully Insured Group Policies in New York Only

Certain ancillary procedures may be considered cosmetic and not medically necessary when performed as part of surgical treatment for Gender Dysphoria. Clinical review for medical necessity of [ancillary procedures](#) is conducted on a case-by-case basis.

## Clinical Evidence

Scandurra et al. (2019) performed a systematic review assessing the health of nonbinary and genderqueer (NBGQ) individuals compared to binary transgender (BT) and cisgender individuals. Eleven studies were included in the review. Results related to the difference in health between NBGQ and BT were mixed, with some finding a better health status while others a worse one. Results related to the differences in health between NBGQ and cisgender individuals highlighted higher health needs in NBGQ individuals compared with cisgender counterparts. The authors noted the need for research expansion in terms of both methodology and research contents.

Wernick et al. (2019) conducted a systematic review of the psychological benefits of gender-affirming surgery. Thirty-three studies were included in the analysis. Overall, most of the studies comparing pre- and post-operative data on quality of life, body image/satisfaction, and overall psychological functioning among individuals with gender dysphoria suggested that gender-affirming surgery leads to multiple, significant psychological benefits. Of the studies comparing psychological well-being between individuals who did or did not undergo surgery, most demonstrated a trend of better mental health among individuals who underwent surgery compared with those who did not. The authors encouraged future research to focus on standardizing the assessment of psychological functioning pre- and post-gender-affirming surgery to gather longitudinal data that will allow for more definitive conclusions to be made about factors that contribute to the psychological benefits of surgery.

Cohen et al. (2019) conducted a systematic review of surgical options and associated outcomes for transmasculine top surgery. Twenty-two studies were included (n=2447). The authors reported that future research is needed to improve patient selection, surgical decision making, and patient-reported outcomes for different chest contouring techniques.

Mahfouda et al. (2019) conducted a systematic review of the available published evidence on gender-affirming cross-sex hormone (CSH) and surgical interventions in transgender children and adolescents, amalgamating findings on mental health outcomes, cognitive and physical effects, side-effects, and safety variables. The small amount of available data suggest that when clearly indicated in accordance with international guidelines, gender-affirming CSHs and chest wall masculinization in transgender males are associated with improvements in mental health and quality of life. Evidence regarding surgical vaginoplasty in transgender females younger than age 18 years remains extremely scarce and conclusions cannot yet be drawn regarding its risks and benefits in this age group. Further research on an international scale is urgently warranted to clarify long-term outcomes on psychological functioning and safety.

Dreher et al. (2018) conducted a systematic review and meta-analysis to evaluate the epidemiology, presentation, management, and outcomes of neovaginal complications in the MtF transgender reassignment surgery patients. Selected studies reported on 1,684 patients with an overall complication rate of 32.5% and a reoperation rate of 21.7% for non-esthetic reasons. The most common complication was stenosis of the neo-meatus (14.4%). Wound infection was associated with an increased risk of all



tissue-healing complications. Use of sacrospinous ligament fixation (SSL) was associated with a significantly decreased risk of prolapse of the neovagina. The authors concluded that gender-affirmation surgery is important in the treatment of gender dysphoric patients, but there is a high complication rate in the reported literature. Variability in technique and complication reporting standards makes it difficult to assess the accurately the current state of MtF gender reassignment surgery. Further research and implementation of standards is necessary to improve patient outcomes.

Manrique et al (2018) conducted a systematic review of retrospective studies on the outcomes of MtF vaginoplasty to minimize surgical complications and improve patient outcomes for transgender patients. Forty-six studies met the authors eligibility criteria. A total of 3716 cases were analyzed. The results showed the overall incidence of complications as follows: 2% fistula, 14% stenosis and strictures, 1% tissue necrosis, and 4% prolapse. Patient-reported outcomes included a satisfaction rate of 93% with overall results, 87% with functional outcomes, and 90% with esthetic outcomes. Ability to have orgasm was reported in 70% of patients. The regret rate was 1%. The authors concluded that multiple surgical techniques have demonstrated safe and reliable means of MtF vaginoplasty with low overall complication rates and with a significant improvement in the patient's quality of life. Studies using different techniques in a similar population and standardized patient-reported outcomes are required to further analyze outcomes among the different procedures and to establish best-practice guidelines.

Van Damme et al. (2017) conducted a systematic review of the effectiveness of pitch-raising surgery performed in MtF transsexuals. Twenty studies were included: eight using cricothyroid approximation, six using anterior glottal web formation and six using other surgery types or a combination of surgical techniques. A substantial rise in postoperative frequency was identified. The majority of patients seemed satisfied with the outcome. However, none of the studies used a control group and randomization process. Further investigation regarding long-term results using a stronger study design is necessary.

Gaither et al. (2017) retrospectively reviewed the records of 330 MtF patients from 2011 to 2015, to assess surgical complications related to primary penile inversion vaginoplasty. Complications included granulation tissue, vaginal pain, wound separation, labial asymmetry, vaginal stenosis, fistula formation, urinary symptoms including spraying stream or dribbling, infection, vaginal fissure or vaginal bleeding. Median age at surgery was 35 years, and median follow-up in all patients was 3 months. The results showed that 95 of the patients presented with a postoperative complication with the median time to a complication being 4.4 months. Rectovaginal fistulas developed in 3 patients, and 30 patients required a second operation. Age, body mass index and hormone replacement therapy were not associated with complications. The authors concluded that penile inversion vaginoplasty is a relatively safe procedure. Most complications due to this surgery develop within the first 4 months postoperatively. Age, body mass index and hormone replacement therapy are not associated with complications and, thus, they should not dictate the timing of surgery.

An ECRI special report systematically reviewed the clinical literature to assess the efficacy of treatments for gender dysphoria. The authors identified limited evidence from mostly low-quality retrospective studies. Evidence on gender reassignment surgery was mostly limited to evaluations of MtF individuals undergoing vaginoplasty, facial feminization surgery and breast augmentation. Outcomes included mortality, patient satisfaction, physical well-being, psychological-related outcomes, quality of life, sexual-related outcomes, suicide and adverse events. Concluding remarks included the need for standardized protocols and prospective studies using standardized measures for correct interpretation and comparability of data (ECRI, 2016).

Morrison et al. (2016) conducted a systematic review of the facial feminization surgery literature. Fifteen studies were included, all of which were either retrospective or case series/reports. The studies covered a variety of facial feminization procedures. A total of 1121 patients underwent facial feminization surgery, with seven complications reported, although many studies did not explicitly comment on complications. Satisfaction was high, although most studies did not use validated or quantified approaches to address satisfaction. The authors noted that further studies are needed to better compare different techniques to more robustly establish best practices. Prospective studies and patient-reported outcomes are needed to establish quality of life outcomes for patients.

Frey et al. (2016) conducted a systematic review of metoidioplasty and radial forearm flap phalloplasty (RFFP) in FtM transgender genital reconstruction. Eighteen studies were included: 7 for metoidioplasty and 11 for RFFP. The quality of evidence was low to very low for all included studies. In studies examining metoidioplasty, the average study size and length of follow-up were 54 patients and 4.6 years, respectively (1 study did not report [NR]). Eighty-eight percent underwent a single-stage reconstruction, 87% reported an aesthetic neophallus (3 NR) and 100% reported erogenous sensation (2 NR). Fifty-one percent of patients reported successful intercourse (3 NR) and 89% of patients achieved standing micturition (3 NR). In studies examining RFFP, the average study size and follow-up were 60.4 patients and 6.23 years, respectively (6 NR). No patients

underwent single-stage reconstructions (8 NR). Seventy percent of patients reported a satisfactorily aesthetic neophallus (4 NR) and 69% reported erogenous sensation (6 NR). Forty-three percent reported successful penetration of partner during intercourse (6 NR) and 89% achieved standing micturition (6 NR). Compared with RFFP, metoidioplasty was significantly more likely to be completed in a single stage, have an aesthetic result, maintain erogenous sensation, achieve standing micturition and have a lower overall complication rate. The authors reported that, although the current literature suggests that metoidioplasty is more likely to yield an "ideal" neophallus compared with RFFP, any conclusion is severely limited by the low quality of available evidence.

Using a retrospective chart review, Buncamper et al. (2016) assessed surgical outcome after penile inversion vaginoplasty. Outcome measures were intraoperative and postoperative complications, reoperations, secondary surgical procedures and possible risk factors. Of 475 patients who underwent the procedure, 405 did not have additional full-thickness skin grafts while 70 did have grafts. Median follow-up was 7.8 years. The most frequently observed intraoperative complication was rectal injury (2.3 percent). Short-term postoperative bleeding that required transfusion (4.8 percent), reoperation (1.5 percent) or both (0.4 percent) occurred in some cases. Major complications were three (0.6 percent) rectovaginal fistulas, which were successfully treated. Revision vaginoplasty was performed in 14 patients (2.9 percent). Comorbid diabetes was associated with a higher risk of local infection, and use of psychotropic medication predisposed to postoperative urinary retention. Successful vaginal construction without the need for secondary functional reoperations was achieved in the majority of patients.

Bouman et al. (2016) prospectively assessed surgical outcomes of primary total laparoscopic sigmoid vaginoplasty in 42 transgender women with penoscrotal hypoplasia. Mean follow-up time was  $3.2 \pm 2.1$  years. The mean operative duration was  $210 \pm 44$  minutes. There were no conversions to laparotomy. One rectal perforation was recognized during surgery and immediately oversewn without long-term consequences. The mean length of hospitalization was  $5.7 \pm 1.1$  days. One patient died as a result of an extended-spectrum beta-lactamase-positive necrotizing fasciitis leading to septic shock, with multiorgan failure. Direct postoperative complications that needed laparoscopic reoperation occurred in three cases (7.1 percent). In seven cases (17.1 percent), long-term complications needed a secondary correction. After 1 year, all patients had a functional neovagina with a mean depth of  $16.3 \pm 1.5$  cm.

Despite the significant increase in genital gender affirming surgery (GAS) within the past 50 years, there is limited data regarding hair removal practices in preparation for genital GAS. Genital gender affirming surgery (GAS) involves reconstruction of the genitals to match a patient's identified sex. The use of hair-bearing flaps in this procedure may result in postoperative intra-vaginal and intra-urethral hair growth and associated complications, including lower satisfaction with genital GAS. In 2016 Zhang et al conducted a literature review, recommendations from experience, and a practical laser hair removal (LHR) approach to hair removal prior to genital GAS.

Horbach et al. (2015) conducted a systematic review of vaginoplasty techniques in MtF individuals with gender dysphoria. Twenty-six studies were included (mostly retrospective case series of low to intermediate quality). Outcome of the penile skin inversion technique was reported in 1,461 patients and bowel vaginoplasty in 102 patients. Neovaginal stenosis was the most frequent complication in both techniques. Sexual function and patient satisfaction were overall acceptable, but many different outcome measures were used. Quality of life was only reported in one study. Comparison between techniques was difficult due to the lack of standardization. The authors concluded that the penile skin inversion technique is the most researched surgical procedure. Outcome of bowel vaginoplasty has been reported less frequently but does not seem to be inferior. The available literature is heterogeneous in patient groups, surgical procedure, outcome measurement tools and follow-up. There is a need for prospective studies with standardized surgical procedures, larger patient groups and longer follow-up periods. Uniformity in outcome measurement tools such as validated questionnaires and scores for sexual function and quality of life is mandatory for correct interpretation and comparability of data.

A Hayes report concluded that, overall, the quality of the evidence on gender reassignment surgery for gender dysphoria was very low (Hayes, 2014; updated 2020). The evidence suggests positive benefits, but because of serious limitations, permits only weak conclusions. Limitations include small sample sizes, retrospective data, lack of randomization and control and a lack of objective and validated outcome measures.

- Patients who underwent chest/breast or genital surgery were generally pleased with the aesthetic results.
- Following gender reassignment surgery, patients reported decreased gender dysphoria, depression and anxiety and increased quality of life.
- The majority of gender reassignment surgery patients were sexually active, but the ability to orgasm varied across studies.
- Complications of surgery following gender reassignment surgery were common and could be serious.



- Rates of regret of surgery and suicide were very low following gender reassignment surgery.
- Data were too sparse to draw conclusions regarding whether gender reassignment surgery conferred additional benefits to hormone therapy alone.
- Data were too sparse to draw conclusions regarding whether outcomes vary according to which surgeries were performed.

Bouman et al. (2014) conducted a systematic review of surgical techniques and clinical outcomes of intestinal vaginoplasty. Twenty-one studies were included (n=894). All studies had a retrospective design and were of low quality. Prevalence and severity of procedure-related complications were low. The main postoperative complication was introital stenosis, necessitating surgical correction in 4.1% of sigmoid-derived and 1.2% of ileum-derived vaginoplasties. Neither diversion colitis nor cancer was reported. Sexual satisfaction rate was high, but standardized questionnaires were rarely used. Quality of life was not reported. The authors concluded that prospective studies, using standardized measures and questionnaires, are warranted to assess functional outcomes and quality of life.

Djordjevic et al. (2013) evaluated 207 patients who underwent single-stage metoidioplasty, comparing two different surgical techniques of urethral lengthening. The procedure included lengthening and straightening of the clitoris, urethral reconstruction and scrotoplasty with implantation of testicular prostheses. Buccal mucosa graft was used in all cases for dorsal urethral plate formation and joined with one of the two different flaps: longitudinal dorsal clitoral skin flap (n=49) (group 1) and labia minora flap (n=158) (group 2). The median follow-up was 39 months. The total length of reconstructed urethra ranged from 9.1 to 12.3 cm in group 1 and from 9.4 to 14.2 cm in group 2. Voiding while standing was significantly better in group 2 (93%) than in group 1 (87.82%). Urethral fistula occurred in 16 patients in both groups. Overall satisfaction was noted in 193 patients. The authors concluded that combined buccal mucosa graft and labia minora flap was the method of choice for urethroplasty in metoidioplasty, minimizing postoperative complications.

In a non-randomized study, Dhejne et al. (2011) evaluated mortality, morbidity and criminal rates after gender reassignment surgery in 324 individuals (MtF n=191; FtM n=133). Random population controls (10:1) were matched by birth year and birth sex or reassigned final sex. The authors reported substantially higher rates of overall mortality, death from cardiovascular disease and suicide, suicide attempts and psychiatric hospitalizations in sex-reassigned individuals (both MtF/FtM) compared to a healthy control population. FtMs had a higher risk for criminal convictions.

Murad et al. (2010) conducted a systematic review to evaluate the effects of hormone therapy on patients undergoing gender reassignment surgery. The authors identified 28 eligible studies, all of which were observational and most lacked controls. These studies enrolled 1833 participants with gender dysphoria (1093 MtF; 801 FtM). After gender reassignment surgery, individuals reported improvement in gender dysphoria (80%), psychological symptoms (78%), sexual function (72%) and quality of life (80%). The authors concluded that very low quality evidence suggests that gender reassignment, that includes hormonal interventions, is likely to improve gender dysphoria, psychological functioning and comorbidities, sexual function and overall quality of life.

Sutcliffe et al. (2009) systematically reviewed five individual procedures for MtF gender reassignment surgery: clitoroplasty, labiaplasty, orchiectomy, penectomy and vaginoplasty. Further evaluations were made of eight surgical procedures for FtM gender reassignment surgery: hysterectomy, mastectomy, metoidioplasty, phalloplasty, salpingo-oophorectomy, scrotoplasty/placement of testicular prostheses, urethroplasty and vaginectomy. Eighty-two published studies (38 MtF; 44 FtM) were included in the review. For MtF procedures, the authors found no evidence that met the inclusion criteria concerning labiaplasty, penectomy or orchiectomy. A large amount of evidence was available concerning vaginoplasty and clitoroplasty procedures. The authors reported that the evidence concerning gender reassignment surgery in both MtF and FtM individuals with gender dysphoria has several limitations including lack of controlled studies, lack of prospective data, high loss to follow-up and lack of validated assessment measures. Some satisfactory outcomes were reported, but the magnitude of benefit and harm for individual surgical procedures cannot be estimated accurately using the current available evidence.

## World Professional Association for Transgender Health (WPATH)

WPATH, formerly known as the Harry Benjamin International Gender Dysphoria Association, is an advocacy group devoted to transgender health. WPATH guidelines (2012) present eligibility and readiness criteria for transition-related treatment, as well as competencies of health care providers.

WPATH describes the transition from one gender to another in the following three stages:

- Living in the gender role consistent with gender identity

- The use of cross-sex hormone therapy after living in the new gender role for a least three months
- Gender-affirmation surgery after living in the new gender role and using hormonal therapy for at least 12 months

## Clinical Practice Guidelines

### *American Academy of Pediatrics (AAP)*

In a 2018 policy statement entitled Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents, the AAP states the following regarding surgery: Surgical approaches may be used to feminize or masculinize features, such as hair distribution, chest, or genitalia, and may include removal of internal organs, such as ovaries or the uterus (affecting fertility). These changes are irreversible. Although current protocols typically reserve surgical interventions for adults, they are occasionally pursued during adolescence on a case-by-case basis, considering the necessity and benefit to the adolescent's overall health and often including multidisciplinary input from medical, mental health, and surgical providers as well as from the adolescent and family.

### *American College of Obstetrics and Gynecology (ACOG)*

An ACOG committee opinion (2017; reaffirmed 2020) provides guidance on health care for transgender adolescents. The document makes the following recommendations regarding surgery:

- Obstetrician-gynecologists should understand gender identity and be able to treat transgender patients or refer them appropriately for medical and surgical therapeutic options.
- Surgical management for transgender male patients is typically reserved for patients 18 years and older.
- For transgender male patients, phalloplasty may be performed when the patient reaches the age of majority.
- Transgender female patients who choose to undergo surgery for a neovagina may have vaginoplasty after the age of majority.
- Transgender patients should be counseled about fertility and fertility preservation prior to surgical treatment.

A separate ACOG committee opinion (2011; reaffirmed 2019) provides guidance on health care for transgender individuals. The document makes the following recommendations regarding surgery:

- Obstetrician-gynecologists should assist or refer transgender individuals for routine treatment and screening as well as hormonal and surgical therapies.
- Hormonal and surgical therapies should be managed in consultation with health care providers with expertise in specialized care and treatment of transgender persons.

