UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,	)	
	)	
Plaintiffs,	)	Case No: 4:22cv325
	)	
v.	)	Tallahassee, Florida
	)	May 9, 2023
JASON WEIDA, et al.,	)	
	)	9:00 AM
Defendants.	)	Volume I
_____	)	

TRANSCRIPT OF BENCH TRIAL PROCEEDINGS
BEFORE THE HONORABLE ROBERT L. HINKLE
UNITED STATES CHIEF DISTRICT JUDGE
(Pages 1 through 250)

Court Reporter: MEGAN A. HAGUE, RPR, FCRR, CSR
111 North Adams Street
Tallahassee, Florida 32301
megan.a.hague@gmail.com

Proceedings reported by stenotype reporter.
Transcript produced by Computer-Aided Transcription.

APPEARANCES:

For Plaintiffs:

Lambda Legal
By: OMAR GONZALEZ-PAGAN
Attorney at Law
ogonzalez-pagan@lambdalegal.com
120 Wall Street
19th Floor
New York, New York 10005

Pillsbury, Winthrop, Shaw, Pittman, LLP
By: JENNIFER ALTMAN
Attorney at Law
jennifer.altman@pillsburylaw.com
600 Brickell Avenue
Suite 3100
Miami, Florida 33131

Pillsbury, Winthrop, Shaw, Pittman, LLP
By: JOSEPH LITTLE
Attorney at Law
joe.little@pillsburylaw.com
500 Capitol Mall
Suite 1800
Sacramento, California 95814

Lambda Legal
By: CARL S. CHARLES
Attorney at Law
ccharles@lambdalegal.org
1 West Court Square
Suite 105
Decatur, Georgia 30030

Southern Legal Counsel Inc
By: SIMONE M. CHRISS
CHELSEA LEE DUNN
Attorney at Law
simone.chriss@southernlegal.org
chelsea.dunn@southernlegal.org
1229 NW 12th Avenue
Gainesville, Florida 32601

Florida Health Justice Project
By: KATHERINE JEAN ANN DEBRIERE
Attorney at Law
debriere@floridahealthjustice.org
3900 Richmond Street
Jacksonville, Florida 32205

APPEARANCES (continued):

For Plaintiffs (continued):

National Health Law Program
By: CATHERINE ANNE MCKEE
Attorney at Law
mckee@healthlaw.org
1512 East Franklin Street
Chapel Hill, North Carolina 27514

For Defendants:

Holtzman Vogel Baren, et al.
By: MOHAMMAD OMAR JAZIL
GARY VERGIL PERKO
MICHAEL BEATO
Attorneys at Law
mjazil@holtzmanvogel.com
garyp@holtzmanvogel.com
michaelb@holtzmanvogel.com
119 South Monroe Street
Suite 500
Tallahassee, Florida 32301

P R O C E E D I N G S

(Call to Order of the Court at 9:00 AM on Tuesday, May 09, 2023.)

THE COURT: Good morning. Please be seated.

Are the plaintiffs ready for trial?

MR. GONZALEZ-PAGAN: Yes, Your Honor.

THE COURT: Defendants ready?

MR. JAZIL: Yes, Your Honor.

THE COURT: Opening statement for the plaintiffs.

MR. GONZALEZ-PAGAN: Good morning, Your Honor. May it please the Court, Omar Gonzalez-Pagan for the plaintiffs.

Today, Your Honor, we start a trial to vindicate the rights of Plaintiffs August Dekker, Bri Rothstein, Susan Doe, and K.F., to be free from discrimination and being able to access necessary, safe, effective, and evidence-based medical care for Medicaid.

Over the next few days we will show that Rule 51G-1.050(7), the challenged exclusion in this case which was adopted by Florida Agency for Health Care Administration, is unlawful because it discriminates based on sex and gender status, in violation of Section 1557 of the Affordable Care Act, the Fourteenth Amendment's Equal Protection Clause, and the EPSDT and comparability provisions of the federal Medicaid Act.

This is case because under *Rush v. Parham*, based on current medical knowledge, the State's determination that

gender-affirming medical care is experimental is not reasonable. In fact, Your Honor, under AHCA's very own regulation to determine whether a treatment is experimental, the only conclusion one can reach is that AHCA's determination was grossly unreasonable.

Rule 51G-1.035(4), presented to the Court right now on the screen, of the Florida Administrative Code sets forth six factors to determine whether a particular medical treatment meets Generally Accepted Professional Medical Standards, also known as GAPMS. And while those factors are not binding on this Court, they emphatically illustrate how gender-affirming medical care is safe, effective, and not experimental. The evidence will show, based on the testimony of experts in the field of transgender health and gender dysphoria and the plaintiffs' own testimony and experiences, that gender-affirming medical care is long-standing evidence-based care.

In setting this road map, I will walk the Court through these factors. The first, the existence of evidence-based clinical practice guidelines, Your Honor, there are primarily two evidence-based clinical practice guidelines for the treatment of gender dysphoria. These are the World Professional Association for Transgender Health Standards of Care, specifically Version 8 published in 2022, and the Endocrine Society's guidelines published in 2017. The State ignores these guidelines.

To be sure, given that they exist and that they are widely accepted, the State could like to undermine the fact that they exist by discrediting the organizations that have published them, but the guidelines, which are consistent with one another, are based on best available evidence, which involves volumes upon volumes of research published over the span of not a few months or years, but, rather, decades. Indeed, the guidelines are endorsed and supported by every mainstream medical organization in the United States.

This factor weighs heavily in favor of the care at issue and shows that it falls squarely within Generally Accepted Medical Professional Standards.

The second factor, we look at whether there are published reports and articles contained in operative medical and scientific literature related to the health service at issue. Plaintiffs will show that there is an abundance of peer-reviewed scientific literature supporting the safety and efficacy of gender-affirming medical care which the rule seeks to ban. The literature, much of which will be summarized with testimony of plaintiffs' experts, dates back decades.

Here the State ignores the whole body of the literature and misses the forest for the trees. The State says that because some studies have limitations, as is the case in all of science, the evidence is insufficient. But in looking at this factor, as plaintiffs' experts will testify, one looks at

the entire body of literature, not one particular study in isolation.