### *Endocrine Society*

Endocrine Society practice guidelines (Hembree et al., 2017) addressing endocrine treatment of gender-dysphoric/gender-incongruent persons makes the following recommendations regarding surgery for sex reassignment and gender confirmation:

- Suggest that clinicians delay gender-affirming genital surgery involving gonadectomy and/or hysterectomy until the patient is at least 18 years old or legal age of majority in his or her country (Recommendation based on low quality evidence).
- A patient pursue genital gender-affirming surgery only after the mental health practitioner (MHP) and the clinician responsible for endocrine transition therapy both agree that surgery is medically necessary and would benefit the patient's overall health and/or well-being (Strong recommendation based on low quality evidence).
- Surgery is recommended only after completion of at least one year of consistent and compliant hormone treatment unless hormone therapy is not desired or medically contraindicated (Ungraded Good Practice Statement).
- The physician responsible for endocrine treatment medically clears individual for surgery and collaborates with the surgeon regarding hormone use during and after surgery (Ungraded Good Practice Statement).
- Recommend that clinicians refer hormone treated transgender individuals for genital surgery when (Strong recommendation based on very low quality evidence):
  - The individual has had a satisfactory social role change
  - The individual is satisfied about the hormonal effects
  - The individual desires definitive surgical changes
- Suggest that clinicians determine the timing of breast surgery for transgender males based upon the physical and mental health status of the individual. There is insufficient evidence to recommend a specific age requirement (Recommendation based on very low quality evidence)

# U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Gender transformation surgeries are procedures, and therefore, not subject to FDA regulation. However, medical devices, drugs, biologics, or tests used as a part of these procedures may be subject to FDA regulation. See the following website to search by product name. Available at: <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm>. (Accessed August 12, 2020)

## References

- American Academy of Pediatrics. Policy Statement. Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents. October 2018.
- American College of Obstetricians and Gynecologists (ACOG). Committee Opinion #512. Health care for transgender individuals. *Obstet Gynecol*. 2011 Dec;118(6):1454-8. Reaffirmed 2019.
- American College of Obstetricians and Gynecologists (ACOG). Committee Opinion #685. Care for transgender adolescents. *Obstet Gynecol*. 2017 Jan;129(1):e11-e16. Reaffirmed 2020.
- American Psychological Association. Report of the task force on gender identity and gender variance. Washington, DC: 2009.
- American Psychological Association. Report of the task force on appropriate therapeutic responses to sexual orientation. Washington, DC: 2009.
- American Psychological Association. Guidelines for psychological practice with transgender and gender nonconforming people. *Am Psychol*. 2015 Dec;70(9):832-64.
- Bouman MB, van der Sluis WB, Buncamper ME, et al. Primary total laparoscopic sigmoid vaginoplasty in transgender women with penoscrotal hypoplasia: a prospective cohort study of surgical outcomes and follow-up of 42 patients. *Plast Reconstr Surg*. 2016 Oct;138(4):614e-23e.
- Bouman MB, van Zeijl MC, Buncamper ME, et al. Intestinal vaginoplasty revisited: a review of surgical techniques, complications, and sexual function. *J Sex Med*. 2014 Jul;11(7):1835-47.
- Buncamper ME, van der Sluis WB, van der Pas RS, et al. Surgical outcome after penile inversion vaginoplasty: a retrospective study of 475 transgender women. *Plast Reconstr Surg*. 2016 Nov;138(5):999-1007.
- Byne W, Bradley SJ, Coleman E, et al. Report of the American Psychiatric Association task force on treatment of gender identity disorder. *Am J Psychiatry*. 2012 Aug;169(8):875-6.
- Cohen WA, Shah NR, Iwanicki M, et al. Female-to-male transgender chest contouring: a systematic review of outcomes and knowledge gaps. *Ann Plast Surg*. 2019 Nov;83(5):589-593.
- Dhejne C, Lichtenstein P, Boman M, et al. Long-term follow-up of transsexual persons undergoing sex reassignment surgery: cohort study in Sweden. *PLoS One*. 2011 Feb 22;6(2):e16885.
- Djordjevic ML, Bizic MR. Comparison of two different methods for urethral lengthening in female to male (metoidioplasty) surgery. *J Sex Med*. 2013 May;10(5):1431-8.
- Diagnostic and statistical manual of mental disorders (5th ed.). 2013. Washington, DC: American Psychiatric Association.
- Dreher PC, Edwards D, Hager S, et al. Complications of the neovagina in male-to-female transgender surgery: A systematic review and meta-analysis with discussion of management. *Clin Anat*. 2018 Mar;31(2):191-199.
- ECRI Institute. Special Report. Gender dysphoria. January 2016.
- Frey JD, Poudrier G, Chiodo MV, Hazen A. A systematic review of metoidioplasty and radial forearm flap phalloplasty in female-to-male transgender genital reconstruction: is the "ideal" neophallus an achievable goal? *Plast Reconstr Surg Glob Open*. 2016 Dec 23;4(12):e1131.
- Gaither TW, Awad MA, Osterberg EC, et al. Postoperative Complications following Primary Penile Inversion Vaginoplasty among 330 Male-to-Female Transgender Patients. *J Urol*. 2018;199(3):760-765.
- Gooren LJ. Clinical practice. Care of transsexual persons. *N Engl J Med*. 2011 Mar 31;364(13):1251-7.

Hayes, Inc. Hayes Directory Report. Sex reassignment surgery for the treatment of gender dysphoria. Lansdale, PA: Hayes, Inc.; May 2014; updated September 2020.

Hayes, Inc. Hayes Evidence Analysis Research Brief. Reversal of gender reassignment surgery. Lansdale, PA: Hayes, Inc.; June 2020.

Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab*. 2017 Nov 1;102(11):3869-3903.

<https://academic.oup.com/jcem/article/102/11/3869/4157558>.

Horbach SE, Bouman MB, Smit JM, et al. Outcome of vaginoplasty in male-to-female transgenders: a systematic review of surgical techniques. *J Sex Med*. 2015 Jun;12(6):1499-512.

Kanhai RC, Hage JJ, Mulder JW. Long-term outcome of augmentation mammoplasty in male-to-female transsexuals: a questionnaire survey of 107 patients. *Br J Plast Surg*. 2000 Apr;53(3):209-11.

Kuhn A, Bodmer C, Stadlmayr W, Kuhn P, Mueller MD, Birkhäuser M. Quality of life 15 years after sex reassignment surgery for transsexualism. *Fertil Steril*. 2009 Nov;92(5):1685-1689.e3.

Mahfouda S, Moore JK, Siafarikas A, Hewitt T, Ganti U, Lin A, Zepf FD. Gender-affirming hormones and surgery in transgender children and adolescents. *Lancet Diabetes Endocrinol*. 2019 Jun;7(6):484-498.

Manrique OJ, Adabi K, Martinez-Jorge J, et al. Complications and Patient-Reported Outcomes in Male-to-Female Vaginoplasty-Where We Are Today: A Systematic Review and Meta-Analysis. *Ann Plast Surg*. 2018 Jun;80(6):684-691.

Morrison SD, Vyas KS, Motakef S, et al. Facial feminization: systematic review of the literature. *Plast Reconstr Surg*. 2016 Jun;137(6):1759-70.

Murad MH, Elamin MB, Garcia MZ, et al. Hormonal therapy and sex reassignment: a systematic review and meta-analysis of quality of life and psychosocial outcomes. *Clin Endocrinol (Oxf)*. 2010 Feb;72(2):214-31.

Nondiscrimination in Health Programs and Activities, 81 Fed. Reg. 31376 (May 18, 2016) (codified at 45 C.F.R. pt. 92). Sutcliffe PA, Dixon S, Akehurst RL, et al. Evaluation of surgical procedures for sex reassignment: a systematic review. *J Plast Reconstr Aesthet Surg*. 2009 Mar;62(3):294-306; discussion 306-8.

Scandurra C, Mezza F, Maldonato NM, et al. Health of non-binary and genderqueer people: a systematic review. *Front Psychol*. 2019 Jun 25;10:1453.

Van Damme S, Cosyns M, Deman S, et al. The effectiveness of pitch-raising surgery in male-to-female transsexuals: a systematic review. *J Voice*. 2017 Mar;31(2):244.e1-244.e5.

Wernick JA, Busa S, Matouk K, et al. A systematic review of the psychological benefits of gender-affirming surgery. *Urol Clin North Am*. 2019 Nov;46(4):475-486.

World Professional Association for Transgender Health (WPATH). Standards of care for the health of transsexual, transgender and gender nonconforming people. 7<sup>th</sup> edition. 2012.

Zhang WR, Garrett GL, Arron ST, Garcia MM. Laser hair removal for genital gender affirming surgery. *Transl Androl Urol*. 2016 Jun;5(3):381-7.

## Policy History/Revision Information

Date	Summary of Changes
04/26/2021	<b>Template Update</b> <ul style="list-style-type: none"><li>Replaced content sub-heading titled “Professional Societies” with “Clinical Practice Guidelines” in <i>Clinical Evidence</i> section</li><li>Removed <i>CMS</i> section</li><li>Replaced reference to “MCG™ Care Guidelines” with “InterQual® criteria” in <i>Instructions for Use</i></li></ul>
04/01/2021	<b>Coverage Rationale</b> <ul style="list-style-type: none"><li>Added notation to indicate this Medical Policy does not apply to self-funded and fully insured group policies in California; refer to the California-specific Benefit Interpretation Policy titled <i>Gender Dysphoria (Gender Identity Disorder) Treatment</i></li></ul> <b>Supporting Information</b>

Date	Summary of Changes
	<ul style="list-style-type: none"> <li>Archived previous policy version 2021T0580i</li> </ul>

## Instructions for Use

This Medical Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard plan. In the event of a conflict, the member specific benefit plan document governs. Before using this policy, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Policy is provided for informational purposes. It does not constitute medical advice.

This Medical Policy may also be applied to Medicare Advantage plans in certain instances. In the absence of a Medicare National Coverage Determination (NCD), Local Coverage Determination (LCD), or other Medicare coverage guidance, CMS allows a Medicare Advantage Organization (MAO) to create its own coverage determinations, using objective evidence-based rationale relying on authoritative evidence ([Medicare IOM Pub. No. 100-16, Ch. 4, §90.5](#)).

UnitedHealthcare may also use tools developed by third parties, such as the InterQual® criteria, to assist us in administering health benefits. UnitedHealthcare Medical Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.

# **EXHIBIT 13**

**TRANSGENDER "TRANSITION" PROCEDURES PERFORMED ON MINORS**  
**ANSWERS TO QUESTIONS AND INFORMATION FOR JOINT INTERIM COMMITTEE**

**Submitted by Rep. Rex P. Shipp**

**June 10, 2021**

**Part I - Evaluating the scope of the challenge**

**1. What is biological sex dysphoria?**

Biological sex dysphoria is the feeling of discomfort or distress that might occur in people whose gender identity differs from their biological sex or sex-related physical characteristics.

*"The medical diagnosis is gender dysphoria. A biological male feeling and believing himself to be a girl and the distress that accompanies these feelings and beliefs is an example of gender dysphoria (previously known as gender identity disorder).*

*There are billions of neurons that make the brain. Neurons are very specialized cells that transmit and store information. The control center, if you will, of every cell in the body is the nucleus, which contains DNA. The DNA is wound up into specialized units called chromosomes. There are 46 chromosomes in every human cell. Two of these are specialized chromosomes called sex chromosomes. Assuming normal development, females have two X chromosomes, and males have one X and one Y chromosome. These sex chromosomes are present in every cell in the body. They remain in the cells from conception until death and do not change."* Michael K. Laidlaw, M.D.

Historically, biological sex dysphoria primarily affected a very small percentage of biologically male children who were first diagnosed at a very young age (generally, under the age of five). More recently, however, a growing number of pre-teen and early teen females (primarily) are experiencing what has come to be called Rapid Onset Gender Dysphoria (ROGD).

*"In my clinical practice I find that social media, internet exposure to pornography, and childhood sexual abuse are often contributing factors to ROGD in my clients ages 10-13. For my client base, the "coming out" is linked to access to the internet or getting their own cell phone where when they google "feeling uncomfortable about your body" google will tell you all about gender dysphoria and being transgender. Other factors can include undiagnosed autistic spectrum and other learning disabilities causing social anxiety."* Sheri Golden, Ph.D.

A distraction frequently raised in the context of this issue is the tiny percentage of people who suffer from disorders of sexual development (DSD), sometimes referred to as an intersex condition. Those in whom sexual anatomy is ambiguous or clearly conflicts with their chromosomal make-up are rare, estimated by one expert as "occurring in fewer than 2 out of every 10,000 live births." The vast majority of "transgender" individuals are not "intersexed."



Any proposed legislation would be carefully written and should not inhibit the normal and traditional treatment of these chromosomal birth defects.

## **2. How many Utah children experience biological sex dysphoria or Utah adolescents experience rapid onset gender dysphoria?**

There are no medical records available that would show how many children see pediatricians because their parents express concerns about any gender confusion their child might be experiencing. Nor are there records that would show how many who do so are advised that that ambiguity in gender expression or feelings is fairly common in children, and that the wisest course is “watchful waiting” because the feelings will resolve themselves in most cases. Nor are there records that would show how many parents have concerns but never report those concerns to anyone. Even if records were available, it still would be particularly difficult to establish or estimate a number because a child’s gender expression or emotional feelings about his or her biological gender are not fixed and can change over time.

Rapid onset gender dysphoria in teens is unquestionably a social phenomenon. Often driven by social media and the need to be noticed or to be “trendy,” teens sometimes identify as a sexual or gender minority for a season. However, we have no research studies to follow how this changes over time. This very fluidity in identity is a fundamental feature of adolescence and illustrates the dangers of making life decisions based on what could well be a temporary enthrallment.

Reliable research on sexual or gender issues in children and adolescents – particularly in individual states like Utah – is essentially nonexistent. Further, identifying randomly selected subjects, employing reliable and reasonably accurate survey methodology, and following the research subjects over time would be extraordinarily difficult. In addition, for a number of reasons, an attempted survey of even a large sample of school-age children and adolescents could easily yield inaccurate or misleading results in either direction. Voluntary response rates would vary and likely would be considerably less than 100 percent even among the survey sample population, for reasons ranging from individual reluctance to parental objection.

We do know from other evidence (e.g. *Examining Health Outcomes for People Who Are Transgender*, 2019) that there has been an increase in adolescents reporting gender dysphoria of over 1,000 percent in the United States and 4,000 percent in Great Britain over the last decade. Another primary indicator is the number of gender clinics that have begun operation within the last five years. In Utah there has been a five-fold increase in the number of prescriptions for testosterone to girls under the age of 18 in the last five reporting years according to information in the Utah Controlled Substances Database. (As discussed further below, there is no medical reason to administer testosterone to girls; the only possible reason is for gender “transition.”)



Evidently, an increasing number of physicians and mental health professionals believe there is money to be made by specializing in this area. New gender clinics are springing up almost overnight. For example, Planned Parenthood is now offering transgender services in the vast majority of its facilities, and has expanding its advertising from its traditional focus on abortion services to include “transgender” pharmaceutical and medical conversion therapies. This indicates that the problem affects a significant number of youth and is increasing.

**3. How many Utah children and adolescents are undergoing various forms of “gender affirming” pharmaceutical or medical (surgical) conversion therapies?**

Transgender “affirming” processes begin with social transition (changes in name, clothing, public presentation, etc.) and then progress to early pharmaceutical interventions – puberty blocking drugs – to stop normal adolescent development. The next transition phase is administering what are popularly called cross-sex hormones (boys receiving abnormally large doses of estrogen, or girls being injected with large doses of testosterone). The final phase is “sex reassignment” surgeries, in which healthy breasts are removed from females and healthy genitals from males, along with a variety of additional surgical procedures to construct artificial male or female genitalia to “reshape” the body to artificially resemble the body of an opposite-sex individual.

The unregulated nature of these experimental processes and the growing number of unregulated venues where these procedures are available make it impossible to know at what age, in what number, or to what degree gender conversion therapies are taking place in Utah.

**a. Puberty blockers:**

*“Puberty blockers are gonadotropin releasing hormone agonists (GnRHa) which basically chemically castrate either sex at the level of the brain, thus suppressing (“blocking”) the formation of either testosterone or estrogen. They are FDA approved for use in precocious (premature) puberty and for treatment of prostate cancer, both being disease states. They are not FDA approved for treatment of gender dysphoria, where their use in otherwise physically healthy minors is experimental, not proven safe, not proven effective, not proven to reduce suicides, and is something to which a minor does not have the competence to consent.”* Andre Van Mol, M.D.

There are proper medical and FDA-approved uses for puberty blockers with children in certain rare cases such as precocious puberty, idiopathic short stature, endometriosis, or sex hormone-stimulated cancers. (The most common puberty blockers are gonadotropin-releasing hormone agonists (GnRHa) such as Lupron.) The legislation being suggested includes express exceptions for all of the known medical conditions for which these drugs are proper FDA-approved treatment.

*“By current protocol, children with gender dysphoria are given these powerful hormones at around age eleven. This is too young for them to understand the implications of what will happen to their minds and bodies. Time is required for maturity of the developing adolescent mind, and hormones play an important role in this development.”* Michael K. Laidlaw, M.D.

For children experiencing biological sex dysphoria (transgender feelings), there is nothing under current law restricting or limiting physicians, psychiatrists, licensed physician assistants, and even nurse practitioners from prescribing puberty blockers to stop the normal developmental process. Under current law, GnRHa and similar drugs are not controlled substances. There is no mandatory reporting system for prescriptions filled for these drugs.

**b. Cross-sex hormones (“masculinizing” or “feminizing” drugs)**

By “masculinizing” drugs, we understand the question to refer to administration of testosterone or other androgens to minor females. By “feminizing” drugs, we understand the question to refer to administration of estrogen or compounds with estrogenic effect to minor males.

The next step in “affirming” gender transition of minors for those who first took puberty blockers is the administration of cross-sex hormones. The male hormone testosterone is given to biological females who wish to present themselves as male, in order to give them more masculine physical characteristics (such as facial and body hair and deepening of the voice). The female hormone estrogen is given to biological males who wish to present themselves as female, in order to give them more feminine characteristics such as enlarged breasts. In effect, the cross-sex hormones are used to initiate an artificial partial puberty corresponding to the desired gender identity. In this situation, there may be pressure to start cross-sex hormones at even younger ages, so that the child does not remain in an artificial pre-pubescent state while his or her peers are continuing to develop more adult sexual characteristics.

*“There is no such thing as ‘trans puberty.’ What happens is that [an] abnormal, pathologic state . . . is induced.”* Michael K. Laidlaw, M.D.

Testosterone is a Schedule III controlled substance. (Utah Code Ann. § 58-37-4(2)(c)(vi)(Z).) Consequently, every retail, institutional, and outpatient hospital pharmacy, and every in-state and out-of-state mail order pharmacy, is legally required to report every dispensing of this substance to the Utah Controlled Substance Database (CSD). (Utah Code Ann. § 58-37f-203(3).) The CSD is not accessible by the public. However, we understand from a former legislator who obtained the information from the CSD that more than 550 prescriptions for testosterone issued to minor females were filled in 2019, and that this number is more than a five-fold increase over 5 years before. There is no medical reason to prescribe testosterone to a female other than to facilitate gender “transition.”

Estrogen is not a controlled substance, and there is no mandatory reporting system for prescriptions filled for estrogen. Therefore, the number of minor males for whom estrogen was prescribed to facilitate gender “transition” is unknown.

### **c. Sex reassignment surgeries**

*"Sex reassignment surgery" is a massive misrepresentation of what these operations actually do. You can't change a person's sex. All that is happening is that the patient is undergoing an intentional mutilation in order to create a counterfeit appearance of the other sex. Nearly 100% of children who are enrolled in "gender clinics" are pushed along from puberty blockers, to wrong sex hormones, to top surgery, and then to bottom surgery, because at each step, the hoped for resolution of their anxiety only finds temporary effect, so the next step is encouraged."* Patrick Lappert, M.D.

There are a variety of medical procedures and surgeries that are undertaken in an attempt to make female bodies appear more male, and male bodies to appear more female. Healthy bodies are declared to be “wrong” and are treated as mere material to be mastered and reshaped. These range from the actual removal of healthy breasts and genitals to plastic surgery to construct a more masculine or feminine sounding or appearing body.

*"Typically, surgery turning a male into a trans-female involves dissecting the penis, turning the skin inside out, and placing it into a surgically created cavity to create a false vagina. After surgery, a dilator has to be placed in this artificial vagina to keep it from collapsing. Since he still has a small child-sized penis (because of puberty blockers), he does not have enough skin to line the false vagina. Potential remedies include sewing in a section of intestine along with the penis skin to make the false vagina. Once he has surgery to remove his testicles he will be forever infertile, with no chance to produce biological offspring."* Michael K. Laidlaw, M.D.

While we have no reporting requirements that would show how many of these various procedures are taking place in Utah, or the age of the patients on whom they are performed, the Internet is replete with the pictures and stories of minor children who have undergone these procedures.

### **4. How many Utah minors who begin treatment for biological sex dysphoria with puberty blocking drugs subsequently move on to cross-sex hormones and sex reassignment surgeries?**

Transgender “affirming” advocates and clinics outline in their publications and websites a step-by-step process that begins with social transitioning, moves to drug and hormone treatment, and concludes with surgical procedures. If one accepts the worldview that an individual can be born as a male with a female brain or as a female with a male brain (*i.e.*, transgender is something you are and not just a dysphoria about biological sex that you experience), then advancing toward becoming your authentic self is the logical goal. Current research from Great

Britain and Sweden suggests that individuals who are socially affirmed in a new transgender identity and begin puberty blockers almost always proceed to cross-sex hormones and surgical transition.

The entire transgender affirming process is so new, so medically experimental, so irreversible in its effects, and so lacking in longitudinal (long term) research that much of the eventual consequences of this socially-driven phenomenon are completely unknown. That is precisely why it is so potentially harmful. Regardless of the number of Utah children affected, be it 5 or 50 or 500, every child and adolescent should be protected from these “adults only” procedures.

**5. How are social awareness, population growth, and the evolving understanding of appropriate treatment for gender dysphoria likely to affect the estimates above?**

Different parties have vastly different views on what constitutes “appropriate treatment for gender dysphoria.” As a nation-wide (and world-wide) social phenomenon, public and even professional awareness is changing rapidly.

We believe the appropriate treatment for children and adolescents is competent and caring counseling by an adept mental health professional. Medical professionals in the United Kingdom, Finland, and most recently Sweden have declared that the permanent, irreversible chemical or surgical damage to the healthy bodies of minors cannot be justified as a wise or sensible approach to what is scientifically a mental health issue. We hope that this growing awareness and Utah’s willingness to protect vulnerable children and adolescents will be the foundation for an “evolving understanding of appropriate treatment.”