The State will argue that the evidence is of low quality and, therefore, insufficient. This is not so. Plaintiffs' expert will testify that the evidence at play is of the same kind and quality that supports countless medical interventions and that AHCA is creating an unprecedented, unequal, and, indeed, impossible standard for evaluating the evidence. This makes sense because defendants are not concerned with the evidence, but, rather, their goal of not covering this safe and effective care.

And because there is no peer-reviewed scientific literature supporting defendants' position, the testimony will show that defendants rely on unpublished reports and not peer-reviewed opinion pieces, which are not what the regulations -- their own regulations call for. The entire body of literature, taken as a whole, as published in peer-reviewed medical and scientific journals, provides strong evidence in support of puberty-delaying medications, hormone therapy, and surgery as treatment of gender dysphoria.

This factor also weighs heavily in plaintiffs' favor and the finding that gender-affirming medical care is not experimental.

The third factor, Your Honor, is the effectiveness of the health service in improving the individual's prognosis or

health outcomes. As noted, the evidence will show that there is an overwhelming universe of medical literature showing that this care is effective to treat gender dysphoria. Not only that, but the testimony from plaintiffs' experts, who together have decades of experience treating and studying gender dysphoria, will show that the scientific and medical literature supporting the efficacy of gender-affirming medical care accords with nearly a century of clinical experience.

The evidence will show that those diagnosed with gender dysphoria may experience high levels of anxiety, depression, and even self-harm and suicidality if their gender dysphoria is left untreated, and that the State's alternative to treat gender dysphoria with psychotherapy alone -- we've met some people who would argue it's akin to conversion therapy -- has no basis in peer-reviewed literature or clinical experience.

Quite fortunately, Your Honor, plaintiffs and their families will attest to the effectiveness of gender-affirming medical care that they have received and which Florida Medicaid previously covered. This care made the lives of Plaintiffs August Dekker, Brit Rothstein, Susan Doe, and K.F. better. It allows them to be themselves, and it helped secure and helped reduce the stress in society and emotional pain that they experience as a result of their gender dysphoria. And Jade Ladue, and Jane Doe will testify about how this care helped their adolescent children finally find comfort in their own

skin.

In sum, Your Honor, this care is not just effective in mitigating the effects of gender dysphoria. It can save lives. This factor goes to the plaintiffs.

Factors 4 and 5, Your Honor, are ordained to utilization trends and coverage policies by other credible insurance payer sources. These factors are so interrelated that we treat them together for purposes of this presentation.

As Your Honor knows, AHCA's fourth factor, utilization trends, is simply an analysis of whether health insurance entities, whether public or private, cover the service that is being analyzed. This is indisputably the case, and plaintiffs' expert Kellan Baker will testify as to that as well. What's more, Dr. Baker will discuss coverage trends across the United States.

The evidence will show that AHCA abandons its own standards by refusing to review private insurance coverage policies which cover this care as medically necessary. That -- AHCA's suggestion that Medicare does not cover this treatment is patently false. Yes, Medicare declined to issue a national coverage determination mandating the coverage of gender-affirming surgery for the Medicare population automatically, but it did so after removing an exclusion for this care when it determined that it was not experimental and after it said the coverage for this care needs to be determined

on an individual basis based on the medical needs of a particular patient.

As for Medicaid, over 45 states and territories of the 56 states and territories in the United States cover this care. By contrast, only a small minority exclude some of it, and we think of that small minority even fewer do it completely, as Florida now seeks to do.

It is clear that these factors also weigh in favor of the plaintiffs and the finding that gender-affirming medical care is not experimental.

The sixth and final factor, Your Honor, is the recommendations or assessments by clinical or technical experts on the subject or field at issue. The last part of this factor on the subject or the field of course implies that the experts being consulted would have actual clinical or technical experience in the health service being analyzed.

Here the State did not do that. Instead, it engaged in what would charitably be called a sham process where it paid quite generously a handful of select vocal opponents of gender-affirming care to serve as consultants. In fact, AHCA had never even hired consultants for a GAPMS process before. To use those consultants to participate in this process, as AHCA former employee and plaintiff witness Jeffrey English will testify and has put it in the past, was a conclusion in search of an argument.

None, absolutely none of AHCA's consultants that worked on creating the GAPMS report had any experience diagnosing, treating, or studying gender dysphoria or its treatment. AHCA employed them specifically because they oppose this care. But of the eight consultants that AHCA hired during the GAPMS report process, only two will be testifying as experts today in this trial, and of those, neither of them -- Dr. Van Meter and Dr. Lappert -- have any experience in treating or studying gender dysphoria, and both of them have previously been disqualified as experts by courts on this issue.

By contrast, the clinicians and technical experts who could provide actual insight into this care, who have experience in treating this condition, as the Court will find, are people like plaintiffs' experts. You'll learn from each of plaintiffs' expert witnesses that they are recognized as leaders in the field of gender-affirming care, that they are experienced. They are published on the topic and have been peer reviewed on the topic. They are qualified to testify as to the efficacy of this care.

This factor heavily supports plaintiffs and demonstrates that AHCA's determination was unreasonable.

On a final note, the process employed by AHCA is an important factor in itself in making a determination of whether their conclusion was reasonable. Here the process that surrounded AHCA's review of the GAPMS factors, as well as the

process used to adopt the final rule itself, were perversions of a standard process, and they support the finding that it wasn't reasonable. AHCA did not legitimately review the evidence as set forth under their own regulations, and there are several other ways in which the process deviated from standard operating procedure.

First, AHCA had never used the GAPMS process before to terminate coverage for a service it previously covered. It just never had. In fact, you'll hear from Mr. English that if a service was already covered by AHCA, then the standard procedure was to not undertake a GAPMS process. AHCA employee Devona Pickle even pointed out to Mr. English via email that eliminating coverage is not something considered under Rule 51G-1.035.

Second, the GAPMS request did not come through traditional channels that typically trigger a GAPMS evaluation. In fact, Jeff English, who was the GAPMS guy at the time, the agency employee who was responsible for every single GAPMS report at the pertinent time at issue, was pulled and excluded from the task of evaluating gender-affirming medical care under the process undertaken by this agency. As the evidence will show, AHCA excluded him because if he followed the evidence as he normally did, he would not reach the conclusion they wanted.

And, third, while it was typical for most GAPMS processes to take months, if not years, and for them to be

evaluated at different stages, here the report was articulated within a matter of weeks, and it was approved within a matter of a day, and just 24 hours later the rule was proposed.

Then there was the rule hearing itself where AHCA paid consultants to respond to comments, where it met beforehand to sketch out a plan for those responses and appearance, and the consultants only responded to those who opposed the rule, not any comment to those who supported it.

And AHCA received thousands of written comments submitted after the hearing but before the close of the rule record that were substantial and included lengthy responses from the Endocrine Society, the American Academy of Pediatrics, and teams of legal and medical experts from various academic institutions, as well as people who stood to be affected by this rule.

Notwithstanding the amount of public comment and particularly opposition to the rule, the agency, a mere three weeks after the close of the comment period, finalized the rule banning coverage of care in identical form to the rule that was proposed in June.

In sum, Your Honor, the totality of the evidence plaintiffs will proffer will show that AHCA's conclusion was not one reached within reason, but, instead, was motivated by discriminatory animus.

Plaintiffs are grateful to have their day in court and

to present this evidence. We are looking forward to vindicate plaintiffs' rights and the rights of other transgender Medicaid beneficiaries throughout Florida whose health, well-being, and very lives are at stake. They deserve and are entitled to the same dignity, respect, and governmental recognition as any other person in Florida.

We thank the Court in advance for its expenditure of its time and its resources in hearing this case.

Thank you, Your Honor.

THE COURT: For the defense?

MR. JAZIL: Thank you, Your Honor. Mohammad Jazil on behalf of the defendants, together with Gary Perko and Michael Beato.

Your Honor, over the next few week this Court will hear from lots of experts: Experts in psychiatry, experts in endocrinology, surgeons, neuroscientists. The State will put on some of these experts. My friends for the plaintiffs will put on some of the other experts.

The State's experts include Dr. Steven Levine, who helped write WPATH's Standards of Care Version 5. The State's expert will include Dr. Sophie Scott, a neuroscientist from the United Kingdom, who has no dog in this fight -- she is not part of either entrenched camp of experts -- talking about the effects of puberty blockers on the brain.

The testimony both from us and from them will focus on

the use, efficacy, safety, and general appropriateness of certain treatments -- puberty blockers, cross-sex hormones, and surgeries -- to treat one mental disorder, gender dysphoria.

The Court will also hear from Matt Brackett, a career civil servant. Mr. Brackett was the one tasked with reviewing the evidence and writing the GAPMS report as an initial matter. The State's experts and Mr. Brackett will tell the Court that the treatments at issue here are experimental. Mr. Brackett's reasons are laid out in his GAPMS report. It's a report that he wrote. It was a report that, together with its attachments, was subject to public comment and public review as part of a rulemaking process. The rule never got challenged.

Under *Rush,* Your Honor, as you know, this Court's task is to assess whether or not the State's conclusion was reasonable based on the current medical opinion. Under *Dobbs,* this Court's task is to assess whether the State's decision was rational and under the weight of the authority -- *Rush, Dobbs*, and *Adams v. School Board* -- the task calls for deference to the State's choices on this issue concerning the regulation of certain medical procedures.

As a further point, Your Honor, I note that -- and to ensure that I preserve this for appeal, I note that the State's position is that 42 U.S.C. 1983 does not serve as a vehicle for challenges under the Medicaid Act. Section 1983 allows for vindication of federally protected rights guaranteed by the

requirements of federal law. Medicaid, the federal at law issue, and the DPSDT and comparability requirements create no federally enforceable rights.

Regardless, Your Honor, the evidence will show that the State is in the right here; its decision was constitutional; its decision complied with the relevant statutes.

Thank you, Your Honor.

THE COURT: All right. For the plaintiff, please call your first witness.

MR. GONZALEZ-PAGAN: Your Honor, if may, Omar Gonzalez-Pagan. We were hoping to -- and I've consulted with my friend -- to admit the joint stipulated exhibits into evidence at the start of trial, if the Court is amenable.

THE COURT: Yes.

This is all the joint exhibits?

MR. GONZALEZ-PAGAN: All the joint stipulated exhibits, and there was a notice filed last night with the Court setting forth which ones those were.

THE COURT: Yeah, the notice last night is ECF 214.

MR. GONZALEZ-PAGAN: It's Docket No. 219, Your Honor.

THE COURT: 219.

214 is the one I'm looking at, but that dealt with the witnesses.

MR. GONZALEZ-PAGAN: We are happy to revisit that at a later time, Your Honor.

THE COURT: No, I've got it right here. The exhibits identified in ECF 219 are admitted into evidence.

(All exhibits listed in ECF No, 219 are admitted.)

MR. GONZALEZ-PAGAN: Thank you, Your Honor.

THE COURT: Most of the witnesses are experts, and I would allow them to be in the room even with the rule invoked.

Does either side wish to have the rule invoked? I'm not entirely sure there are any lay witnesses other than parties. But if there are, does either side wish to have them excluded?

MR. JAZIL: No, Your Honor, not for the defense.

MR. GONZALEZ-PAGAN: Not from the plaintiffs, Your Honor.

THE COURT: All right.

MS. DeBRIERE: Your Honor, plaintiffs call Dr. Dan Karasic as their first witness.

(Dr. Karasic entered the courtroom.)

THE COURTROOM DEPUTY: Please be seated.

DR. DAN HALABAN KARASIC, PLAINTIFFS WITNESS, DULY SWORN

THE COURTROOM DEPUTY: Please be seated.

Please state your full name for the record and spell your last name for the record.

THE WITNESS: Sure, Dan Halaban Karasic, K-a-r-a-s-i-c.