*“As a family therapist for over 25 years, as well as educating on gender identity development for nearly 20 years, I have found that when children are confused about their gender, there are usually underlying factors that need to be addressed. Offering to change a child's body, instead of addressing his or her mind, completely ignores the underlying issues. Hormones and amputation of body parts are neither safe, nor effective solutions. However, individual and family therapy (talk therapy) have been shown to be effective with many of these children. Not only is this a safer option, but it addresses the deeper issues.” Julie Hamilton, Ph.D., LMFT*

Professional perception of what constitutes appropriate treatment for biological sex dysphoria depends primarily on the professional’s “worldview” of the issue. Transgenderism is based on the idea that a person can be born into the “wrong body” (*i.e.*, that someone born male can have a “female brain,” and vice versa). “Affirming” mental health professionals and physicians accept and advocate that position. Consequently, they favor drug, hormonal, and surgical interventions to try to re-fashion the body to align with internally-perceived gender. However, there is no scientific evidence for this underlying proposition. There is no evidence that there is anything different about a transgender female’s brain or body from that of any other male. There is no evidence that there is anything different about a transgender male’s brain or body from that of any other female. Persons experiencing biological sex dysphoria are having a

mental or emotional experience—albeit a very painful and difficult and often persistent one—which may arise from any of a number of causes or contributing factors particular to the individual.

It is for this reason that medical professionals are becoming more reluctant to undertake medical procedures on people whose bodies do not present medical issues. Mental health and medical professionals who do not accept transgenderism’s underlying assumption—which is an ideological proposition, not a scientific fact or evidence-based scientific hypothesis—believe that these emotional challenges should be addressed through therapeutic counseling procedures.

## **Part II – Assessing the treatment options**

### **1. What are the short- and long-term potential benefits and harms of addressing gender dysphoria in minors with medical intervention?**

#### **a. Puberty blockers:**

*“Puberty blockers (GnRHa or PB) cause infertility (blocking sperm and egg development) as long as they are used, and their reversibility after discontinuation is not assured. If puberty blockers are followed by cross-sex hormones, sterility is assured. Puberty blockers inhibit and compromise bone density development precisely during life’s greatest period of increase for such. This may lead to early osteoporosis. Genitalia are arrested in an underdeveloped stage and sexual dysfunction is also noted (for males: erectile, orgasmic and ejaculatory impairment; for females: a menopausal-like state is induced).*

*The Lupron package insert warns of mood swings, depression, suicidal ideation and attempts. Brain development milestones are hindered with unknown long-term effects, and the puberty time frame shared with peers is forever sacrificed. Numerous studies show that initiation of puberty blockers selects persistence of gender dysphoria over its natural desistance. Therefore, puberty blockers are not “buying time” or “pause buttons” to “wait and see,” but are gateway drugs to cross sex hormones and possible gender reassignment surgery, along with all of their shortcomings.*

*Their use in otherwise physically healthy minors is experimental, not proven safe, and not proven effective. Thus ruled the United Kingdom’s High Court in Bell v Tavistock (Dec 2020), which led to the NHS amending service specifications for Gender Identity Development Services for children and adolescents. Likewise, Sweden’s famed Karolinska Hospital issued a similar policy change effective April 1, 2021. Puberty blockade will no longer be allowed for minors under 16, and only under court order (UK) or in a closely monitored clinical trial (Sweden) for those under 18.” Andre Van Mol, M.D.*

The legislation being suggested includes express exceptions for all of the known medical conditions for which these drugs are the proper FDA-approved treatment. The FDA has not approved use of puberty blockers for treatment of biological sex dysphoria. Use of GnRHa for this purpose is still highly experimental.

Current Utah law does nothing to protect children from physicians, physician assistants, or even nurse practitioners from prescribing these drugs, even though the medical practitioner may have little or no experience or specialty training in the physical or psychological consequences of prescribing these drugs, or knowledge of the current medical research.

Delaying puberty in a child who has confused or dysphoric feelings about his or her biological sex may bring a very temporary perception of relieved stress in delaying physical development that the child thinks he or she does not want, and with which the child is, in the immediate moment, uncomfortable. However, if the confused feelings don't actually represent reality—in other words, if a child with confused feelings has not actually been “born into the wrong body”—prescribing medications can only “mask” or distract from the exploration of underlying problems or sources of the confused feelings.

Transgender activists argue that use of puberty blockers is harmless. They say that their effects are fully reversible if a minor stops taking them. Making any such claims for experimental treatments about which there is little longitudinal medical research is speculative at best and irresponsible at worst. Notably, last year the United Kingdom's National Health Service (NHS) backed away from previous categorical statements that effects of puberty blockers are fully reversible; new NHS statements are much more cautious.

The biggest concern, however, is that in the overwhelming majority of cases, children who are socially transitioned and placed on puberty blockers progress to the next phase of “transition,” that is, the administration of cross-sex hormones.

#### **b. Cross-sex hormones**

Cross-sex hormones – large doses of feminizing hormones (estrogen) given to biological boys places them at increased risk for blood clots, high triglycerides, cardiovascular disease, high blood pressure, and diabetes. Large doses of masculinizing hormones (testosterone) given to biological girls places them at increased risk for high red blood cells, high cholesterol, cardiovascular disease, high blood pressure, diabetes, and destabilization of certain psychiatric disorders.

The effect of administering cross-sex hormones after puberty blockers is permanent sterilization. A young person who has taken puberty blockers will have already prevented the development of the reproductive system to the point where viable sperm or eggs would be produced in the first place. Indeed, the medical disclosure forms patients or their parents are required to sign before these treatments can proceed emphasize this.

Individuals who have already undergone natural puberty will generally be rendered infertile, at least temporarily, by the administration of cross-sex hormones, which inhibit ovulation in biological females and the production of sperm in biological males. While claims that either puberty blockers or cross-sex hormones alone are “fully reversible” are questionable, the use of both amounts to what some have called “chemical castration.”

### **c. Sex reassignment surgery**

It is very important to understand the reality of attempted sex-change surgical procedures. For females, this involves mastectomies, hysterectomies, removal of the ovaries, chest and facial masculinization procedures, and construction of artificial male genitalia from other tissues. For males, attempted sex-change surgery involves orchiectomy (removal of the testes); reduction and reconstruction of the penis to form an artificial clitoris; construction of an artificial vagina and artificial vulva; breast augmentation surgery, and facial feminization procedures. These procedures are irreversible and cause permanent sterilization.

Life-long pharmaceutical treatment and very often repeated medical interventions will be necessary because of the extreme nature of these hormonal and surgical procedures.

*“Elective mastectomy to masculinize a young woman's chest (sometimes as young as 13-year-old girls) is the intentional removal of normal tissue in hopes of satisfying a disordered subjective feeling. It cannot be equated to the removal of normal breast tissue in a girl with abnormally large breasts because this latter case is based upon the diagnosis of an orthopedic problem (neck, back, and shoulder pain limiting physical activity). There is an objective medical condition, and 3rd party payment requires reporting of the weights of the specimens in order to confirm the mechanical effects of the weight of the breast, and to distinguish this operation from a cosmetic procedure to make the girl look better. In the case of boys having breast tissue removed, here again we have an objective medical diagnosis of gynecomastia (breast glandular tissue in a boy is not normal).*

*In the case of transgender masculinization, the diagnosis is subjective, the diagnosis is made by the child, and the doctor has no way of confirming or refuting the diagnosis, and has no way of predicting if the child will benefit. There are no peer reviewed publications to support the procedure, only small studies, typically single center, with massive self-selection bias, and no long term follow up to show benefit. The best studies, which are longitudinal population based studies show that persons who have completed transition surgeries, when followed long term, have a 19-fold higher incidence of completed suicide.*

*Mastectomy is irreversible. All that can be offered to the ever growing population of females with transition regret is the construction of breast mounds. They will never be able to breast feed (so they have lost a human capacity) and in most cases will have lost erotic sensibility. They will always have large chest scars in most cases.”* Patrick Lappert, M.D.



Again, there is no medically defensible reason to cut off or mutilate healthy body parts or destroy healthy body functions in response to what is actually an emotional or mental health issue. None of these procedures address the underlying causes of the confused feelings for the individual involved. As with administration of cross-sex hormones, performing these procedures on a minor who does not have the maturity or judgment to make such life-long irreversible decisions for himself or herself is not justifiable.

In short, from a medical perspective, all of these procedures are only harmful and damaging.

The only arguable benefit from this damage is a perception of continued partial relief from distressed and conflicted feelings. How long such perceived relief lasts will vary according to the individual case because the underlying causes of the confused feelings will go unaddressed.

This is especially true for minors, who are at an age at which conflicted emotions on any number of issues are common, and for whom the emotional maturation and developmental processes are not complete. To permanently sterilize a minor at this stage of life, when the minor does not have the maturity and judgment to make the decision for himself or herself, is unjustifiable.

## **2. What are the short- and long-term potential benefits and harms of addressing gender dysphoria in minors with non-medical (counseling and support) interventions?**

Children and adolescents experiencing either biological sex dysphoria or later-occurring rapid onset gender dysphoria are experiencing authentic confusion and distress. Ignoring these genuine symptoms of angst is risky and potentially dangerous. A process of acknowledgement, counseling, evaluation, and support directed by competent mental health professionals is the appropriate approach.

*"In young children, for example, parents can be taught how to genuinely "affirm," i.e., learn to recognize their child's innate goodness and communicate their delight in his or her being. In time affirmation by others helps one to affirm oneself as one is, and as one has the potential to be(come). Family and parental therapy may be a tremendous help for enabling parents to affirm their child as s/he is now, even if s/he is discordant about his/her biological sex and how s/he would like to live as a gendered being. Fundamentally, parents can learn to unconditionally love their child."* Philip Sutton, Ph.D.

Experiences of biological sex dysphoria in teens are taking place in a developmental season where incidents of childhood trauma, normal identity exploration, peer influence and various emotional conflicts or intellectual misunderstandings (to cite just a few examples) can effect an evolving sense of self. Understanding and evaluating these potential developmental factors requires both time and professional competence. There should be no rush to reach hypothetical and premature psychological conclusions, or to move toward experimental and



dangerous medical interventions which are clearly life-changing and irreversible.

*“The research indicates that approximately 90% of dysphoric patients resolve dysphoria by their late 20s. Past peer reviewed research has shown that dysphoria in children can be resolved via psychotherapy, which indicates dysphoria is environmentally based. And yet...many medical doctors and therapists approve of and perform permanent removal of healthy body parts in order to supposedly relieve dysphoria. The research is already showing increased transgender treatment regret in some areas of the world. But the damage to their bodies is permanent in operative cases. Authentic and compassionate psychotherapy treatments must be adopted by our professions.”* David Pickup, LMFT

Since research clearly demonstrates that a very high percentage of children experiencing biological sex dysphoria will resolve their confusion in favor of their biological sex by the time they reach adulthood, surely a counseling approach makes more sense and does not foreclose “transition” opportunities for adults who eventually pursue a medical option.

### **3. How should potential harms and benefits be weighed in treatment decisions?**

As a matter of general principle, of course, potential harms and benefits should be weighed in any treatment decision. But inherent in that is the imperative necessity of an accurate and truthful understanding, and honest and logical analysis, of the factors involved. In addition, we must consider the ability of children and adolescents to understand these potential harms and benefits and offer truly “informed consent”.

*“During the past decade, research on neurological maturity shows that the human brain is not finally “mature” until the mid-20’s (25 is often given as the average.) It is simply not possible for pre-pubescent and pubescent girls and boys to truly understand the serious short and long-term (life-long) consequences of taking puberty blockers and cross-sex hormones. These boys and girls are simply humanly unable to understand the gravity of such decisions. This is even more true for the amputation of primary and secondary sexual organs.”* Philip Sutton, Ph.D.

We must keep the following in mind:

There is no scientific or medical evidence to clearly establish any biological explanation for biological sex dysphoria. We are left to conclude that this is a very real emotional and psychological condition. This is a mental health, not a medical, condition.

Experimental, life-altering pharmaceutical and surgical procedures are a decision to artificially alter the body to meet a mental image the individual may have of himself or herself and to regulate challenging emotions. This process will require life-long medical treatments to force the natural body to accept these synthetically-imposed alterations.

Both a decision to go forward with or to postpone medical “transition” may have emotional consequences. The difference is that children and adolescents who postpone medical interventions and pursue the family and mental health counseling route can always pursue medical interventions as adults should they choose to do so for themselves. Children and adolescents who are permitted by adults to pursue medical transition can never “un-ring the bell.” They can never really undo the damage to their body that these procedures will do.

Sadly, parents are sometimes misinformed about the long-term consequences to their children of medical interventions, or receive inadequate support from mental health professionals to assist their children while they pursue a “supportive counseling” approach.

Sometimes parents are misled into believing that a failure to support childhood biological sex transition processes will lead to an increased suicide risk for those they love. They need to know that there is no reliable research to support the idea that these medical transition procedures prevent suicide. While there may be some evidence that biological sex dysphoria increases distress in certain individuals, there is absolutely no research that demonstrates that children who follow a counseling process for their dysphoria are any more suicidal than those who follow a medical transition process. Experts agree that suicide is most likely to be associated with some form of ongoing mental illness.

*“Ninety percent of suicides are associated with a psychiatric condition. The risk of suicide coincides of course with the high prevalence of mental illness in this group of people. Depression, for example, is present in at least 50 percent of those who commit suicides.”*  
Michael K. Laidlaw, MD

In fact

*“Using quotes from the following studies done through NIH/NCBI to answer these concerns.*

*‘Approximately 58% of transgender patients had at least one DSM-5 diagnosis, most frequently Major Depressive Disorder. (13.6% cisgender) \* NIH/NCBI November 2020.’ Clearly this is a population at risk and in need of therapeutic counseling and perhaps medication to address these illnesses. Any type of medical transitioning will complicate diagnostic evaluation and treatment. Therefore, rather than reducing suicide risk, medical procedures involving hormone therapy and surgery have the potential to increase the risk because of missed diagnosis and complications of medications.*

*It seems that transitioning in and of itself does not remove the risk of suicide in this population. As found in the study from \*NIH/NCBI June 2020, “Suicide risk in transgender people is higher than in the general population and seems to occur during every stage of transitioning.” Therefore the act of transitioning does not prevent the risk of suicide.”* Steven Johnson, Ph.D. and Dale Johnson, M.S.

**4. To what extent have long-term outcomes, including physical health, mental health, satisfaction, and regret, been tracked in individuals receiving various treatments for gender dysphoria? What do those studies indicate?**

Again, the entire transgender “affirming” process is so new, so medically experimental, so irreversible in its effects, and lacking in longitudinal (long term) research that much of the eventual consequences of this socially driven phenomenon are completely unknown. That is precisely why it is so potentially harmful and exactly why we should not be performing these irreversible pharmaceutical and medical conversion therapies on minors.

**Part III – Clinical Guidelines**

**1. Are the guidelines published by the World Professional Association for Transgender Health and the Endocrine Society and other published information adequate to guide professionals in their care of minors experiencing biological sex dysphoria?**

Twelve years ago a review of more than 100 international medical studies of post-operative transgender patients by the University of Birmingham Aggressive Research Intelligence Facility found “no robust scientific evidence that gender reassignment surgery is clinically effective . . . Research from the US and Holland suggests that up to a fifth of patients regret changing sex.”

In regards to children and adolescents there are almost no scientific outcome studies whatsoever.

We must again return to the concern that there has been too little longitudinal research for scientifically-minded organizations to offer authoritative guidelines for either medical or mental health professionals. For example, even when small studies have been conducted, the results are often based on a minority of the participants because, as *The Guardian* newspaper in Great Britain reported, “The results of many gender reassignment studies are unsound because researchers lost track of more than half of the participants. For example, in a five-year study of 727 post-operative transsexuals published, 495 people dropped out for unknown reasons.”

Additionally, how do you set medical guidelines without understanding the many psychological conditions that may be affecting the emotional stability of the client? According to one study (*Psychiatric Axis I Comorbidities among Patients with Gender Dysphoria*, 2014) Fifty-seven (62.7%) patients had at least one psychiatric comorbidity. Major depressive disorder (33.7%), specific phobia (20.5%), and adjustment disorder (15.7%) were the three most prevalent disorders. Consistent with most of earlier research, the majority of patients with gender dysphoria had psychiatric Axis I comorbidity.

The Endocrine Society Guidelines published in 2017 advocated for “watchful waiting” as the standard of care for gender dysphoria. The Society noted, “In some forms of Gender dysphoria/ gender incongruence, psychological interventions may be useful and sufficient.”

Taking a conservative approach to treatment is justified because, as Professor Kenneth Zucker (of the Toronto Gender Clinic) notes, “. . . the field suffers from a vexing problem: There are no randomized controlled trials of different approaches, so the front-line clinician has to rely on lower-order levels of evidence in deciding on what optimal approach to treatment might be.”

The so called “World Professional Association for Transgender Health,” or WPATH, is simply a self-selected group individuals who are a political advocacy organization for “affirming” transgender procedures. WPATH is not a scientific or medical organization, and its membership is not restricted to medical or mental health professionals and scientists. No national government or international legal body officially appointed or recognizes WPATH. Nor is it accountable to any recognized body of scientists or medical researchers.

WPATH’s views are by no means accepted objective standards, as demonstrated by the policies of the national medical associations in the United Kingdom, Sweden and Norway who oppose pharmaceutical and surgical procedures for children or young adolescents.

In simple terms, organizations who refuse to acknowledge the following concept have a divergent “worldview” that cannot be reconciled with those of us who do:

*“Sex as defined by biology and reproductive function cannot be changed. While hormonal and surgical procedures may enable some individuals to “pass” as the opposite gender during some or all of their lives, such procedures carry with them physical, psychological, and social risks, and no procedures can enable an individual to perform the reproductive role of the opposite sex.”*  
Stephen B. Levine, M.D.

#### **Part IV – Utah policy**

##### **1. Should any particular treatments for gender dysphoria be limited to adults and emancipated minors? Why or why not?**

For reasons discussed above, cross-sex hormone treatments and surgical interventions for purposes of “transition” or attempted sex change should be limited to adults who have the maturity and judgment (and legal capacity) to make these decisions for themselves. As Stephen B. Levine, M.D. noted in his article published in the Journal of Sex & Marital Therapy, *Informed Consent for Transgendered Patients*:

All of these patients should be helped by their clinicians to grapple with four relevant questions. Their answers provide the professional with a judgment about how realistic the patient is being:

1. What benefits do you expect that the consolidation of this identity, gender transition, hormones, or surgery will provide?

2. What do you understand of the social, educational, vocational, and psychological risks of this identity consolidation and gender role transition?
3. What do you understand about the common and rare, short- and long-term medical and health risks of hormone and surgical interventions?
4. What have you considered the nature of your life will be in 10 to 20 years?

Clearly children and adolescents cannot provide informed consent. The suggested legislation would apply only to procedures performed on minors. Adults are free to choose to undertake these procedures on their own bodies, regardless of whether other individuals personally would agree with that choice.

**2. is there statutory, regulatory, or case law you believe the committee should be particularly mindful of?**

Yes. In 2019, the Legislature enacted a law prohibiting female genital mutilation on minors (HB 430, Chapter 398 of the 2019 General Session). It was aimed at the practice of genital mutilation of young girls followed in some African Muslim cultures that has found its way to the United States.

Utah Code Ann. § 76-5-701(1) defines “female genital mutilation” comprehensively and with great specificity. Under paragraph (f), it includes “any other actions intended to alter the structure or function of the female genitalia for non-medical reasons.” Female-to-male “bottom surgery” certainly alters the structure and function of female genitalia, in addition to involving specific procedures identified in some of the preceding paragraphs of that subsection. Subsection (2) provides that female genital mutilation is child abuse for mandatory reporting purposes under § 62A-4a-403.

Section 76-5-702(1) then makes performing a female genital mutilation on a minor female, giving permission for such a procedure on a minor female, or removing or facilitating the removal of a minor female from the state for the purpose of facilitating such a procedure a second degree felony. Subsection (2) provides that it is not a defense that the practice is required as a matter of religion or custom or that the girl’s parent or guardian consented to it. Subsection (3) then provides that a surgical procedure is not a violation of the section defining female genital mutilation if it is necessary for medical reasons or if it is “requested for sex reassignment surgery by the person on whom it is performed.”

Under subsection (4), a medical professional who is convicted of a violation will have his or her license revoked. Additionally, section 76-5-704 creates a civil right of action by the victim of female genital mutilation for damages.