DIRECT EXAMINATION

BY MS. DeBRIERE:

Q. Dr. Karasic, what is your profession?

A. I'm a psychiatrist.

Q. How long have you been a psychiatrist?

A. I have been a psychiatrist for 32 years, 36 years including psychiatric residence.

Q. Have you specialized in the treatment of any particular conditions or populations?

A. Yes, I've specialized in the treatment of transgender and gender-diverse people, as well as people with HIV.

Q. What current positions do you hold, Dr. Karasic?

A. I am professor emeritus of psychiatry at the University of California at San Francisco.

Q. Okay. Over your years at UCFS --

A. Yes.

Q. -- what have your duties been?

A. Over the years at UCFS, I've provided health care and created programs and done research and taught on the care of both people with HIV and transgender and gender-diverse people.

Q. Specifically with regard to transgender people, in what settings have you provided clinical care to patients?

A. I was the psychiatrist for the Dimensions Clinic for transgender youth, as well as the Transgender Life Care Program at Castro-Mission health care center, and that was from 2023

until 2020.

I was also the cofounder of -- and coleader of the gender team at the UCFS Alliance Health Project from 2012 to 2020.

Q. Can you describe --

A. Also, just to add, throughout the 30 years, I saw -- would see transgender people in my faculty practice.

Q. Thank you.

Can you describe your experience a little bit at the Dimensions Clinic?

A. Sure.

So the Dimensions Clinic provides care for transgender youth from ages 12 to 25; one of the first places in the U.S. to do so. And there was also the Transgender Life Care Program which was primarily a clinic for people who had kind of aged out of that 12-to-25-year range. And so I saw patients and also supervised therapists there.

Q. And what years did you see patients at Dimensions?

A. From 2003 to 2020.

Q. Can you describe your experience a little bit at the Transgender Life Center as well?

A. Transgender Life Care Program was in the same clinic, but it was providing care for people after they had -- were no longer a part of the Dimensions program because they were 26, 27; they had aged out of it.

And, yeah, so I guess answering that part.

Q. Yeah. How many patients have you treated over the years?
A. So -- well, I would also say, in terms of places I saw people, the transgender team at the UCFS Alliance Health Project, that was a team that we started when San Francisco started covering gender-affirming care for people first with Healthy San Francisco in 2012, and people with Medicaid starting in 2013.

And so we provided the mental health assessments for surgery for the Medicaid patients who were getting surgery through the -- through San Francisco's Managed Medi-Cal.
Q. Thank you. Thank you.

So in all of those clinical settings, can you give an approximation of how many patients you've seen over the course of your practice?
A. Certainly thousands.
Q. Thousands.

Aside from gender dysphoria, what other types of conditions do you treat?
A. So as a psychiatrist, I take care of a lot of patients who are depressed, anxious, have bipolar disorder, people with panic disorder, OCD; the whole range of psychiatric conditions that people have.
Q. Do you also do research?
A. And so -- so yes. Well, I retired from UCFS in 2020. But, yes, I did research as part of my work at UCFS from 1991 to

2020.
Q. 1991 to 2020?
Have you published any scholarly articles?
A. Yes.
Q. Have those been in peer-reviewed journals?
A. Yes.
Q. Approximately how many peer-reviewed articles have you published?
A. Twenty-three.
Q. And what topics did those articles cover?
A. They covered the care of transgender people, as well as care of people with HIV.
Q. In addition to those articles, are there any other professional published works you have authored that relate to transgender health issues?
A. Yes. I was the -- an author of the WPATH Standards of Care 7, and I was the mental health chapter lead of WPATH Standards of Care Version 8. And I also worked on the primary care protocols for transgender care for UCFS, both versions.
Q. Have you served as a peer reviewer for any of the scholarly journals?
A. Yes.
Q. Are there particular areas you are asked to review when you are doing the peer review?
A. Transgender health.

Q. Dr. Karasic, are you being compensated for your time here today?
A. Yes.
Q. Does your compensation in any way depend on the outcome of this litigation?
A. No.
Q. Or your testimony?
A. No.
Q. Dr. Karasic, when you provided a copy of your expert report for this case, did you include a copy of your CV?
A. Yes.
Q. And does that CV present an accurate summary of your qualifications and professional activities?
A. Yes.
MS. DeBRIERE: Your Honor, Dr. Karasic's CV is among the stipulated exhibits provided to the Court listed as Plaintiffs' Exhibit 359.
THE COURT: That's admitted.
(PLAINTIFFS EXHIBIT 369: Received in evidence.)
MS. DeBRIERE: At this time I'd move to have Dr. Karasic qualified as an expert in psychiatry; more specifically, the assessment, study and treatment of gender dysphoria in both adolescents and adults.
THE COURT: Mr. Jazil, any questions at this time?
MR. JAZIL: No, Your Honor.

THE COURT: You may proceed.

MS. DeBRIERE: Thank you, Your Honor.

BY MS. DeBRIERE:

Q. Dr. Karasic, you mentioned that you've treated both adolescents and adults with gender dysphoria, so let's just go over some basic terms.

What is gender dysphoria?

A. So gender dysphoria is the distress about the difference between one's identified gender and one's sex assigned at birth.

Q. What does the term "gender identity" mean?

A. Gender identity is a deeply felt, long-standing sense of being male, female, or another gender.

Q. I think you just mentioned sex assigned at birth?

A. Yes.

Q. What does that mean?

A. So when a doctor delivers a baby, the -- usually based on the appearance of external genitalia, a sex of male or female is assigned.

Q. How is sex at birth determined?

A. Usually by appearance of external genitalia.

Q. What does the term "transgender" mean?

A. So transgender is -- a transgender person is someone whose gender identity is different from their sex assigned at birth.