Given that these sections apply only to procedures performed on minors, it appears that mutilating a minor girl’s genitals as part of surgical “transition” (or consenting to or facilitating

such a procedure for that purpose) is exempt from the criminal sanctions as long as the minor girl requests the procedure.

The exception for sex reassignment surgery was in the bill as originally introduced. We have not been able to find any relevant legislative history regarding that exception. Given the apparent absence of discussion on the issue, it may be that the sponsors were looking at the “sex reassignment surgery” exception as a way to address the rare true “intersex” birth situation for which surgery may be medically appropriate. Or (without any offense to the sponsors or drafters intended) it could be that the provision was not well thought-through in the context of the bill’s exclusive application to minors.

As a matter of public policy, it is difficult to understand why performing these procedures, or a parent’s consenting to these procedures, is criminalized if it is for reasons of religious conviction, but it’s OK if the minor girl is emotionally confused or delusional at the moment.

The version of the suggested legislation considered in the general session earlier this year would not have criminalized performing attempted sex-change surgery on a minor female (assuming the parents consented), but would have defined performing such procedures on a minor as unprofessional conduct that could lead to revoking the medical license of the surgeon performing the procedure. If a measure such as the suggested legislation is enacted, the exemption from criminal prosecution in section 76-5-702(3) could remain unchanged. However, to avoid ambiguity, the legislation should provide specifically for the possibility of professional discipline notwithstanding the exemption from criminal sanction. It should also provide that the private right of action in section 76-5-704 applies and that parental consent is not a defense to a private right of action.

---

We express appreciation to these noted professionals who contributed to this report:

**Chauncey Adams, Ph.D.** - Dr. Adams is a Clinical Psychologist with more than thirty years’ experience in private practice, served as a psychology consultant in the Washington County school district, and as a the Behavioral Medicine Clinical Director, and former Chair of the Psychiatry Department at the IHC St. George Regional Medical Center. He is a graduate of Brigham Young University, a Member of the American Psychological Association, and a past Board Member of the Utah Psychological Association

**Shirley E. Cox, D.S.W.** – Dr. Cox has spent many years in private practice and 27 years as a social work educator at Weber State, University of Nevada, Las Vegas, and Brigham Young University. She has received numerous awards for her teaching and community practice including: the Liberal Arts

Outstanding Faculty Award, the Morris Committee on Excellence in Teaching Award, the NASW Nevada Chapter Social Worker of the Year. Her individual and jointly authored publications appear in outlets such as: The Journal of International Social Work and the Journal of Social Work Education.

**Michelle Cretella, M.D.** - Dr. Cretella received her medical degree from the University of Connecticut School of Medicine and she completed her internship and residency in pediatrics at the Connecticut Children's Medical Center. She practiced pediatrics with a special interest in behavioral health for 15 years and now serves as the Executive Director of the American College of Pediatricians (ACPed). Dr. Cretella is a peer reviewer for the Journal of American Physicians and Surgeons, Issues in Law and Medicine, and the International Journal of Behavioural and Healthcare Research.

**Sheri L. Golden, Ph.D.** – Dr. Golden holds a PhD in Counselor Education and Supervision, and an MS in Human Services and Mental Health Counseling, with a specialization in Human Sexuality, from Capella University. Dr. Golden practices as a licensed professional counselor at Steeple Counseling LLC, and is the Director of Counselor Education at The Steeple Institute.

**Julie Harren Hamilton, Ph.D.** - Dr. Hamilton is a licensed marriage and family therapist with a private practice in south Florida. A graduate of Nova Southeastern University, she is a former Assistant Professor of Psychology in the Graduate Counseling Psychology Department of Palm Beach Atlantic University. She is a former president of the Palm Beach Association for Marriage and Family Therapy.

**Geoffrey Heath, J.D., LL.M.** – Mr. Heath graduated from the University of Utah, the University of Michigan Law School, and received an LL.M. degree from George Washington University. He is a former supervisory attorney and administrative judge of an Executive department of the Federal government.

**Paul W. Hruz, M.D., Ph.D.** – Dr. Hruz is an associate professor of pediatrics, endocrinology, and diabetes and an associate professor of cell biology and physiology at Washington University School of Medicine in St. Louis. A graduate of Marquette University, he received both his Ph.D. and his M.D. from the Medical College of Wisconsin.

**Dale Johnson, M.S.** - Received her undergraduate degree at Salisbury University and received a Master's degree in counseling from Johns Hopkins University. She worked for many years as a school counselor and served as the Department Chair for a staff of 15 where they served over 2000 “high risk” high schools students annually. Dale now acts as a Court Appointed Special Advocate.

**Steve Johnson, Ph.D.** – Dr. Johnson received his M.A. from the University of Nebraska at Omaha and his Ph.D. at the University of Illinois (dissertation on cognitive dissonance). He is a member of the National Register of Health Service Providers in Psychology and was in private practice in clinical psychology for almost 40 years. During those same years he served as a school psychologist specializing in emotionally and behaviorally disrupted adolescents, conducted cognitive and personality testing, parent and staff training and therapeutic groups. He has taught at George Mason and Western Maryland Universities.

**Patrick Lappert, M.D.** – Dr. Lappert has been practicing in the field of Plastic Surgery for over 25 years. He completed his undergraduate studies in Biology at the University of California, Santa Barbara, his medical degree at the Uniformed Services University School of Medicine and his general surgery residency at the Naval Hospital Oakland, and is Board Certified in General Surgery. Dr. Lappert completed his Plastic Surgery Residency at the University of Tennessee-Memphis and is Board Certified



by the American Board of Plastic Surgery. He was the former Chief of Plastic Surgery at the largest military hospital in the world (Naval Hospital Portsmouth, VA).

**Michael K. Laidlaw, M.D.** – Dr. Laidlaw is a board-certified physician in private practice for almost two decades specializing in Endocrinology, Diabetes, and Metabolism. He is a graduate of the University of Southern California School of Medicine, and is a member of the Endocrine Society and the National Board of Physicians and Surgeons.

**Stephen B. Levine, M.D.** – Dr. Levine earned his M.D. from Case Western Reserve University School of Medicine in and serves as a Clinical Professor of Psychiatry there. His clinical practice is with the University Hospitals of Cleveland Sexual Dysfunction Clinic (presently called The Center for Marital and Sexual Health). He received the Masters and Johnson Lifetime Achievement Award from the Society of Sex Therapy and Research and is a Distinguished Life Fellow of the American Psychiatric Association.

**Paul McHugh, M.D.** – Dr. McHugh is a psychiatrist, researcher, educator and currently the University Distinguished Service Professor of Psychiatry at the Johns Hopkins University School of Medicine and the author, co-author, or editor of seven books in his field. He graduated from Harvard College and Harvard Medical School. He served as the Chairman of the Department of Psychiatry at the University of Oregon and as the Henry Phipps Professor of Psychiatry and the director of the Department of Psychiatry and Behavioral Science at the Johns Hopkins University. At the same time, he was psychiatrist-in-chief at the Johns Hopkins Hospital.

**David H. Pickup, L.M.F.T.** – Mr. Pickup holds a Master's Degree in Psychology and is a Doctoral Candidate in Psychology at California Southern University. He is a member of the American Psychological Association and the California Association of Marriage and Family Therapists and is in private practice with offices in California and Texas. He regularly speaks at regional, national, and international conferences on subjects related to human sexuality.

**David Clarke Pruden, Sr., M.S.** – Mr. Pruden graduated from the University of Utah and Utah State University in Family and Human Development. He is currently the Managing Editor of the Journal of Human Sexuality and an author and speaker on adolescent resilience and sexuality. He was a former adjunct faculty member at USU and Provo College and in his long career served as the Executive Director of the Utah Republican Party and the Director of the Utah Newspaper Association.

**Philip M. Sutton, Ph.D.** – Dr. Sutton is a licensed psychologist in Michigan, and a licensed marriage and family therapist and clinical social worker in Indiana. He earned his Master of Science in the clinical psychology program and Ph.D. in the marriage and family therapy program at Purdue University and earned a BA in philosophy at the University of Notre Dame. He has been in practice as a clinical psychologist for more than thirty years.

**Andre Van Mol, M.D.** – Dr. Van Mol is a board-certified family physician with more than 20 years in private practice and is the co-chair of the American College of Pediatrician's Committee on Adolescent Sexuality. His education included the University of Southern California, the Medical College of Wisconsin, Charleston Naval Hospital, and the Naval Aerospace Medical Institute. He is a diplomate of the American Board of Family Practice.



**Quentin Van Meter, M.D.** – Dr. Van Meter graduated from the College of William and Mary, the Medical College of Virginia and completed his pediatric endocrinology fellowship at Johns Hopkins Hospital. After a 20-year career in the Navy Medical Corps he developed his own full-time private practice. He is an adjunct associate professor of Pediatrics at Emory University School of Medicine and an Associate Clinical Professor of Pediatrics at Morehouse Schools of Medicine.

#### **Addendum A – Detransition Statements**

Below is just a small sampling of stories among hundreds of examples you will find on the Internet. For example, go to YouTube and search “detransition” to listen to the many individuals speaking very candidly about their transition stories. To understand the scope of this growing problem, then consider the many more individuals who are too humiliated or traumatized to share their stories, or who just want to move on.

-----

No matter where you are, there are aspects that are dangerous and terrifying about being a woman. And if we don't change that now, then we are just going to continue on this path of changing women and losing women to wanting to be a man because they cannot possibly survive in this society.

Pushing a person like myself in that direction and encouraging that person to take medical steps, I think was a very dangerous thing. Um, I was not told about much of the long-term effects from my therapist. After almost five years on testosterone, I started to experience liver and kidney failure. However, I was not prepared or told even that kidney and liver damage could be related to cross-sex hormones.

I felt like all these success stories were out there this whole time and why was I not doing it right? Why was everything out of control? Why was I not fixed? And when I was reading the stories of these detransition women, I realized it's because transitioning can't fix you.

Rachel Foster - See full interview at: <https://youtu.be/w8taOdnXD6o>

-----

I was about 17 when I had the word for transgender. I felt different before that but I didn't have like a particular word for it and I took intro to psych in high school and, you know, during that time, as a teenager, obviously, everybody goes through like changes and doesn't quite understand themselves. And I happened to be also autistic... A thing about autism is that, um, at least for high functioning, autism will tend to have like obsessions. So when they get into something it's like really into something, um, and they'll do all sorts of like research and, and it can like really, and they convince themselves also. And so I convinced myself that, uh, that I was absolutely trans, like that's what I needed to do...

I started seeing a gender therapist specifically because I'm really, um, resourceful with the internet. And so all I did was like Google gender therapist in Calgary and that was how that happened. After like three sessions I got my, um, permission slip or whatever for transitioning, medically for hormones. And so I started in 2013 on testosterone and it wasn't until 2015 or 2016, actually that I had any surgery. I had a top surgery and unfortunately I had a hysterectomy and oophorectomy, so, uh, I can't have babies. Top surgery I did in May of 2016 and the hysterectomy and oophorectomy I did in 2017. I ended up going through with it and, you know, really regretting it.

I think that up until recently there, haven't been like a lot of detransitioners speaking out, and I think it's important for the trans community, for people considering transitioning and for people who have like doubts in their minds who have already transitioned to hear our stories...

Ashira – See full Interview at: [https://youtu.be/i0EFPv1\\_jdI](https://youtu.be/i0EFPv1_jdI)

-----

My first feelings of doubt. I can't really pinpoint the first thought that I ever had, but it was after my transition had finished. And that was when I changed all of my legal documents. And I felt like I could breathe after that, like I was done, let's live my life the way it was supposed to for the first time. And it was, there was a strong sense of relief in the, in the immediate, you know, and after four years of effort. I started having real doubts was in April of 2019 around my 21st birthday...

I've already done everything that I set out to do. And yet I still feel this dissonance and the dissonance was actually more apparent than the dissonance that I felt before my initial transition. And that was deeply, deeply concerning to me because transition is supposed to correct that initial dissonance. I hated my body now...

And when my voice started to change, I was elated when I got top surgery, I was elated. And so naturally because I was elated after each step, I thought, you know, this meant that I was going in the right direction. But when it was finished, I was left, incomplete, broken. I was suicidal. I couldn't even say the words. I regret my transition. I couldn't bear to hear myself say it. It was the, it was the unthinkable. It was my greatest nightmare.

Daisy – See full video at: [https://youtu.be/R\\_KD46\\_Ophg](https://youtu.be/R_KD46_Ophg)

-----

When I was 16 in high school, I thought that I might be a trans man so socially I transitioned about a year. And then when I was 17, I went on to a hormone replacement therapy and I was on that until I was 19. And then I got off of it and I detransitioned fully.

The therapist and the medical staff without being presented enough risks... like if they're not aware of a lot of detransitioners out there and the possibility of detransitioning, then they're going to just be like, oh, well, this person just has gender dysphoria so it's just allowed them to go and fully transitioned. If you've been on hormone replacement therapy you're going through your third puberty and that's kind of traumatic. It's very intense.

Willow – See full video at: <https://youtu.be/d-z4H4NvGjw>

-----

Billy Burleigh took cross-sex hormones and getting surgeries to change his outward appearance after a difficult childhood and being sexually assaulted by his swim coach. He did his best to live as a woman but ultimately the truth of his biology won out. Billy hopes that by sharing his story, he will help others avoid the damaging and expensive procedures he endured.

<https://youtu.be/55IR8taw2lg>

Sydney Wright started cross-sex hormones shortly after she turned 18 and almost died from the effects of testosterone. As she matured she realized she wanted to transition as a result of childhood trauma and internalized homophobia.

<https://vimeo.com/481533780>

Hacsi Horvath had a traumatic childhood and in a deep depression grabbed hold of the idea that he was actually a woman as a way to start a new life. After years on cross-sex hormones and genital mutilating surgery, he realized it was a mistake.

<https://youtu.be/qbCX8XgvBmI>

Laura Perry detransitioned after being on cross-sex hormones and having her breasts removed. She has spoken out widely about the harms of the gender industry.

<https://www.youtube.com/watch?v=ucdLJi8j50>

# **EXHIBIT 14**

## LOCAL NEWS

# Alabama bill that would criminalize treatment for transgender minors headed to full Alabama Senate

A Gadsden police officer testified about getting care for his transgender daughter, which would be outlawed by the proposed legislation.

Author: Micah Danney (alreporter.com)  
Published: 3:02 PM CST February 14, 2021  
Updated: 3:05 PM CST February 14, 2021



MONTGOMERY, Alabama — The Alabama Senate Health Committee on Wednesday approved a bill that would outlaw puberty-blocking medications and gender-affirming care for minors, giving it a favorable report in an 11-2 vote. An Alabama House committee heard testimony in a public hearing on a companion bill, but the committee did not vote on the measure.

The legislation would also prevent school faculty from encouraging minors to not tell their parents or legal guardians that they do not identify as their biological sex, and would require that faculty divulge that information to parents and guardians.

During the House hearing, some members questioned why the bill was assigned to them instead of the House Health Committee.

They heard from four speakers who supported the bill and four who opposed it. There were medical professionals on both sides, with those in favor saying the bill would protect children from reckless medical procedures and those against saying it would deny life-saving health care to minors at high risk for self-harm and suicide.

Ment

**Exhibit**  
**0006**  
9/30/2021  
Dr. Lappert

Others have had personal experience.

Speaking against the bill was David Fuller, a sergeant with the Gadsden Police Department. He spoke about raising his transgender daughter, who was assigned male gender at birth but seemed different from a young age and struggled with depression and other emotional issues. She revealed her [gender dysphoria](#) to him when she was 16.

"I mean, I was probably like you guys — I didn't like this. I didn't understand this," he said. "I was ignorant to it."

As he began to learn about it, he discovered the statistic that half of transgender teens try to kill themselves, he said. It terrified him. Then he learned that the suicide risk returns almost to normal for teens who are supported by their families and communities — and who have access to health care. [Studies have shown](#) that gender-affirming care, such as puberty blockers, is linked with lower suicide risk for transgender people.

After his daughter shared her suicidal thoughts, Fuller took her to specialists at the University of Alabama at Birmingham. He said they were keen to slow down any talk of medical treatment like puberty-blockers or hormone therapy. Most importantly, he said, they provided support and information about options that could be pursued overtime at a delicate and critical time for his family, which he credited with saving his daughter's life.

"They made us feel like we weren't alone, that we were normal in an abnormal situation, and that they could help us," Fuller said.

One voice in favor was Walt Heyer, an author and traveling speaker who has become known in some Christian circles for his story of living as a woman for eight years before transitioning back to a man. He regrets that decision and period of his life, he said. Heyer said that confusion in minors about gender identity can start early and lead to medical decisions that have lasting consequences, so he supports the bill's blanket ban on medical treatments.

Another speaker opposed to the bill was Dr. Morissa Ladinsky, a Birmingham pediatrician who has experience working with transgender youth. She said that they may assert their gender identity anywhere from preschool to puberty or later, and any treatment that affirms that identity is long-term and involves "lengthy informed consent" with all parents.

No irreversible treatments are allowed on minors, she said. Puberty-blocking medications can be reversed and surgeries are not performed on children.

"Folks, there are not pediatricians traveling around Alabama just writing hormone prescriptions for minors," she said.

Ladinsky accused the bill of unfairly criminalizing pharmacists for filling the prescriptions that it would outlaw. Pharmacists rarely, if ever, know the reason a drug is prescribed, she said.

"This bill tells truly vulnerable youth, those facing gender dysphoria, that you are going to make their health care a crime," she said. "It invades the sacred domain of parenting, reaches into the practice of medicine and shuts down the parent voice in medical decision-making."

Dr. Patrick Lappert, a Decatur plastic surgeon, spoke in favor of the bill. He cited a Swedish study that found an increase in suicide rates and other mental health issues among transgender people in adulthood, apparently contrary to the notion that early medical treatment had saved them.

Sweden has a universal database for medical records, which Lappert said makes its data most reliable in tracking the health of transgender people longterm. A [30-year study](#) in Sweden

Mental Health Monday: LGB...

published in 2011 found that participants who had sex-reassignment surgery went on to have significantly higher rates of mortality, suicidal behavior and psychiatric morbidity than the general population. The researchers concluded that “sex reassignment, although alleviating gender dysphoria, may not suffice as treatment for transsexualism, and should inspire improved psychiatric and somatic care after sex reassignment for this patient group.”

But a 50-year survey published in 2010 found that out of 767 respondents, just 2 percent expressed regret about their reassignment surgery. Among participants who underwent non-surgical treatments like puberty-blockers, less than 2 percent expressed regret. More recent research has found that mental health gets better and continues later in life the earlier that medical treatment addresses gender dysmorphia.

Lappert, who has spoken against the use of medicine and surgery for transgender people as a Catholic deacon in his local diocese, said that the vast majority of teens who present themselves as being in the wrong body “have gotten over the idea” once they reach early adulthood. When a committee member questioned Lappert’s medical expertise on the issue, Lappert said that he would not treat a person seeking guidance for their gender dysphoria but would refer them to a qualified mental health professional.

Responding to further questions from the committee, Fuller took issue with what he said was implied by Lappert’s mentioning of the Swedish study.

“I’ll tell you why that happens: It is terribly hard to be a transgender person in this world, on this planet, anywhere. And God forbid in Alabama — here we are legislating against the health care these kids need,” Fuller said.

The Human Rights Campaign, a national group that advocates for LGBTQ rights, issued a statement on Wednesday saying that the bill is part of a seven-state, coordinated push for legislation by a national campaign.

“These bills are not addressing any real problem, and they’re not being requested by constituents,” the group said. “Rather, this effort is being driven by national far-right organizations attempting to sow fear and hate.”

Dillon Nettles, director of policy and advocacy at the ACLU of Alabama, issued a statement on the Senate Health Committee’s passage of the bill:

*“Alabama lawmakers are once again threatening the healthcare choice of everyday Alabamians. By passing SB10 out of the Senate Health committee today, children across Alabama are at risk of losing life-preserving care due to their identity and the government.*

*“This legislation also puts Alabama’s doctors at risk of being charged with a Class C felony simply for performing their duties by supporting the health and well-being of transgender children.*

*“This legislation is wholly dangerous and irresponsible, particularly at a time when the importance of qualified and non-exclusionary medical professionals is more evident than ever, and children are already struggling under the circumstances of this pandemic.”*

The bill is expected to go to a full vote in the Senate. It will be on the House Judiciary Committee’s agenda again in two weeks.

[This story originally appeared in the Alabama Political Reporter.](#)

**IN OTHER NEWS:** [Mental Health Monday: LGBT+ youth face additional struggles during pandemic](#)

Mental Health Monday: LGB...

Mental Health Monday: LGBT+ youth face additional stru...



## Related Articles

[Mental Health Monday: Counselors share how pandemic impacts special needs clients](#)

[In LGBTQ-friendly fashion, Biden White House website now allows choice of pronouns](#)

[LGBTQ community disproportionately affected by pandemic, report finds](#)

LOADING NEXT ARTICLE...

Mental Health Monday: LGB...



# **EXHIBIT 15**



**Exhibit  
0033**

9/30/2021  
Dr. Lappert

# Transgender Surgery & Christian Anthropology



Deacon Patrick W. Lappert, MD  
Birmingham in Alabama  
256-303-8509



# The Challenge

- “Male and female He created them” has been replaced by a confusion of exceptional cases.
- Aggressive re-characterization of the nature of the human person.
  - Academia, entertainment, law, and even at church.

Finally and above all, man has made stupendous progress in the domination and rational organization of the forces of nature, such that *he **tends to extend this domination** to his own total being; **to his body**, to psychical life, to social life, and even to the laws which regulate the transmission of life.* ~ Humanae vitae 2

# The Challenge

- Understand the subject.
- Fluent in the language.
- No shocking surprises.
- Patient, but insisting upon the truth

# Human Nature

- The human person: body and spirit together comprising a single nature.
- By our nature we are made for *the other*.
- Possessed of an intellect by which we can know the good, the true, and the beautiful.
- Possessed of a will by which we can choose the good, the true, and the beautiful; *the moral life*.

# Human nature

- The moral life: built upon foundational truths.
- Not arbitrary.
- Not repressive, but rather affirming of the intrinsic dignity of the person.



# What is a human being?



# Human Nature

- The human body
  - The “reproductive system”, and the fulness of humanity.
  - Dimorphism and complementarity.
  - The human family is in our nature.





# The Image and Likeness of God



# Human Nature

- Why must we consider first the *nature* of the human person?
- Defines the “end” of medical and surgical care.
- Human nature is that which is perfected by the life of grace.
- That which is perfectly realized in the Incarnation of Jesus Christ.

# Modern “Gender”

- A confusion of biology, psychology, and political science.
- Use of biology to explain psychology
- Political terms to explain the emotional life.
- Shifting from biological determinism, to freedom of expression.
- Language of “science” counterpoised with rejection of scientific evidence as “tool of oppression”.

# “Great Expectations”

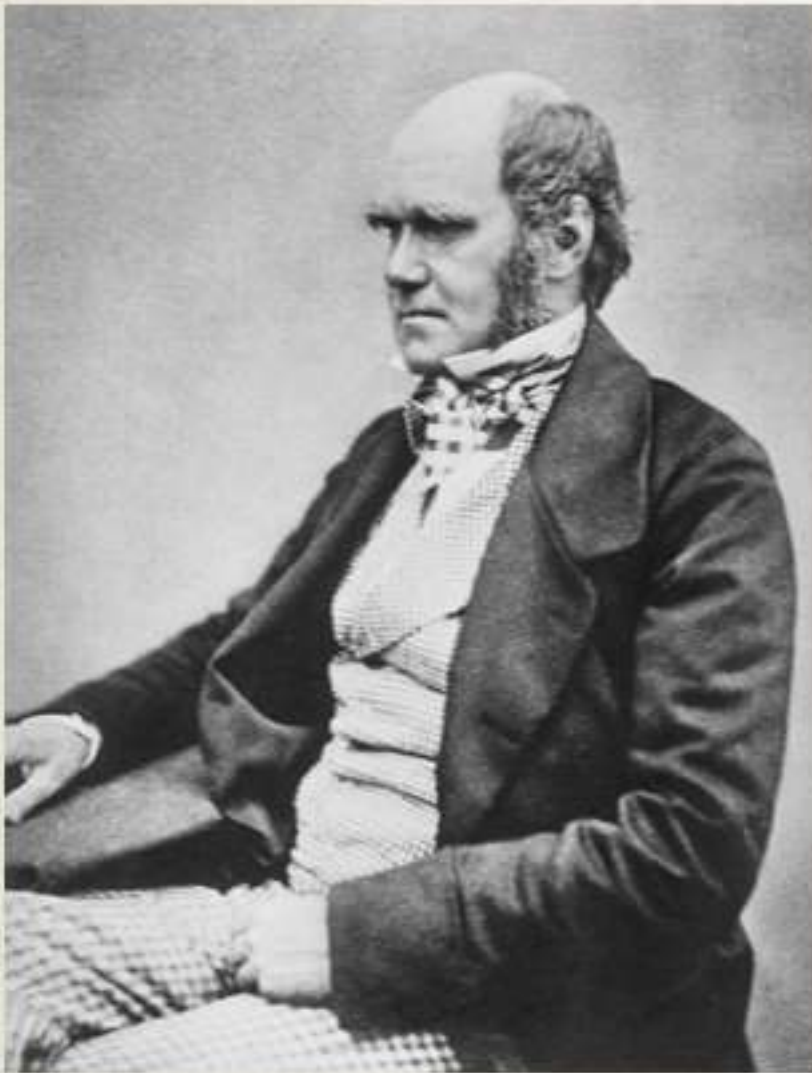
- Science (separate from faith): A “pure” thing.
  - Deeper, “more evolved”
- Technology: domination of nature
  - Capability to modify the person in any way that “choice” demands.
- *Progress*: irresistible power of history leading to liberation from the oppression of the past. Transgenders no longer “outcasts”!

# Transgender Language

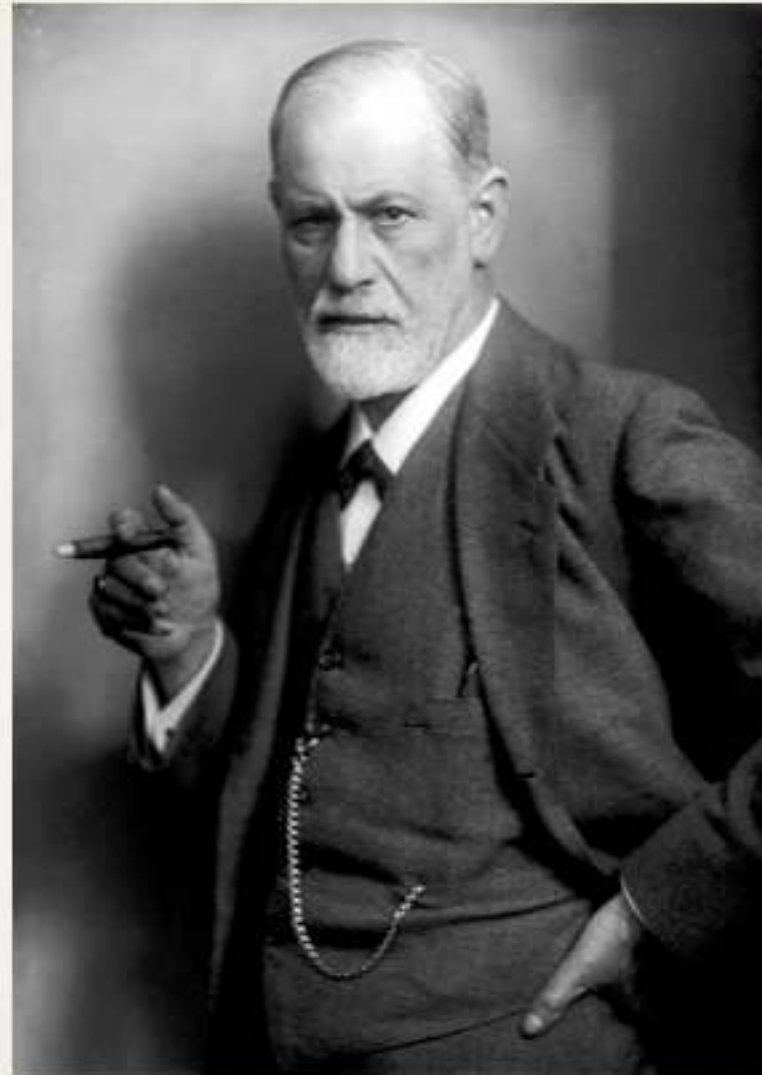
- Outgrowth of “gender identity” principles.
- Relationship to the “sexual revolution”.
  - The divorce of the two aspects of human sexual union.
- Catholic anthropology vs. materialistic anthropology.



# The 3 Stranded Rope



Charles Darwin



Sigmund Freud



Karl Marx

**The human person is materially caused, materially driven, and his highest aim and happiness is materially defined.**



# Psychological Language

- Seeking to give a complete explanation of human behavior, without recourse to theology.
- Man as merely a particularly complicated animal.
- Inherent drives common to animal life.
  - Assorted coping mechanisms to deal with the frustration of those drives. Some are pathological = neurosis / psychosis
- “The Pleasure Principle” ~ Freud

# Psychological Language

- The search for “pleasure” is the central instinct:
- Sexual pleasure seen as the zenith.
- The central element in character development:
  - Sexual drive, and sexual experiences are seen as the prime movers in the development of personality and social capacities.
  - Good (pleasurable) experiences = good personality development.

# Psychological Language

- Human sexuality is viewed from the standpoint of the *one person, their needs*, and the satisfaction of those needs.
- Any moral perspective on human sexuality seen as an arbitrary social restriction, or “*taboo*”, without foundational truth.
- Belief that much psychopathology can be avoided by changing society, and ignoring moral questions.

# Modern Sexuality Sumarized

(Lappert's Axioms)

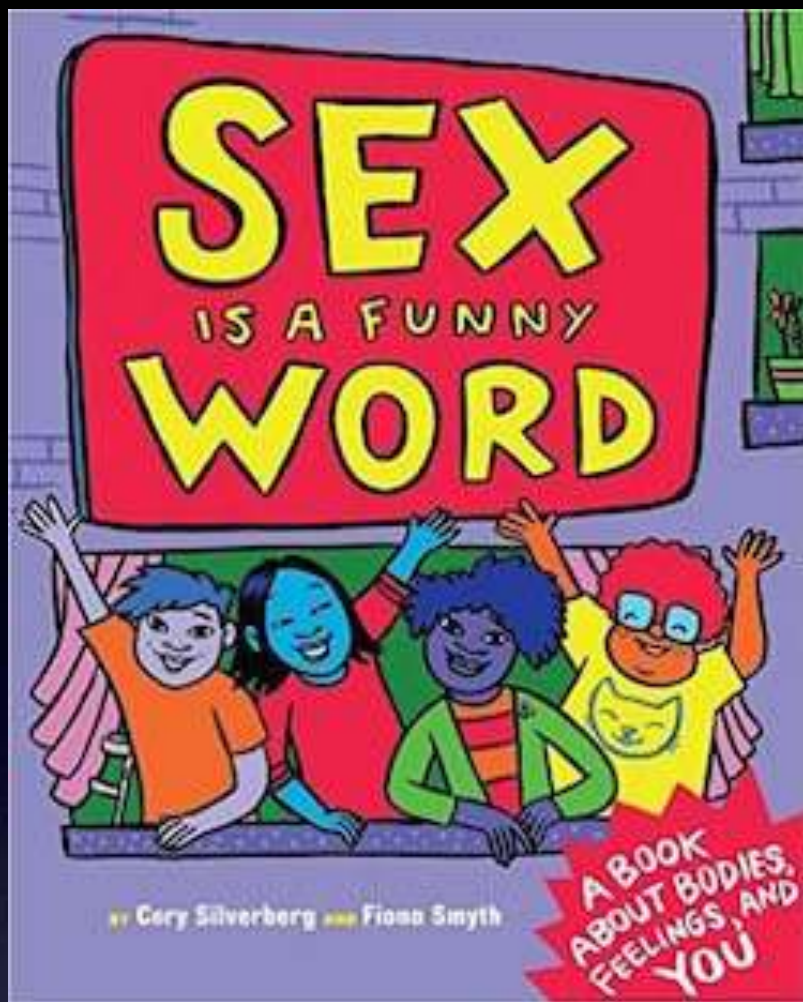
“Adult sexuality” is an endlessly variable, *personal* expression of *individuality*, the purpose of which is to produce joy for that person. It sometimes involves other people, and with alarming frequency, is known to produce other people.

# Modern Sexuality Sumarized

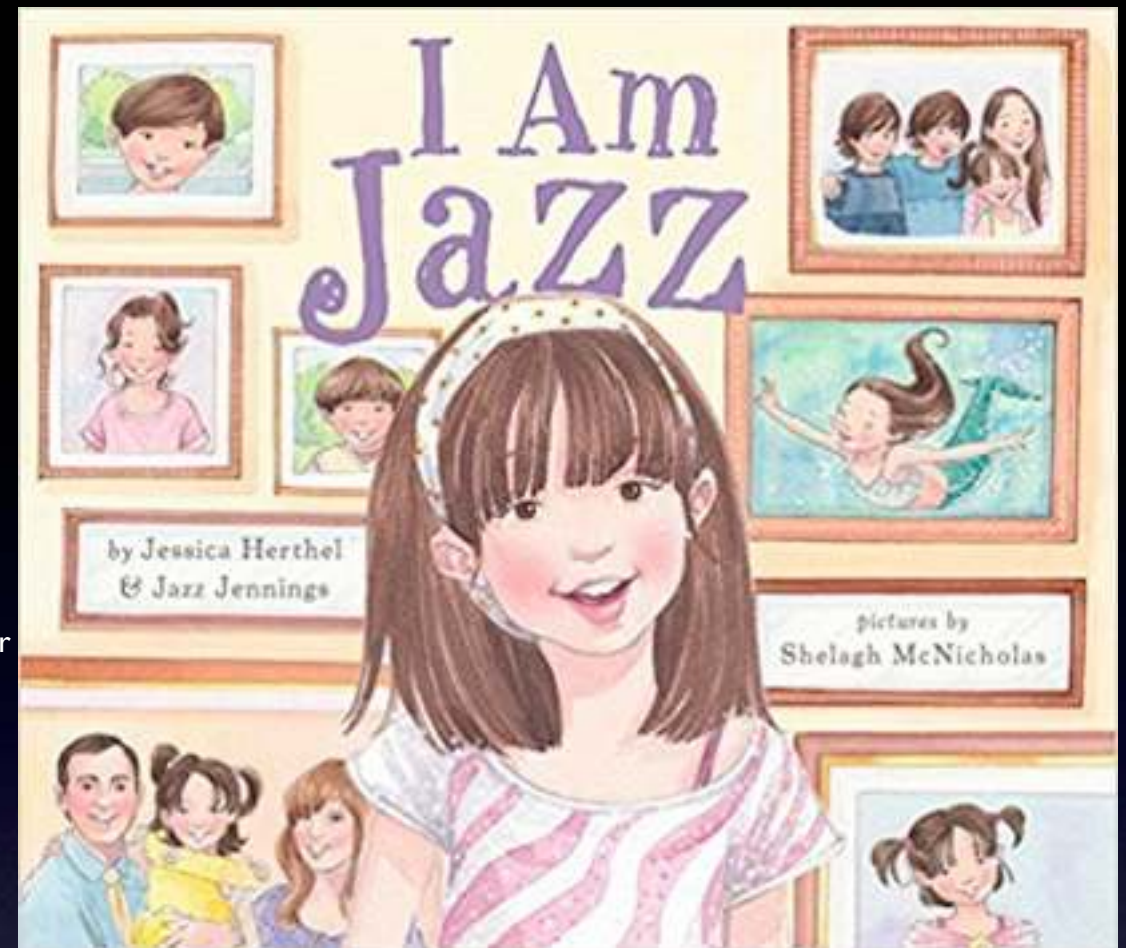
(Lappert's Axioms)

“Adult sexuality”, is the developmental result of “childhood sexuality”, just as adult language is the developmental result of childhood language. For this reason, it has become the habit of psychologists, and teachers to talk to children about “adult” sexual activity.

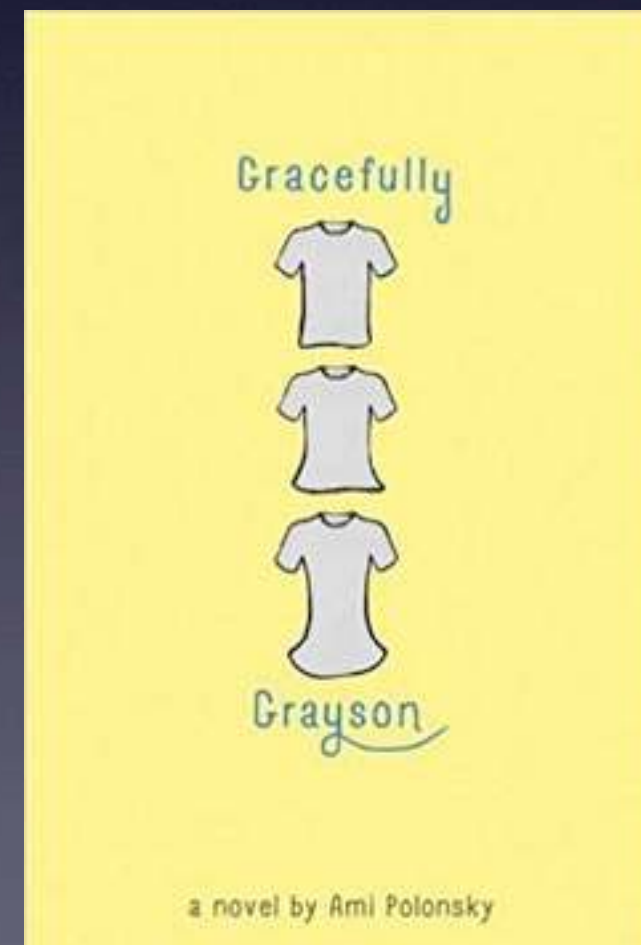
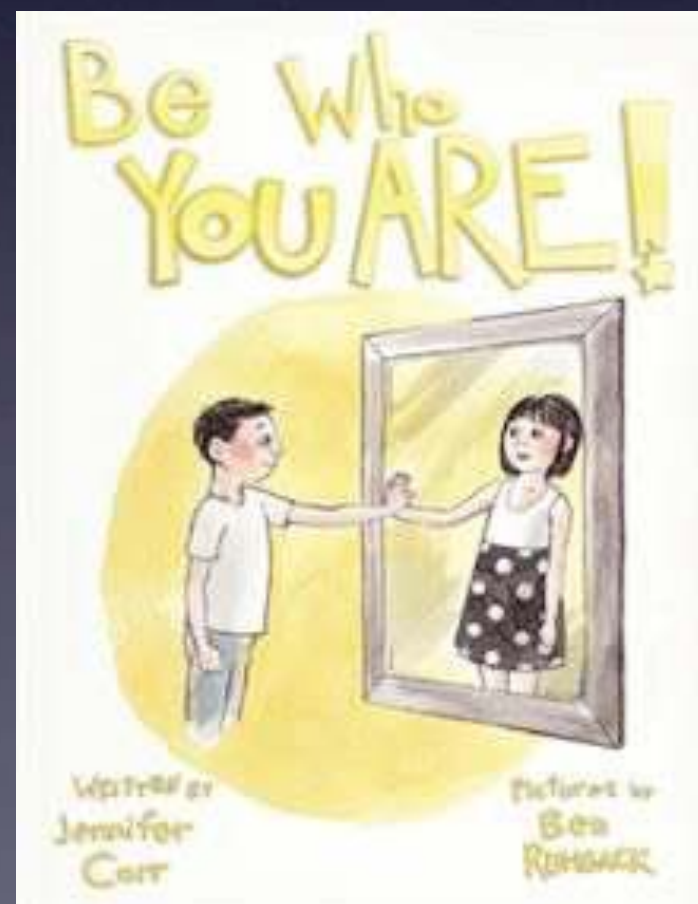




Recommended for  
7- 10 y.o. children



Recommended for  
4- 8 y.o. children



Recommended for  
9 y.o. children





"I like to say that  
I'm a girl stuck  
in a boy's body."

Lia, age 9

#GrowingUpTrans

[pbs.org/frontline](https://pbs.org/frontline)

**FRONTLINE**



# Shaping the Conversation, & Grooming a Generation

Make an impact with a  
**Master's or PhD in  
Media Psychology**

- Pioneer an exciting new field
- Customize your plan
- Study anywhere, any time

**REQUEST INFO**

**FIELDING**  
Graduate University



## Pages

- ♥ Home
- ♥ Jazz In The News
- ♥ Who We Are
- ♥ Main
- ♥ Mission

Main

Mission

Support Us

News

Gallery

Links

FAQs

Contact Us

Search



## Jazz Talks Dating With Barbara Walters 20/20 Update 2013

On a Special Edition of "20/20 Saturday," Jazz is a typical 11-year-old girl except for one thing, she was born as a boy.