Q. What about the term "nonbinary?" What does that mean?

A. Nonbinary is someone whose gender identity is other, male

or female.
Q. Is there any diagnosis associated with gender dysphoria that is used in the U.S.?
A. I'm sorry. What was the question?
Q. Yeah. Is there any diagnosis associated with gender dysphoria that is used in the United States?
A. Oh, yes.
So there are two diagnoses that are in the *DSM-5*, and then the ICD-10-CM refers to those diagnoses. There's gender dysphoria of children and gender dysphoria of adults and -- of adolescents and adults.
Q. What is the DSM?
A. Oh, the Diagnostic and Statistical Manual of the American Psychiatric Association.
Q. You also mentioned ICD-10. What is that?
A. So that's the International Classification of Diseases. It's the World Health Organization's list of disorders. And in the United States we use ICD-10-CM as kind of the billing manual, diagnoses for billing.
Q. So turning back to the DSM, how is that used by mental health professionals in caring for patients?
A. So the DSM provides classification with a list of symptoms that define the different disorders. And that's used so that everyone has a common understanding of what a particular disorder is and also for billing purposes.

Q. When you say "everyone," what group of people is that?
A. So clinicians, and also for researchers, that if people are researching a particular disorder, it's -- they are talking about the same thing, the same list of symptoms.
Q. Dr. Karasic, have you ever diagnosed patients with gender dysphoria?
A. Yes.
Q. Can you summarize the diagnostic criteria located in the DSM for gender dysphoria?
A. Sure. So it's having for six months or longer -- so at least six months -- distress about the difference between one's gender identity or experienced gender and one's gender assigned at birth. And it -- and then there are some -- like, six criteria of which you have to have two of those six symptoms. And then you have to have clinically significant distress or social or occupational impairment.
Q. So what does that mean, "clinically significant distress"?
A. So that's distress that is strong enough that you would go to the doctor for it.
Q. And same question for impairment of functions?
A. For social and occupational impairment.
So social impairment is that the symptoms are strong enough that they are getting in the way of your relationship with other people, with your, kind of, interface with the world. And occupational impairment is that the symptoms are getting in the

way of school or job performance.
Q. Does the fact that someone is gender nonconforming mean that they are to be diagnosed with gender dysphoria?
A. No.
Q. Is being transgender a mental disorder per se?
A. No.
So being transgender is just part of human diversity. There are people who are transgender who meet criteria for gender dysphoria. But being transgender per se is an identity that a person might have.
Q. Has the diagnosis of gender dysphoria changed at all over time in the DSM?
A. The diagnosis of gender dysphoria, both diagnosis of children and adults, came into the DSM with *DSM-5* in 2013. Prior to that, there were diagnoses of gender identity disorder of adolescents and adults and gender identity disorder of children.
Q. So what were the differences, I guess, between those two diagnoses?
A. So one big difference was with gender identity disorder of childhood, which did not have an absolute requirement of transgender identity, it could be implied through strong cross-sex behavior. And there was a recognition that -- that that included a lot of people who were not transgender adults. And so in -- for *DSM-5*, they made the A1 criteria of a

transgender identity required for gender dysphoria of childhood.

There is also changing the name from gender identity disorder to gender dysphoria, an emphasis that it was the distress about the difference that was the disorder as opposed to being transgender.

Q. You just mentioned that A1 criteria?

A. Yes.

Q. What -- just tell us what that A1 criteria is. I believe you just --

A. So the A1 criteria in gender dysphoria of childhood is our -- symptoms that speak to having a transgender identity, having an identity of being a gender other than the one assigned -- sex assigned at birth. So it was in the list of symptoms before, but it wasn't a required symptom until *DSM-5*.

Q. Is gender identity something someone can change voluntarily to be congruent with their sex assigned at birth?

A. No.

Q. Have there been efforts through the field of psychiatry or psychology to try to change a transperson's gender identity through therapy?

A. Yes, generally labeled conversion therapy.

Q. How did those efforts impact patients?

A. So major medical and mental health organizations have come out with policy statements against conversion therapy, because there just hasn't been any data that it helps. And we have some

data and certainly a lot of clinical experience of people who were harmed from conversion therapy.

Q. You mentioned major medical associations. Can you name a couple of those?

A. Sure.

The American Psychological Association, American Psychiatrist Association, American Medical Association; the American Psychological Association not that long ago came out with a long document in opposition to what they labeled as gender identity change efforts, which is conversion therapy specifically for transgender people.

Q. So, Dr. Karasic, you said people can't voluntarily change their gender identity, but can someone's understanding of their gender identity change over time?

A. Yes.

So people can have these deep-seated feelings and they can have different conceptualizations or names that they give for those. And certainly I have patients who might identify as nonbinary at one point and as binary/transgender at another point, or vice -- or switching, vice versa.

And so, you know, people can label their gender identity in different ways over time as their understanding of their self evolves.

Q. Can you describe the process that's used to diagnosis gender dysphoria?

A. Yes.

So specifically for -- not gender dysphoria, the symptom of gender dysphoria, the diagnosis in the *DSM-5* has a set of symptoms. The person has a -- the patient has a clinical interview from a clinician, and that includes a clinical history and a clinic exam, and the clinician making the determination if that fits with the gender dysphoria diagnosis. It's really the same process for making any DSM diagnosis.

Q. Are there any differences between diagnosing a child versus an adult?

A. Yes.

Well, for prepubertal children, there is a different set of criteria, first of all. And, secondly, the parents are involved in the clinical interview and typically the exam as well when working with the child.

Q. Are there any recommendations as to who should make the assessments or diagnosis of gender dysphoria when it comes to patients?

A. Yes.

WPATH Standards of Care 8 makes recommendations for adolescents. There's a recommendation of it being a mental health professional with substantial knowledge and experience in the field.

For adults, it's a health professional, but also a knowledgeable health professional.

Q. Is there an understanding of what causes someone to have a particular gender identity or for experiencing gender incongruence?
A. So, we know that there are biological bases for gender identity, but we also know it's more complicated than that. And we don't know specifically why a given individual might have a transgender identity.
Q. Are there any studies exploring these bases?
A. Yeah. So there's a whole literature of biological differences, from increased concordance in identical twins, to brain structure, to hormonal differences in utero.

And so there are -- there is substantial data that -- it doesn't account for all of someone's gender identity, but these are contributory factors.
Q. And some of the State's experts take issue with the legitimacy of the diagnosis of gender dysphoria, asserting that it's a self-diagnosis because it's based on what the patient reports instead of a biological or laboratory test.