# Making Life Better with Plastic Surgery

- When you “don’t feel right, because something “doesn’t look right”.
- Aesthetics or Reconstruction

# Managing the Unseen Wound

- Profound sorrow, anger, anxiety.
- Seeking a material (aesthetic) explanation and remedy.

# Body Dysmorphic Disorders

- Broad category of disorders of misperception about physical appearance
  - Anorexia
  - BDD/ Aesthetic surgery patients
  - Seeking limb amputations etc.

## Science

Neurophilosophy

# The science and ethics of voluntary amputation

Should amputation be offered as a treatment to people suffering from Body Integrity Identity Disorder?

Mo Costandi

Wednesday 30 May 2012  
13.07 EDT



Shares 107  
Comments 74





# Body Dysmorphic Disorder

- Type of Obsessive- Compulsive Disorder
  - Depressive presentation
  - Social isolation. “Outcast”
- Treatment
  - SSRIs, Cognitive-Behavioral Therapy

# Gender Dysphoria

- The unhappiness associated with the condition because:
  - “I don’t look the way I know I should”
  - “The world does not accept me as I know I really am”
  - Social isolation due to:
    - Incongruous behavior
    - Secret life with associated shame.

# Transgender

- Obsessive thinking with varying degrees of “dysphoria”
- Perceiving something that is not objectively there:
- Delusional thinking
- Errors of assumption

# Criteria For Delusion

- Karl Jaspers in *General Psychopathology* (1913 )      The criteria are:
  - certainty (held with absolute conviction)
  - incorrigibility (not changeable by compelling counterargument or proof to the contrary)
  - impossibility or falsity of content (implausible, bizarre or patently untrue)



# Co-morbidities:

- Alcohol and drug abuse, depression, incarceration, homelessness, high rate of suicidal ideation.
- Variable in Expression:
  - Private stress management by cross-dressing
  - Public, anonymous cross-sex persona, including sexual contact (sometimes prostitution).
- Transitioning in stages.

# Biological Language

- Seeks to establish the material causation for the psychological instincts/ drives
  - Genetic, neuroanatomic, endocrine, etc.
- Seeks to understand the biological basis for “gender”
  - Sexual dimorphism/ polymorphism vs. social construct and learned behaviors

# Biological Language

- “Evolution” words applied to human sexual functioning.
- Searching for the “adaptive advantage” of fruitless sexual activity.
  - The problem of reconciling a Darwinian view of the human person, and a putative inherited behavior that is annoyingly maladaptive.
- The hope: genetic trait of animal life would silence moral arguments.

# Biological Determinism vs. The Moral Life



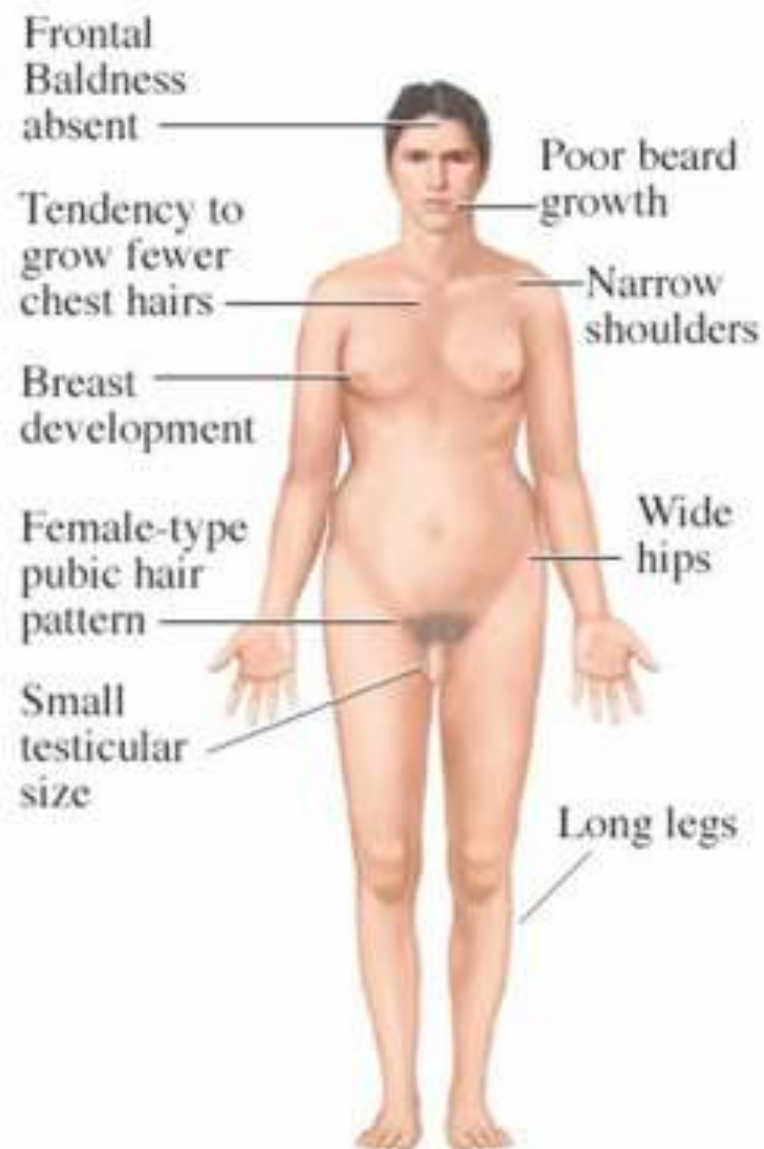
# Biological Language

- “Isn’t there a genetic explanation for “transgender?”
- “We learned in school that there are many genetically caused examples of people who are somewhere in between “man” and “woman”.
- Klinefelter’s Syndrome
- Androgen Insensitivity Syndrome (AIS)
- “That is what I have. I am “intersex”, and I choose to be.....”



# Biological “Intersex” (Hermaphroditism)

## Klinefelter syndrome



- Lower IQ than sibs
- Tall stature
- Poor muscle tone
- Reduced secondary sexual characteristics
- Gynaecomastia (male breasts)
- Small testes/infertility

# Clinical Support for Intersex Persons

- Multidisciplinary: Pediatrics, Geneticists, Pediatric Surgery, Urology, Psychology.
- Assessment: Including genital ambiguity, problems with voiding etc.
- Planning based upon “sexual assignment”.

# Gender Assignment Surgery (ambiguous genitalia)

- Seeks to remedy structural problems that interfere with voiding.
- Seeks to establish an arrangement of tissue that would make sexual intercourse possible.
- Make reproduction possible only in cases of structural problems of shape, size, and patency.



# So...is it biological?

- Genetic, like Klinefelter or ALS?
  - No genetic marker, no mutation.
    - Normal male or female karyotype
- Hormonal?
  - Hormone levels entirely normal for age/sex matched controls
- Anatomical?
  - Brain scans: MRI, PET Scan etc.
    - No structure/ activity that mimics opposite sex.

# Nature v. Nurture

- Speculation among “sexologists” working in Intersex Clinics.
- “Gender Identity” is:
  - Malleable, or “fluid”
  - Socially determined
  - Typically produced by “repressive” processes

# The “Science” of Gender



Dr. Harry Benjamin



Dr. Alfred Kinsey



Dr. John Money



# Nature v. Nurture

- Difficulty in separating the vague and as yet not demonstrated genetic influences from social/ cultural influences.
- Database skewed by selection bias among genetically/ developmentally abnormal patients.

# The Twin Study

- The “gold standard” for exclusion of biological determinism (genetic).
- Monozygotic twins raised in different social circumstances.

# The Index Case



# John Money, PhD

Sexologist in the Intersex Clinic  
Johns Hopkins



- Convinces parents to raise their son as a girl.
- “Socialize” strenuously as a girl
- Castrate, and administer estrogen
- Ultimately use reconstructive surgery to produce a neo-vagina.

# Published Results in “Peer Reviewed Journals”

- Papers and presentations based upon “long term follow up”.
- “Successful” in every way.
- Torrent of “scientific literature” re: gender roles/ identity etc.
- Political dimension



John Money, PhD



# The Reimer Twins



# “Brenda” Reimer



# “Scientific” Basis of Gender Politics

- Gender “assignment” is a process of repression.
- Forces persons into “binary” model of sexual expression.
- Sexual expression is a form of political expression.
- “Dr. Money’s twin study proves this conclusively!”



# Annual Visits to John Money, PhD

- Expected result further drives the intervention.
- Photographs them as he “instructs” them in “sex-play”.
- Fear and anxiety



# Truth

- Was eventually given the truth at age 15.
- Enthusiastically embraces boyhood.



# The Experiment is Ended

- Hormone replacement due to castration.
- Surgical efforts
- The silence of John Money, PhD





# David the Man



Husband, and  
adoptive father of  
three children

# David the Man

- Battle with depression.
- Financial difficulties
- Wife leaves him after 14 years.
- Brother dies of drug overdose.







David Reimer 1965- 2004

# The Nexus

- Catholic Anthropology
- &
- Plastic/ Reconstructive Surgery

# A Quick Review of Plastic Surgery

- The oldest form of surgery
  - Ear reconstruction- India
  - Nasal reconstruction- Italy
    - Restoration of the social outcast.





## Sushruta- 7th Century BC India

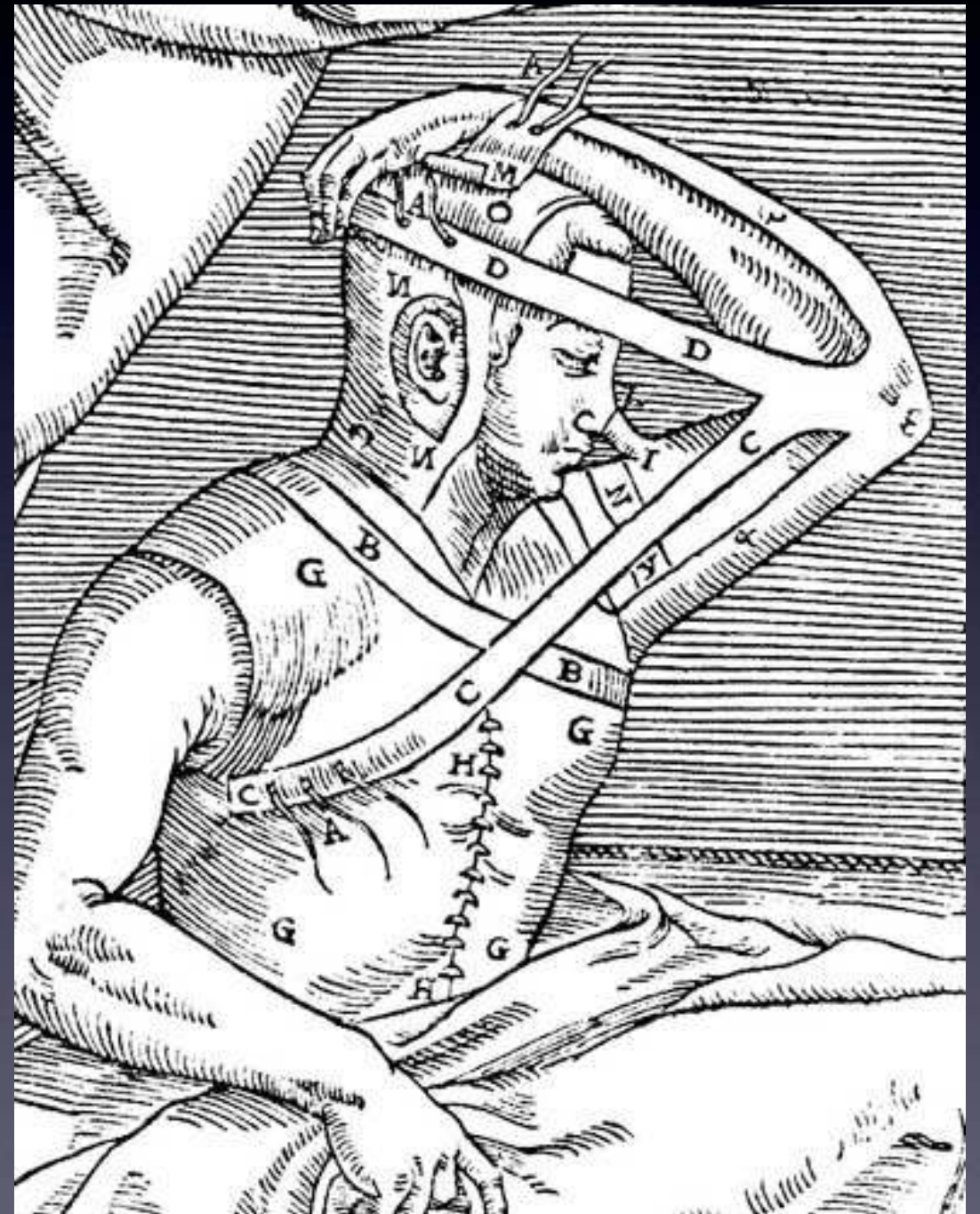




The Mutilation  
of Emperor  
Justinian II  
“Rhinothymos”  
695 AD



# History-



# Plastic & Reconstructive Surgery

- Basic Principles:
  - Establishment or Restoration
    - Form and Function
  - Based upon a thorough understanding of the nature of the missing or injured part, and its relationship to the person.
  - Directed at the “perfection” of the nature of the human person.

# Restoration

- Lost due to trauma, or surgical management of malignancy, infection, etc.
- Missing at birth, due to developmental anomalies, or in-utero events.



# Missing from trauma

- Adult male: traumatic amputation of non-dominant thumb
- Needs prehensile, helping hand with good grip and fine “key pinch” functions.



# Restoration

- Degree of functional restoration is dictated by the intrinsic natural function of the lost part
- Hand:
  - Grasping, pinching, stabilizing, pushing, dominant vs. helping.
- Goals are tailored to the life of the patient

# Congenital Cleft Palate

- Congenital malformation of the face with varying degrees of palatal integrity
- Feeding difficulty
- Speech problems
- Hearing problems
- Dental problems







# The Cost of Reconstruction

- What will be lost, or compromised in the course of reconstruction?
- “Donor defect”.
- Risk vs. benefit

# “Transitioning”

(Progressive Expression of Condition)

- Obsessive thoughts leading to compulsive behaviors.
- Interferes with living in the present moment.
- Managing anxiety by unhealthy means.
- Withdrawal, cross-sex dressing/acting in secret.

# Transitioning

- Secretive, dysfunctional life leads to conflicts with family, and peers. Causes “dysphoria”.
- Psychological counseling: the broad and the narrow.
- APA: Presumes that “gender non-conforming” is the essential and true nature of the person, therefore health is to be found in giving full expression to the subjectively perceived persona.

# Transitioning

- Psychological Testing of “maleness and femaleness” (objective standard).
- Cross-sex identity development: clothing, name, persona.
- Endocrine management
  - Puberty blocking in pre-pubertal children; cross-sex hormones.
- Voice training, hair management.



## Endocrinologist



Wilma C. Rossi, MD,  
MBE



## Gender and Sexuality Development Clinic

CONTACT US

“Providers, patient and parents were ready to start hormone therapy with testosterone to help him align his body with who he had always known he was on the inside.”

“While gender-related healthcare can be expensive in the short term, it is recognized to lead directly to improved health outcomes and long-term cost savings.” ~CHOP



# The Washington University Transgender Center

## at St. Louis Children's Hospital



E-m



314.454.KIDS (54)

800.678.KIDS (

Resources

About Us

What to Expect



[cs.wustl.edu/transgender-center/#](https://cs.wustl.edu/transgender-center/#)

“Your first visit to the Washington University Transgender Center at St. Louis Children's Hospital will take about 60-90 minutes. You'll meet with one of our physicians for an informational discussion about age-appropriate therapies (depending on if the patient has started puberty.) You may be referred to a mental health provider for ongoing psychosocial support and assessment, if indicated. Records from patient's primary care physicians should be sent prior to the first visit, so our doctors can review them for pre-existing conditions that may be affected by hormone therapy.”



**Karen Hamon, BSN, RN, CDE**

Pronouns: She, Her, Hers

Karen is a Clinical Nurse Coordinator in outpatient care at Washington University School of Medicine, Division of Endocrinology and Diabetes. She received her Bachelor's of Science in Nursing from Goldfarb College of Nursing, Saint Louis University. She also received her Master's of Science in Justice Systems with a minor in Sociology from Truman State University. Karen's prior experience includes staff nursing care in pediatric general medicine floor and as an inpatient diabetes educator at St. Louis Children's Hospital. She joined the Endocrinology and Diabetes team in 2013 and has won two division awards since then. She is also currently a finalist for the 2022 St. Louis Children's Hospital Nurse of the Year. Karen is very passionate about social justice issues and jumped at the chance to be part of the



**Casey E. Lofquest, MSN, RN, CPNP**

Pronouns: She, Her, Hers

Casey is a Pediatric Nurse Practitioner (PNP) in outpatient care at Washington University School of Medicine, Division of Endocrinology and Diabetes. She received both her Bachelor's of Science in Nursing and Master's of Science in Nursing from Saint Louis University. Casey's prior experience includes staff nursing care in pediatric intensive care nursing. She practiced as a PNP in primary care in Arnold, MO, prior to joining the





PHOTOGRAPHY BY GARA DYSON

Jessica, one of the center's patients, with Dr. Christopher Lewis

- Education regarding gender dysphoria and its possible treatments. Gender dysphoria refers to the distress that may accompany the incongruence between one's gender identity and one's assigned sex at birth.
- Administering pubertal blockers, which delay puberty and suppress unwanted and irreversible secondary sexual characteristics; for example, deepening of the voice and facial hair for transgender females and breast development for transgender males.
- Administering cross sex (gender-affirming) hormones that make a person's physical body match their gender identity. These may begin between the ages of 14 and 16 after patients meet readiness and eligibility criteria.

# Puberty blocking drugs

## Cross-sex hormones

Absence of medical evidence

Human experimentation

Irreversible effects on:

Fertility

Neuropsychiatric/ musculoskeletal development

**Desistance data. 9% vs. 100%**







# Transitioning

- Surgery
  - Secondary surgeries: hair, forehead, nose, jaw, neck, breast. Euphemism: “Top Surgery”.
  - Definitive and final: castration and vaginoplasty, or hysterectomy / oophorectomy and phalloplasty. “Bottom Surgery”.



# PSEN University: Gender Affirming Surgeries 101 - Webinar (Includes Gender Affirming 101 Series)

Member Price **\$250.00**


Non-Member Price **\$325.00**

Members Save \$75.00

In Stock

**Login Required**

To add this product to your cart, please log in.

 **Log In**

## Product Description

**Presented by:** Loren Schechter, MD

### About this Course :

This course is a live webinar CME course to be held on **April 18th 2018 at 7pm cst**. This course also includes the 2017 **PSEN University: Gender Affirming 101 for Surgeons - Video Series** which features ten webinar recordings from a



# The Surgery

- Top surgery is largely reversible.
- Bottom surgery is irreversible. Fully functioning genital organs are mutilated in order to produce a counterfeit form.
- Form has primacy
- Function is destroyed (donor morbidity)



# Grave Matter

- Willful sterilization destroys the procreative aspect.
- Simultaneous degradation of the unitive aspect.
- major loss of sensory apparatus, and persistence of the native neural “map” in the brain.

# Grave Matter

- “Banking” of ova and sperm for future in vitro and proxy pregnancies.
- Objectification of children; the “right to a child”.
- Link between “reproductive technology”, & “gender affirmation medicine”.

# Plea For Mercy

- Because self-identified transgender persons suffer greatly
- High rate of substance abuse.
- High rate of homelessness.
- High rate of suicide attempt:
  - 18yo - 55yo steady at approx. 40% risk.



*"The only way I will rest in peace is if one day transgender people aren't treated the way I was, they're treated like humans, with valid feelings and human rights. Gender needs to be taught about in schools, the earlier the better. My death needs to mean something" - Leelah Alcorn*

UK: 48% of trans people under 26 attempt suicide (2014)  
US: 41% of trans people attempt suicide (2014)  
Canada: 43% of trans people attempt suicide (2012)

## The Appeal From Sentiment

### DEATH BY EXTREME CHRISTIANITY



**Carla Wood Alcorn**

**Doug Alcorn**

LEXIE CANNES STATE OF TRANS

Conservative Christian Parents Triggers Trans Teen Suicide



# Compulsion To “Mercy”

- “Everything must be done to help these persons live their new identity”
- Home, school, work
  - Names, pronouns, bathrooms, etc.
  - Health insurance directed toward transitioning, not treatment of OCD.
  - Attempts to diagnose and treat are labeled “hate speech”.