Could you tell us your response to that?
A. Sure.

Well, you know, having -- before even being a psychiatrist, having been a medical student and then doing a, you know, general internship, the history you take from a patient and your observation of the patient are among the most valuable things in making a diagnosis. It's not just, you do a lab test and make a

diagnosis.

And then specifically for psychiatry, we make all of our diagnoses by talking with patients and by observing them.

Q. Dr. Karasic, the State and some of its experts have also suggested that gender dysphoria might be caused by something called endocrine disrupting chemicals.

Are you familiar with that term?

A. So I think that's referring to environmental chemicals and the question of can they affect gender identity, and there really isn't, you know, evidence to support that.

Q. Okay. So, I guess, the next set of questions.

Are there any best practice guidelines recognized within medical/mental health fields to treat patients with gender dysphoria?

A. Yes. Those include the WPATH Standards of Care Version 8, the Endocrine Society guidelines from 2017, and then there are recommendations that various professional societies have made.

Q. So let's -- can you talk a little bit about what WPATH is?

A. Sure. The World Professional Association for Transgender Health is an organization of, I believe, approximately 3,000 health professionals, almost all of whom are clinicians, who are working in transgender health, but also including health academics and a few health legal experts.

Q. And what is WPATH Standards of Care 8? Can you describe that a bit?

A. Sure. WPATH has put out periodically standards of care, which are practice guidelines, since -- 1979 was Standards of Care Version 1. Standards of Care 7 was released in 2011, published in 2012, and then Standards of Care 8 came out just in September of 2022.

Q. And are you at all familiar with the process used to develop the Standards of Care, including Standards of Care 8?

A. Yes, I was one of the authors of Standards of Care 7 and one of the authors of Standards of Care 8, including being chapter lead for the mental health chapter of Standards of Care 8.

Q. How many chapters are in the Standards of Care 8?

A. I believe it's 18.

Q. Who is involved in developing the recommendations to include in the Standards of Care?

A. So the -- for Standards of Care 8, the WPATH board of directors appointed an editor and two coeditors, and they were two American clinicians and academicians and one from the United Kingdom.

And those three editors then selected from applications chapter leads, and then the editors and the chapter leads worked together from applications to go through CVs and pick a team for each chapter, and those were people who had considerable expertise in transgender health.

Q. So to follow up on that, in writing the chapters of

Standards of Care for 8, what did the -- these individual who were selected to write the standards, what did they base their recommendations on?

A. So -- so speaking for the mental health chapter -- I was chapter lead -- we had leaders of the transgender health programs of Sweden, Belgium, Turkey, and several people from the United States, and they -- and recommendations were based on our review of the literature, as well as our experience in those programs. There was also -- WPATH commissioned from John Hopkins University systematic reviews of the evidence to provide a basis for the recommendations that were made.

Q. How long did this whole process take?

A. About five years.

Q. Okay. You also mentioned the Endocrine Society guidelines?

A. Yes.

Q. Are you familiar with those guidelines?

A. Yes.

Q. Why, because you're not an endocrinologist?

A. Yes. So there were -- so there was over a decade in between Standards of Care 7 and Standards of Care 8, and the Endocrine Society guidelines were kind of right in the middle timewise. So they were a useful guide in that process of time. I'm sure endocrinologists, for example, you know, might still preferentially look at that. For us certainly in mental health, we would probably look more to Standards of Care 8 that includes

an endocrine section but, you know, is the most current.
Q. In the Endocrine Society guidelines, does it cover all age ranges?
A. Yes.
Q. How are the WPATH Standards of Care and the Endocrine Society guidelines viewed within the medical and mental health communities?
A. They are quite universally accepted or commonly accepted by -- as practice guidelines for clinicians, you know, throughout the United States.
Q. And so what -- when we're referencing these major medical and mental health professional groups, what are some of those groups? Could you name them for us?
A. Sure. American Medical Association, American Academy of Pediatrics, the American Psychiatric Association, the American Psychological Association, National Association of Social Workers, and many more.
Q. Do you follow the WPATH Standards of Care in your psychiatry practice when seeing patients?
A. Yes.
Q. In your experience, are the WPATH Standards of Care and Endocrine Society guidelines recommended practices that are followed by clinicians?
A. Yes.
Q. And how do you know that?

A. So I've been involved not only practicing transgender health, but teaching transgender health since the 1990s, and so I speak at a lot of conferences. I've trained thousands of people.

Just last week I was doing a training in San Francisco that was put on by UCSF for clinicians. There was this one person I met from Florida there. I've -- I did a train -- a large training in South Florida several years ago.

And so I've also probably presented on transgender health at the American Psychiatric Association probably more than any other one individual since the 1990s.

So I meet a lot of people, and I discuss their practice and WPATH Standards of Care, and some of the principles of gender-affirming care are, you know, utilized in cross-disciplines throughout the United States and internationally.

Q. In practice guidelines like WPATH and the Endocrine Society guidelines, similar guidelines, is it ever appropriate for clinicians to deviate from those guidelines?

A. So they're practice guidelines, and so a clinician still uses their individual judgment, and that takes into account practice guidelines. But they're not laws. They are guidelines for practice.

Q. So just turning to some specifics about WPATH Standards of Care 8, are the recommendations for the treatment of gender

dysphoria the same across age ranges?
A. So -- I'm sorry. Were you talking about --
Q. So in the W -- turning specifically to WPATH 8 --
A. Yes.
Q. -- some specifics there, are the treatment recommendations for gender dysphoria the same across age ranges?
A. No.
Q. So can you describe that a little bit for us?
A. Sure. So there's no medical treatment that is recommended for people before puberty.

And then starting at Tanner Stage 2, the start of puberty, there is the possibility of a medical intervention of puberty blockers.

And at -- later in adolescence cross-sex hormones could be used, and also later in adolescence transmasculine youth can get chest surgery. Other surgeries in adolescences are very uncommon.

And then adults get -- you know, could get -- in addition to hormones can get chest surgery, genitalia surgery, facial feminization surgery.

Q. Dr. Karasic, are you familiar with the Rule 59G-1.050, subpart (7), of the Florida Administrative Code?
A. Yes.
Q. What's your understanding of that rule?
A. So that -- that rule does not allow provision of or payment

reimbursement for gender-affirming care, including hormones -- or puberty blockers, hormones, and surgery.

Q. So let's just discuss a little bit the medical interventions this rule covers, starting with pubertal suppression.

How does pubertal suppression address a young person's gender dysphoria?

A. So pubertal suppression stops the progression of puberty where it is. So if -- a young person could present at these -- a very early stage of puberty. For someone assigned female at birth, you could have -- start breast bud development, and puberty blockers would halt pubertal development where it was when the person started the medication.

Q. Does that have any impact on the individual's mental health condition?

A. Yes, particularly if the person is experiencing distress either at the physical changes that already happened or the anticipation of the progression of those changes, there can be great relief from, you know, knowing that those have been frozen in place.

Q. How about hormone therapy? How does that relate to addressing the diagnosis of gender dysphoria?

A. So hormone therapy helps masculinize or feminize the body to be more congruent with the person's gender identity, and, again, that can certainly provide mental health benefits with a

lessening of the gender dysphoria -- the distress of gender dysphoria and sometimes other co-occurring mental health symptoms.

Q. It would be the same question for surgery, Dr. Karasic.

A. Uh-huh. So surgery also alters the body to be more congruent with the person's gender identity and also can both provide relief from gender dysphoria and also sometimes other mental health symptoms surrounding the distress of gender dysphoria.

Q. In your experience, what are the effects of untreated gender dysphoria?

A. So I've taken care of patients for a long time and through many different kind of eras and have had also had patients who for various family or social or occupational or medical reasons have not been able to take hormones for extended periods of time, and for some people that can cause great distress.

And, by definition, a diagnosis of gender dysphoria has more than six months of clinically significant distress or social and occupational impairment. So that can impair people's performance in school, work, relationships.

Q. Can you give some -- can you describe a little bit more for us how that distress manifests in an individual, what some of the behavior looks like?

A. So that could be depression, anxiety, suicidal ideation, self-harm, withdrawing from loved ones, or from -- or not

performing well in school or work might be some examples.
Q. Are there any minimum age requirements for the treatments we just discussed?
A. Yeah. So as I said, you wouldn't give a puberty blocker until they start puberty. That's not a set age. The -- the adolescent chapter in Standards of Care 8 sets an 18 for phalloplasty. For other interventions it says that they should be age appropriate, and the -- the young person should have the cognitive development to assent to the interventions that parents consent to.
Q. I think you said this a little bit before, but does that mean minors would always receive surgeries to treat their gender dysphoria?
A. I'm sorry. What's the question?
Q. Yeah. Does that mean minors would receive surgeries to treat their gender dysphoria?
A. So minors can receive surgery to treat gender dysphoria. The overwhelming number of those surgeries, in my experience, are transmasculine youth who later in adolescence get chest surgery because of strong persistent dysphoria about their chest. Other surgeries can be done but are quite uncommon.
Q. All right. So we've been talking about the WPATH Standards of Care 8.
Did the Endocrine Society guidelines also make recommendations regarding the use of puberty blockers and

hormone therapy?
A. Yes, the Endocrine Society also says that puberty blockers shouldn't be used until the start of puberty, so no medical intervention until the start of puberty. They refer to the Dutch research in saying 16 for hormones, but also say they could be given at 13 or 14. This was an area of kind of increasing knowledge at that time in 2017 when the guidelines came out.
Q. I see. Do the Endocrine Society guidelines make any recommendations about surgery or surgical treatment?
A. Yes.
Q. And what is that recommendation?
A. They recommend -- they say chest surgery, particularly for transmasculine, youth can be done in adolescents, and genital surgery should be done at age 18 or later.
Q. So these guidelines, the Endocrine Society guidelines and WPATH, are they fairly consistent with one another?
A. Overall they're quite consistent. Again, there's -- they came out at different points in time, and so there are, you know, differences between Standards of Care 7, Endocrine Society guidelines, and Standards of Care 8.
Q. So under the WPATH Standards of Care and these guidelines, how can mental health professionals help patients who come to them because they have distress about their gender?
A. So -- actually, could you repeat the question?

Q. Yeah. So under the guidelines --
A. Uh-huh.
Q. -- we've been discussing, WPATH and Endocrine Society, how can mental health professionals help patients who come to them, you know, expressing distress about their gender identity?
A. Sure. So before puberty it's -- there's only psychotherapy, family support. There's no medications until then. Starting with the start of puberty, there could be an assessment for puberty blockers and later an assessment for hormones.
Q. Dr. Karasic, are you familiar with the term "gender-affirming therapy"?
A. Yes.
Q. What does that mean in your field?
A. So the gender-affirming label has now been put on both gender-affirming medical care and gender-affirming therapy. And so gender-affirming medical care basically refers to the provision of puberty blockers, hormones, surgery.

Gender-affirming therapy refers to a therapy that provides space for the patient to explore and understand their gender without any preconceptions of the therapist being placed in terms of where that should go.

Q. Is it the role of mental health professionals to actively encourage patients to pursue a transgender identity?
A. No.

Q. Would that active encouragement be something that's consistent with WPATH or the Endocrine Society guidelines?
A. No. As a matter of fact, WPATH's Standards of Care specifically says that the therapist should not impose their idea of where the patient should go in terms of their expression of their gender identity, that they should provide a supportive environment for the patient to kind of find their path.
Q. Under the WPATH Standards of Care and Endocrine Society guidelines, are medical interventions that -- gender-affirming care, is that appropriate for all patients who have gender dysphoria?
A. No.
Q. Do the WPATH Standards of Care have any recommendations regarding assessments of patients before the provision of gender-affirming medical interventions?
A. Yes. So there are a separate set of recommendations for adolescents and a set of recommendations for adults.
And so do you want me to --
Q. That would be great. Thank you.
A. -- elaborate?
So for adolescents, there's a recommendation of a comprehensive biopsychosocial evaluation, preferably by a mental health professional. And they lay out some components of that evaluation that include gender identity development, social development, an evaluation for the presence of co-occurring

conditions, and the cognitive ability to assent to care with the parents' consent.