So...it is working,  
right?

# Evidence Based Medicine

- Over the years, many small retrospective studies.
- Inconsistent criteria for inclusion of patients and the selection of controls
- Much self-selection bias; high drop out rate.
- Small samples and short follow-up
- Varying degrees of “success”. Ranging from “improved in gender dysphoria” to continued elevated psychiatric hospitalization and suicide attempts and death.

# The Swedish Study



- \* Population cohort study over 30 year period.
- \* Age and sex matched cohort.
- \* Data from consistent national database.
- \* Standardized reporting for identity change, hospitalization, psychiatric diagnosis and co-morbidities, and mortality.



# The Swedish Study

## Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden

[Cecilia Dhejne](#),<sup>1</sup> [Paul Lichtenstein](#),<sup>2</sup> [Marcus Boman](#),<sup>2</sup> [Anna L. V. Johansson](#),<sup>2</sup> [Niklas Långström](#),<sup>2,3</sup> and [Mikael Landén](#)<sup>1,2,4,\*</sup>

James Scott, Editor

[Author information](#) ► [Article notes](#) ► [Copyright and License information](#) ►

This article has been [cited by](#) other articles in PMC.

### Abstract

Go to: Go to:

### Context

The treatment for transsexualism is sex reassignment, including hormonal treatment and surgery aimed at making the person's body as congruent with the opposite sex as possible. There is a dearth of long term, follow-up studies after sex reassignment.

# Swedish Study

**Table S1.** Risk of various outcomes in sex-reassigned subjects in Sweden compared to population controls matched for birth year and *birth sex*.

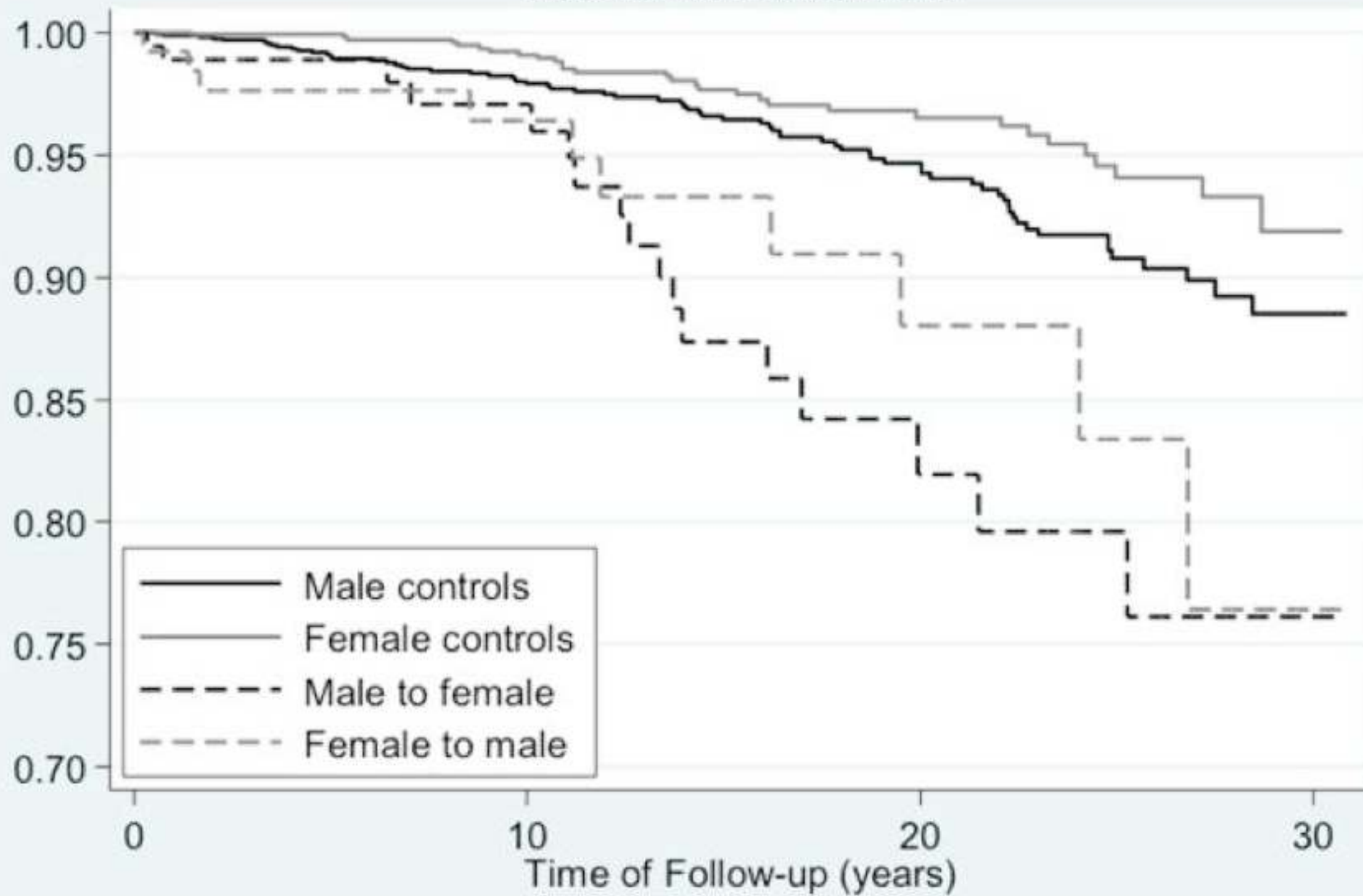
Outcome	No. of events (male-to-female/ female-to-male)	Crude hazard ratio (95% CI)			Adjusted* hazard ratio (95% CI)		
		All sex- reassignment persons (N=324)	Male-to-female only (N=191)	Female-to- male only (N=133)	All sex- reassignment persons (N=324)	Male-to-female only (N=191)	Female-to-male only (N=133)
Any death	27 (17/10)	2.9 (1.9-4.5)	2.6 (1.5-4.5)	3.7 (1.8-7.7)	2.8 (1.8-4.3)	2.4 (1.4-4.1)	3.8 (1.8-7.9)
Death by suicide	10 (6/4)	19.1 (6.5-55.9)	13.9 (3.9-49.6)	40.0 (4.5-357.9)	N/A	N/A	N/A
Death by cardiovascular disease	9 (6/3)	2.6 (1.2-5.4)	2.3 (0.9-5.7)	3.2 (0.9-11.9)	N/A	N/A	N/A
Death by neoplasm	8 (4/4)	2.1 (1.0-4.6)	1.7 (0.6-4.9)	2.8 (0.9-8.5)	N/A	N/A	N/A
Any psychiatric hospitalisation‡	64 (43/21)	4.2 (3.1-5.6)	4.7 (3.2-6.7)	3.4 (2.1-5.6)	2.8 (2.0-3.9)	3.2 (2.1-4.9)	2.2 (1.3-4.0)
Substance misuse	22 (14/8)	3.0 (1.9-4.9)	2.8 (1.6-5.1)	3.5 (1.6-7.8)	1.7 (1.0-3.1)	1.5 (0.7-3.1)	2.3 (0.9-5.8)
Suicide attempt	29 (22/7)	7.6 (4.7-12.4)	15.4 (7.9-30.2)	2.9 (1.3-6.8)	4.9 (2.9-8.5)	10.4 (4.9-22.1)	1.9 (0.7-4.8)
Any accident	32 (19/13)	1.6 (1.1-2.3)	1.4 (0.9-2.2)	1.9 (1.0-3.4)	1.4 (1.0-2.1)	1.2 (0.7-2.0)	1.8 (1.0-3.3)
Any crime	60 (33/27)	1.9 (1.4-2.5)	1.2 (0.8-1.7)	5.6 (3.5-9.1)	1.3 (1.0-1.8)	0.8 (0.5-1.2)	4.1 (2.5-6.9)
Violent crime	14 (8/6)	2.7 (1.5-4.9)	1.8 (0.8-3.7)	9.9 (3.2-30.7)	1.5 (0.8-3.0)	0.8 (0.3-2.1)	7.2 (2.1-24.4)

**Notes:** N/A Not applicable due to sparse data. \*Adjusted for immigrant status and psychiatric morbidity up to baseline. ‡ Hospitalisations for gender identity disorder were excluded.



# Any Cause of Death

Matched on sex at birth



# THE NEW ATLANTIS

A JOURNAL OF TECHNOLOGY & SOCIETY

~ SPECIAL REPORT ~

## **Sexuality and Gender**

**Findings from the Biological,  
Psychological, and Social Sciences**

*Lawrence S. Mayer, M.B., M.S., Ph.D.*

*Paul R. McHugh, M.D.*

NUMBER 50 ~ FALL 2016 ~ \$7.00

[www.TheNewAtlantis.com](http://www.TheNewAtlantis.com)

A study of the studies.

-Examination of 500 papers in:  
epidemiology, genetics,  
endocrinology, psychiatry, neuro-  
science, embryology, and  
pediatrics

“The scientific definition of biological sex is, for almost all human beings, clear, binary, and stable, reflecting an underlying biological reality that is not contradicted by exceptions to sex-typical behavior, and cannot be altered by surgery or social conditioning.”

~ Lawrence S. Mayer, M.B.,M.S., Ph.D.



“The notion that a two-year-old, having expressed thoughts or behaviors identified with the opposite sex, can be labeled for life as transgender has absolutely no support in science.

Indeed, it is iniquitous to believe that all children who have gender-atypical thoughts or behavior at some point in their development, particularly before puberty, should be encouraged to become transgender.”

~Lawrence S. Mayer, M.B.,M.S., Ph.D.



OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

# Rapid-onset gender dysphoria in adolescents and young adults: A study of parental reports

Lisa Littman

Published: August 16, 2018 • <https://doi.org/10.1371/journal.pone.0202330>

Instructions on lying

- “TL;DR find out what they want to hear if they’re gonna give you T and then tell them just that. It’s about getting treatment, not about being true to those around you. It’s not their business and a lot of time doctors will screw stuff up for you.”<sup>a</sup>
- “...Get a story ready in your head, and as suggested keep the lie to a minimum. And only for stuff that can’t be verified. Like how you were feeling, but was too afraid to tell anyone including your family.”<sup>b</sup>
- “I’d also look up the DSM for the diagnostic criteria for transgender and make sure your story fits it, assuming your psych follows it.”<sup>c</sup>

Urgency to transition

- “...If you don’t do it when you are young. You’ll be miserable and unhappy with your body for the rest of your life.”<sup>d</sup>

Vague and nonspecific symptoms called signs of GD

- “Signs of indirect gender dysphoria: 1. Continual difficulty with simply getting through the day. 2. A sense of misalignment, disconnect, or estrangement from your own emotions. 3. A feeling of just going through the motions in everyday life, as if you’re always reading from a script. 4. A seeming pointlessness to your life, and no sense of any real meaning or ultimate purpose. 5. Knowing you’re somehow different from everyone else, and wishing you could be normal like them...”<sup>e</sup>

- [https://www.reddit.com/r/asktransgender/comments/2nt8gi/having\\_a\\_psych\\_eval\\_soon/#bottom-comments](https://www.reddit.com/r/asktransgender/comments/2nt8gi/having_a_psych_eval_soon/#bottom-comments)
- [https://www.reddit.com/r/asktransgender/comments/4agt76/is\\_it\\_best\\_to\\_be\\_completely\\_honest\\_or\\_lie\\_a/](https://www.reddit.com/r/asktransgender/comments/4agt76/is_it_best_to_be_completely_honest_or_lie_a/)
- [https://www.reddit.com/r/asktransgender/comments/4ihwar/what\\_things\\_should\\_i\\_never\\_tell\\_my\\_psychologist/](https://www.reddit.com/r/asktransgender/comments/4ihwar/what_things_should_i_never_tell_my_psychologist/)
- [https://www.reddit.com/r/asktransgender/comments/3gpb94/at\\_the\\_final\\_stage\\_of\\_questioning\\_need\\_some/#bottom-comments](https://www.reddit.com/r/asktransgender/comments/3gpb94/at_the_final_stage_of_questioning_need_some/#bottom-comments)
- <https://transgenderteensurvivalguide.tumblr.com/post/62036014416/that-was-dysphoria-8-signs-and-symptoms-of>



# Britain's Youngest Patient



Although Ms Cooper underwent a thorough psychological assessment and counseling at Hull Royal Infirmary prior to starting her sex change therapy she has suffered such torment living as a woman that she has tried to commit suicide twice.



RYAN T. ANDERSON

# When Harry Became Sally

Responding to the  
Transgender Moment

# Summary

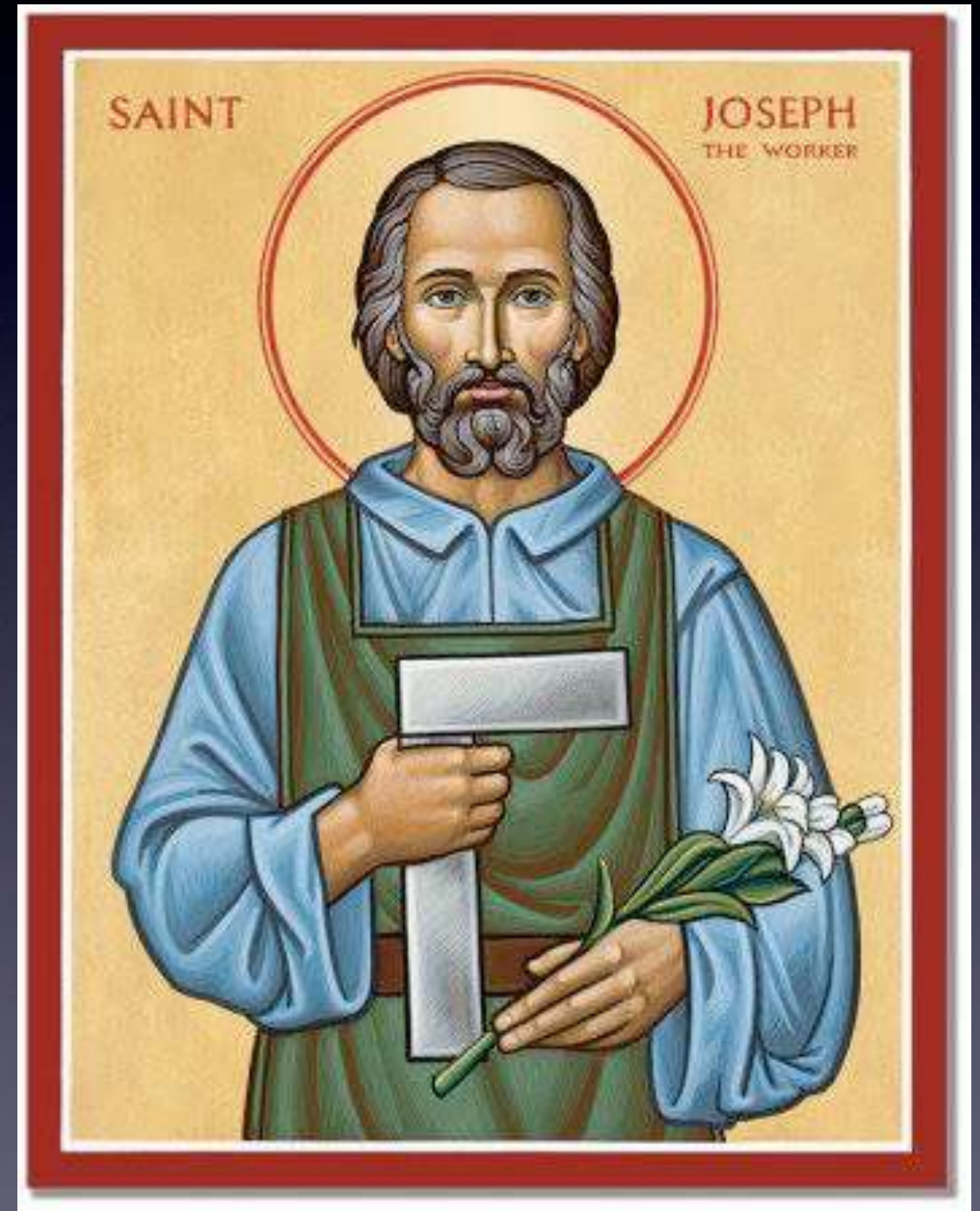
- Not a new condition. OCD w/ BDD.
- Psychological/ Spiritual wound.
- Ordinary childhood role playing being sexualized/ treated with puberty blockers!
- In many cases, permanently mutilating surgeries.
- A huge engine of public opinion, policy, and enforcement aimed at the family, and the church.

- Transgender persons are at high risk for abuse and self harm.
- Care must be based in a true human anthropology.
- Missteps must be anticipated
- Protection from “blind guides”.
- Fluency in the language, and knowledge about the erroneous science will permit witnessing with patience and fraternal love.



# Let Us Pray

God our Father,  
creator and ruler of the universe, in  
every age you call man to develop and  
use his gifts for the good of others.  
With Saint Joseph as our example and  
guide, help us to do the work you  
have asked and come to the rewards  
you have promised.  
We ask this through our Lord Jesus  
Christ, your Son, who lives and reigns  
with you and the Holy Spirit, one  
God, for ever and ever.  
Amen













# Let Us Pray

Oh glorious martyrs of Christ, Saints Cosmas and Damian, you gave your lives for the love of God, benefiting your fellow man, and crowning your martyrdom with an open and loyal profession of your faith. You taught us to love God above all things, and to love our fellow man as ourselves, professing always, and without fear, the religion of Jesus. Augmenting amongst the faithful populace many miracles, you are glorious indeed. Through your intercession, which brings about deliverance of these miracles, we pray to you for your aid in all things. May your patronage never be far from us in the illness of our body and soul.

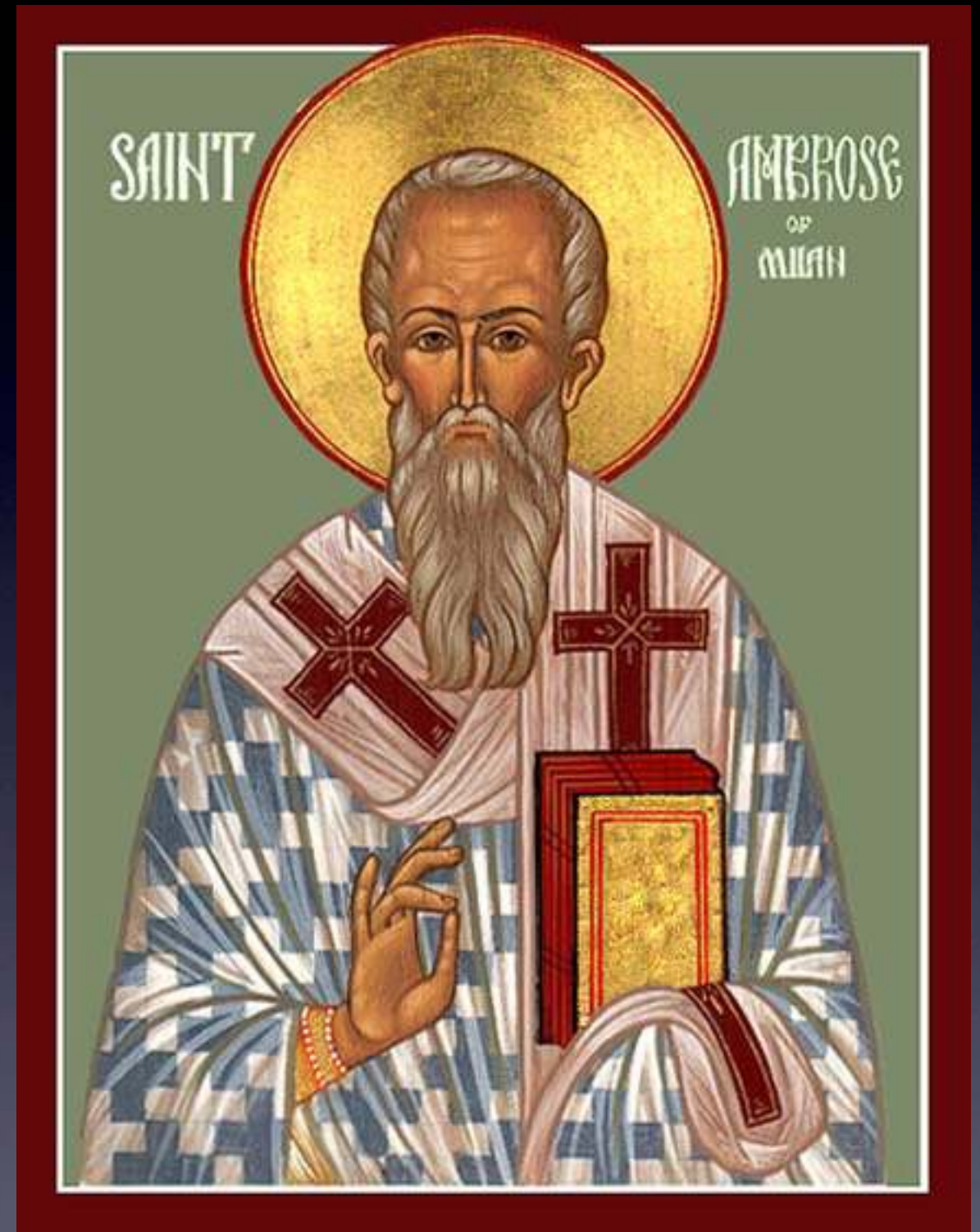
Oh great protectors, Saints Cosmas and Damian, assist us with your love and free us from all evils.  
Amen





# Let Us Pray

Lord,  
you made Saint Ambrose  
an outstanding teacher of  
the Catholic faith and gave  
him the courage of an  
apostle.  
Raise up in your Church  
more leaders after your  
own heart, to guide us with  
courage and wisdom.  
We ask this through our  
Lord Jesus Christ, your Son,  
who lives and reigns with  
you and the Holy Spirit,  
one God, for ever and ever.  
Amen.





## Let us Pray

Almighty God, whose deacon  
Vincent, upheld by you, was  
not terrified by threats nor  
overcome by torments:  
Strengthen us to endure all  
adversity with invincible and  
steadfast faith; through Jesus  
Christ our Lord, who lives and  
reigns with you and the Holy  
Spirit, one God, for ever and  
ever.

Amen



St. Vincent of Saragossa



Let Us  
Pray



殉教



God our Father,  
source of strength for all your saints; you led Paul Miki and his companions  
through the suffering of the cross to the joy of eternal life.  
May their prayers give us courage to be loyal until death in professing our faith.  
Through Jesus Christ, your Son, who lives and reigns with you  
in the unity of the Holy Spirit, one God, for ever and ever.  
Amen.



# Let Us Pray

O God, almighty Father, you have consecrated us to the work of bringing our brothers and sisters to the life of grace; there to grow in that perfection of our nature which leads to eternal life.

Grant unto us ,O Lord, an unswerving devotion to the service of those suffering from wounds that keep them from that fullness of life which you intend for all of us.

Do not allow us to be mislead by the deceptions of a world that has lost sight of you, and help us to follow in the obedience of your Son, Jesus Christ, who lives and reigns with you in the unity of the Holy Spirit, One God, for ever, and ever.

Amen





transition surgery for first time



[www.sexchangeregret.com](http://www.sexchangeregret.com)



1947

*From Male to Female and Back Again*

2013

# Sex Change REGRET

[Home](#)

[Things I've learned](#)

[Research I've found](#)

[Examples](#)

[Other Web Sites](#)

[Italiano](#)

[Bookstore](#)

## Walt's Welcome

Intro to sex change regret 7 8 15



Reaching Out to Those  
with Sex Change Regret

This is the book you  
need in your hands



# The Challenge

- Evangelizing people who are being relentlessly misled concerning human sexuality.
- In need of catechesis at all levels.
- In need of pastoral sensitivity to particular wounds.
- In need of the sacraments.



Bl. John Henry Cardinal Newman



# Plea For Mercy

- For The Children!
- To prevent suicide!



# Let Us Pray

O Mary, Powerful Virgin; thou art the mighty and glorious protector of the Church; Thou art the marvelous **Help of Christians**; Thou art terrible as an army in battle array; Thou alone hast destroyed every heresy in the whole world. In the midst of our struggles, our anguish, and our distress, defend us from the power of the enemy, and at the hour of death, receive our souls into Paradise.

Amen





# Transgender Surgery and Christian Anthropology



Deacon Patrick W. Lappert, MD  
Birmingham in Alabama  
256-303-8509

# **EXHIBIT 16**

**NEWS**

# Plastic surgeon: Sex-change operation 'utterly unacceptable' and a form of 'child abuse'

Dr. Patrick Lappert, a Catholic deacon in Alabama, says changing a person's sex is a lie and also a moral violation for a physician.



**Exhibit  
0034**

9/30/2021  
Dr. Lappert

Lisa Bourne

Mon Sep 9, 2019 - 6:42 pm EDT

***EDITOR'S NOTE: This story contains explicit content.***

September 9, 2019 ([LifeSiteNews](#)) – The idea that you can change someone's sex is a lie, an Alabama-based plastic surgeon said, and pursuing this avenue with children amounts to child abuse.

"It's a form of tyranny, exercising a form of tyranny over our own bodies," Dr. Patrick Lappert said. "And in the case of children, it's child abuse."

Appearing on a recent [broadcast](#) of Relevant Radio's Trending with Timmerie, Lappert said the view that the human body is something that someone owns, that they can do things in order to provoke happiness in themselves, is a self-reverential view divorced from the objective reality of the human person.

Lappert briefly touched on the negative physical effects of same-sex sexual activity, and he also explained in detail the disturbing reality of what happens when a person undergoes so-called sex-change surgery.

He called it "utterly unacceptable" on moral grounds for a plastic surgeon, because it disregards the surgeon's call to balance respect for both form and function of the body in his or her work.

Regarding children, Lappert said, sexualizing them at a young age with these ideas is grooming them for later abuse.

"It's atrocious," he said. "And no one even knows how that's going to play out. There's no body of scientific evidence to even support the safety of doing that to children. But it's being done."

"Children do not have the capacity to consent to those sorts of treatments," Lappert said of sex-change procedures. "You cannot tell a pre-adolescent child anything about their adult life and expect that they're going to understand what you're telling them."

"Their concept of themselves is in the formative years," he continued. "And to ask a child to think of their sexuality when they're pre-adolescent is utterly insane. And it's in fact another great evil that's being inflicted upon children because it's the sexualization of normal chaste friendships of childhood."

**'They will never be the other sex'**

Asked "What is a sex change?" Lappert responded, "Well, to begin with, the idea that you can change someone's sex is a lie."

“Many people have been led to believe by a lot of very clever programs and advertising from plastic surgeons and whatnot that you can actually change a man into a woman or a girl into a boy or anything like that,” he said. “You cannot. Essentially all you can do is you can modify people's bodies both with medicines as well as with surgery to make them appear to be the other sex, but they will never be the other sex.”

Lappert, a board certified general surgeon and plastic and reconstructive surgeon, is a Navy and Marine veteran, as well as a permanent deacon for the Diocese of Birmingham, Alabama. He is also chaplain for the Courage apostolate in the Birmingham diocese.

Experts have said for years that surgery or hormone treatment for gender-confused individuals, and certainly encouraging transgender ideas in children, is not the solution, and can result in exacerbating their condition.

Nonetheless, sex change surgeries have been on the rise, transgender ideology continues to be pushed in schools, civil government, and healthcare associations and institutions, while gender confused-individuals are also appearing more and more in pop culture, sports, media, and advertising.

## **The beginning stages**

Lappert said gender confused individuals will typically begin by adopting a lifestyle and persona, change their name, hair and other aspects of their looks, and then move onto other identity components such as changing their driver's license and so on. Then hormonal medications are often introduced, and while sometimes these may initially make someone feel better about their gender confusion, this gives the false impression that surgical intervention will result in success, and taking hormones of the opposite sex over time can have a negative physical impact.

## **Irreversible**

Most of the chemical interventions and cosmetic procedures done to alter a person's face or neck are to a degree reversible. However, Lappert warned, more invasive surgeries, such as mastectomy and procedures involving genitalia, are not.

## **A counterfeit vagina**

In the case of men seeking to present as women, after they've had the other initial interventions performed, a definitive genital surgery includes castration, removal of the testicles, and the opening of the penis and removal of the erectile tissue, which is a procedure called penile inversion. This is where the penis is turned inside out and suspended up in the pelvis, turning it into “a receptive structure,” Lappert explained.

The tissues of the scrotum are then turned into labia, meaning the external genitalia portions of the phallus itself are used to create the labia minora. In creating the receptive structure, the surgeon is trying to preserve the nerves, so that those parts of the genitalia that provoke erotic sensation can do so.

“Which is a very challenging thing to try to do when you're essentially mutilating the penis,” he said, “to try to preserve the neurological support for it, so that the person can have erotic sensation from this counterfeit vagina that you've created.”

“The problem is that this counterfeit vagina doesn't want to keep its dimensions,” said Lappert. “And so you're constantly having to attend to the dilation of it to try to preserve its dimensions and so on. You also are taking the urethra that was in the penis and shortening it down so that it essentially is just an opening at the top of this counterfeit vaginal orifice that you've created.”

This is the most commonly performed operation for males trying to present as female, he said.

## **A counterfeit penis**

In the case of women trying to present as men, it begins with the removal of the ovaries and the uterus, removal of the vagina and the creation of a neo phallus, or a counterfeit penis.

This can be done a couple of different ways, he said, one being a high dose of testosterone, which will produce an enlargement of the clitoris, and then when you have exhausted those very high levels of testosterone, and they've had this effect on the clitoris, an operation is done to lengthen the urethra so that the urethra is extended along the underside of this enlarged clitoris, so that the urine empties at the tip of this structure.

That operation is called a metoidioplasty.

“And essentially what you get there is a small phallus,” said Lappert, “and that's usually supplemented by creating a neo scrotum into which are placed two prosthetic testicles.”

For women seeking a more developed physique, Lappert continued, a neo phallus is produced by what's called a flap operation.

This is where an area of tissue, typically from the leg, is raised up and surgically turned into a cylindrical structure inside of which is a urethral tube. That urethra tube is then connected to the native urethra, which appears at the base of the clitoris. The clitoris tissue itself is draped over the base of this neo phallus and then, again, a counterfeit scrotum with prosthetic testicles.

“And then in that whole apparatus you can also implant malleable or inflatable prosthetics that can produce the appearance of an erection,” explained Lappert. “So that's called a phalloplasty by flap operation.”

The most common flap operation done today is to harvest the skin for the neo phallus from the forearm, said Lappert.

“It's called a radial forearm flap and it's a tremendously disfiguring surgery on the forearm,” he said. “And so these women who are presenting as men will tattoo their forearms to conceal the disfigurement.”

“And then so (ultimately) what you wind up with is a counterfeit phallus or a counterfeit vagina,” stated Lappert.

Why are these counterfeit?

“Because they don't function the way those structures function,” said Lappert. “It's obviously the case with the reproductive organ that what you're doing is you're robbing the person of an essential human capacity of the reproductive faculty. And that's not reversible or retrievable.”

“You cannot preserve the procreative function when you do these operations,” stated Lappert.

## **A sterile act**

The doctor then touched on the spiritual component with these procedures.

“As Catholics, we recognize the human sexual embrace that's having two aspects, its unity and its procreative,” said Lappert. “It unites the two persons in an emotional-spiritual bond. But it's also a fruitful union.”

“Well, (with sex change procedures) you've robbed it of its fruitfulness,” he said. “It's now become a sterile act.”

## **The erotic sensation is never fully preserved**



“The other thing that people don't understand is that because of the surgeries I’ve just described the desire to preserve erotic sensation from these structures that you're mutilating is never fully met,” said Lappert.

In the nature of our nervous system there is a thing called neural mapping, he continued, meaning even though the physician works to preserve those nerves, the nerves continue to recognize sensations from their original form and function.

“The brain is still thinking that, even though you've turned your penis into a counterfeit vagina, whenever it is stimulated the brain is still thinking that there is a penis down there,” said Lappert. “So here's a person trying to live as a woman hoping that they're going to be able to conduct their lives as women, who enters into a relationship with a man, and then in a sexual act is constantly being reminded by their own bodies that they are in fact still men, and that's a hard one to get over.”

## **The malpractice of medicine**

Lappert also warned that a whole generation of children is being raised whose psychosexual, physical, and neurological development are being stunted in hopes of supporting this cross-sex idea of themselves – pushed by the transgender industry.

He pointed out that if you took 100 children with cross-sex idea of themselves, 91 percent of them will desist.

“Ninety-one percent of them will stop thinking of themselves as the other sex,” said Lappert. “But if you take the same hundred children to a transgender clinic at your local urban center, 100 percent of them will persist in it, which on the face of it tells you that this is this is the malpractice of medicine.”

“If 91 percent of them would have gotten over the disease and 100 percent of them persistent and obviously you're doing something wrong here,” he added. “But nonetheless that's how it's being presented.”

“People are being led to believe that if you have the surgery your sorrows will go away,” said Lappert. “But what's called gender dysphoria, this interior sense of sadness that the persons who suffer with transgender feel, they're being told that if they have all of this medical and surgical therapy, that those bad feelings will go away. And the best study looking into that tells us that that is not the case.”

After a period of observation beyond some eight to 10 years, the suicide rate goes right back to where it was if nothing had been done for these people.



“If you didn't offer them any care at all, you'd have the same suicide rate that people have now after all of the surgical interventions,” said Lappert. “And after the excitement dies down, and eight, 10 years later, they're right back to a 40 to 42 percent suicide rate. So that's a huge misrepresentation of benefit that is just not true.”

Advocates for gender-confused individuals continually say these individuals need authentic psychological help that focuses upon the source of the confusion.

## **This kind of surgery is utterly unacceptable**

Lappert called sex change surgery “an intentional destruction of a human faculty,” and “so on moral grounds from the perspective of a plastic surgeon this kind of surgery is utterly unacceptable.”

## **The language of slavery**

Because these procedures result in sterilization, they are tied to assisted reproductive technology, Lappert explained, with patients asked how they want to “preserve their fertility,” donating either sperm or ova, should they want children later.

“Those things will be put aside and for future assisted reproductive technology, essentially turning human persons into commodities,” Lappert said.

## **A huge evil**

“Because they will be told, you have a right to have a child even though you're having this transgender surgery,” he said. “You have a right to have a child. So we're going to do these things for you. Well, that's the language of slavery, to speak of a person that's having a right to another person is the language of slavery.”

“It's leading us to seeing the human person as a commodity that is regulated by the government, by government institutions, universities, and by laboratories,” Lappert continued. “And that is a huge evil. It's a huge evil and never forget, that transgender surgery is right at the heart of that evil.”

“First of all because it utterly perverts our sense of human sexuality,” he said. “It internally divides the human person from their very own bodies. And now it's separating the human community from their reproductive faculties, in the era of assisted reproductive technology. So this is diabolical in every sense of the word. Diabolical.”

## **Rejecting objective truth**

Encouraging people to pursue sex-change surgery rejects understanding of who the human person is, said Lappert.

“One of the mistakes that people are making in contemporary life is viewing themselves as sort of a spirit creature and their bodies as something that they own or something that they possess,” he said. “They view their own bodies as something that they can do things to in order to provoke happiness in themselves. It's a very self-referential view of the human person and it has at its heart this division of the nature of the human person.”

Plastic surgery can never divorce itself from objective reality just as no form of medical care can separate itself from the objective truth of who the human person is, he said.

“So if I aim to be a good surgeon, then the very first thing I have to understand is the subject upon whom I am working,” Lappert stated. “If I have met grave misunderstandings about the objective reality of that of the person, I'm going to be making some serious mistakes when I embark on medical or surgical care.”

“To view the body as a thing, but somebody that a person owns, to view themselves, their personhood is something separate from their own bodies, is a very grave mistake,” he said. “And then to set about modifying the body in ways that you hope will bring about a lasting happiness can't possibly succeed, because it begins with a lie, it begins with an error about the objective truth of who the human person is.”

The full interview with Dr. Patrick Lappert is available [HERE](#).

Two positive resources for gender-confused and same-sex attracted individuals featured in the discussion were the Roman Catholic Courage apostolate and [Walt Heyer's](#) outreach titled Sex Change Regret. Heyer had transitioned to living as a woman and then returned to living as a man, and now performs outreach for gender-confused people.

Information on Courage is available [HERE](#) and [HERE](#).

The Sex Change Regret website can be accessed [HERE](#).

[James Shupe](#), formerly [Jamie Shupe](#), [ex-transgender](#) and [former non-binary person](#), writes about his experience and chronicles transgender issues [HERE](#).

The [National Suicide Prevention Hotline](#) provides free and confidential help and resources to individuals in distress 24/7. The number is [800-273-8255](#).

Additional resources are available [here](#), [here](#) and [here](#).

TOPICS

Gender

TAGGED AS

Gender Confused   Hormone Treatment   Patrick Lappert   Penis   Plastic Surgery

Sex-change Surgery   Transgenders   Vagina

# **EXHIBIT 17**



ScienceDirect



View PDF

Access through **your institution**[Purchase PDF](#)

Reference Module in Neuroscience and Biobehavioral Psychology  
Encyclopedia of Mental Health (Second Edition)  
2016, Pages 183-186

## Body Dysmorphic Disorder

C.M. Elliott, S. Wilhelm

[Show more](#) 

Outline



Share



Cite

<https://doi.org/10.1016/B978-0-12-397045-9.00081-1>[Get rights and content](#)

### Abstract

Body dysmorphic disorder (BDD) is primarily characterized by an excessive preoccupation with a perceived defect or flaw in appearance that others would be unable to observe, or would consider slight in appearance. BDD is accompanied by repetitive behaviors intended to hide, fix or check on the perceived appearance flaw. This article provides an overview of the current understanding of the factors influencing the onset and maintenance of BDD symptoms, as well as prevalence rates. The assessment and treatment of this common and severe disorder are also discussed.

### Keywords

Assessment; BDD; BDD by proxy; Body dysmorphic disorder; Body image; Clinical features; Epidemiology; Etiology; Muscle dysmorphia; Treatment

[FEEDBACK](#)

[Recommended articles](#)[Citing articles \(0\)](#)

Corinna Elliott, PhD is a clinical and research fellow at Massachusetts General Hospital (MGH), and clinical fellow at Harvard Medical School (HMS). She is currently completing a postdoctoral fellowship in the OCD and Related Disorders Program at MGH/HMS under the mentorship of Dr. Sabine Wilhelm. Dr. Elliott was awarded a postdoctoral fellowship from the Fonds de la recherche en santé du Québec (FRSQ), in Québec, Canada. Her primary research interests involve factors that influence the onset and maintenance of obsessive compulsive disorder and body dysmorphic disorder. Dr. Elliott has published several articles and chapters on these disorders, and has won research awards from the Canadian Psychological Association and the Anxiety Disorders Association of Canada.



Sabine Wilhelm, PhD is a professor at Harvard Medical School, director of the OCD and Related Disorders Program at Massachusetts General Hospital. She is an internationally known researcher in the areas of obsessive-compulsive disorder (OCD), body dysmorphic disorder (BDD), and tic disorders. She has published over 150 articles, reviews, and chapters on the cognitive functioning, prevalence, and treatment outcome of these disorders. In addition, Dr. Wilhelm has authored and coauthored several books, including a recently published treatment manual for BDD entitled: A cognitive behavioral treatment manual for body dysmorphic disorder. She also wrote the self-help book *Feeling Good About the Way You Look: A Program for Overcoming Body Image Problems*.

Dr. Wilhelm has been the principal investigator or site principal investigator of 7 NIMH-funded research grants. She is the vice chair of the Scientific Advisory Board of the International OCD Foundation, and she serves on the Scientific Council for the Anxiety and Depression Association of America as well as on the Tourette Syndrome Association Behavioral Science Consortium. Dr. Wilhelm serves on several editorial boards and is a Representative-at-Large for the Association for Behavioral and Cognitive Therapies (ABCT).

[FEEDBACK](#)

[About ScienceDirect](#)[Remote access](#)[Shopping cart](#)[Advertise](#)[Contact and support](#)[Terms and conditions](#)[Privacy policy](#)

We use cookies to help provide and enhance our service and tailor content and ads. By continuing you agree to the **use of cookies**.

Copyright © 2021 Elsevier B.V. or its licensors or contributors. ScienceDirect ® is a registered trademark of Elsevier B.V.

ScienceDirect ® is a registered trademark of Elsevier B.V.