Q. Can you talk about those components a little bit more, starting with gender identity development?

A. Yes.

So -- so, again, these are adolescents, and they may have strong feelings or behavior related to their transgender identity. But there's a process of -- that could be putting words to it, that gaining an understanding as a child develops cognitively, and so kind of understanding that development to the point where they present to the clinician.

Q. And I think another component you mentioned was the social development?

A. Right. And so people's relationship and expression of their gender identity to family, peers, school, et cetera.

Q. And the assessment of possible co-occurring conditions, why do you do that? Why is that a component?

A. So there can be co-occurring conditions that can affect the assessment. For example, if someone has Autism Spectrum Disorder, they might have communication difficulties, and so one might need to do extra work on communication. One also might assess for depression, anxiety, suicidality that might be addressed either beforehand or concurrently with gender-affirming medical care. And that decision needs to be made by the clinician. So it's important to understand

co-occurring conditions and how they might affect the process of transition.
Q. And then I think the last component you mentioned related to cognitive functioning for the ability to assent or consent to care. Why is that important?
A. Well, even the parents' consent for care, but we'd certainly want to have assessment of the child's understanding of the risks and benefits as well and have that be a component along with -- for them to be able to assent along with the parents' consent.
Q. Are these same factors taken into consideration in the assessment of adults?
A. For the assessment of adults there is a separate set of criteria that includes the capacity to consent, that co-occurring mental health conditions that could affect the care have been assessed and the risks and benefits of providing treatment versus waiting to provide treatment are weighed in that assessment before treatment.
Q. So does Standards of Care 8 -- does it recognize that any common -- or does it cover, I should say, any common psychiatrist comorbidities in gender dysphoric patients?
A. I'm sorry?
Q. Yeah. No. Does the -- do the Standards of Care 8 recognize whether some psychiatric comorbidities are common in gender dysphoric patients?

A. Oh, yes.
Q. And what are those common comorbidities?
A. So there is, as I mentioned, Autism Spectrum Disorder before. And there is a bigger overlap than one would expect just from the general population of people who have Autism Spectrum Disorder and gender dysphoria. It's not known why that is. And, in addition, there are many people with gender dysphoria who have anxiety, depression, suicidality, self-harm.

And so those are important things to ask and take into consideration if they are present.

Q. So I heard you mention Autism Spectrum Disorder. Set that aside for just a second.

Just talking about the other common comorbidities, is there any understanding of why these co-occurring mental health issues are common among patients with gender dysphoria?
A. Yes. I think you can put things in two categories.

One is minority stress, the difficulty of living in society or even with family where a person might be subject to discrimination or even just kind of the negative descriptions that are associated with being transgender that are so deeply engrained in society.

And then there's also the distress of gender dysphoria itself. And so people -- that distress can be very strong, and people can have depression, anxiety, self-harm, suicidality related to that distress of having gender dysphoria.

Q. So turning back to Autism Spectrum Disorder, does the WPATH Standards of Care -- do they say anything about that specifically, the co-occurring disorder?
A. Yes. They say that clinicians, and particularly in the adolescent chapter, should be familiar with Autism Spectrum Disorder and working with young people who have Autism Spectrum Disorder and to take that into account in their evaluation.
A big part of the symptomology of Autism Spectrum Disorder is problems with communication or social communication, and so that's something that has to be taken into account in terms of doing the evaluation and ongoing work with the patient.
Q. Is it possible for an individual to be both transgender and neurodiverse?
A. Yes.
Q. Does autism spectrum disorder affect an individual's ability to understand their gender identity?
A. No.
Q. Does it impact an individual's -- an individual diagnosed with autism, does it impact their ability to assent to care?
A. No. I mean, it impacts it in a sense in that -- well, it's called Autism Spectrum Disorder because there is this extremely wide range of symptoms. And there is kind of a small number of people who are really so kind of profoundly impaired maybe in terms of communication that it might affect the process in terms of, you know, understanding what they want, and communicating is

a benefit, et cetera. And so there may be extra kind of work involved in terms of figuring all those things out in people who are more impaired.

There are also a large number of very highly functioning people with Autism Spectrum Disorder where there really isn't an impairment in terms of being able to transition.

Q. Does anxiety affect an individual's understanding of their gender identity?

A. No.

Q. How about depression?

A. No.

Q. Difficult circumstances in their home life?

A. No.

Q. Self-harm?

A. No.

Q. How do you respond to the assertion that gender dysphoria is a type of body dysmorphic disorder and, thus, should be treated with psychotherapy?

A. So body dysmorphic disorder is a separate DSM diagnosis, something more akin to OCD, where somebody has obsessive thoughts about their appearance in particular. And it's really an entirely different thing than gender dysphoria.

Q. The treatment of the other conditions that we've been discussing, would that resolve a person's gender dysphoria?

A. No.

Q. How does a medical -- how does medical treatment, gender-affirming medical interventions for a person's gender dysphoria, impact a person's co-occurring mental health disorder?

A. So doing anything, including making change, can be very difficult if you're depressed or anxious. And, in addition, there are many transgender people with suicidal ideation or suicide risk or who do self-harm. And so whether you're cisgender or transgender, whatever your gender identity is, it's important to address those things. When somebody maybe has some additional stressors of being transgender or of transition, it might be particularly important to have them be feeling as good as they can be while they go through that process.

Q. And that impact of the medical treatment on a person with gender dysphoria, do you have any examples from the patients that you've treated about how that's assisted with their mental health condition?

A. You said the impact of treatment of gender dysphoria on their mental health?

Q. The impact of any of the gender-affirming medical interventions.

A. Yes.

So I've been doing this work for a long time, and that included when at UCFS Alliance Health Project, where I've been for a long time, where our patients with Medicaid were finally,

you know, able to get their surgeries paid for, many other circumstances where people haven't been able to get care and then were able to get care, and as well as just kind of along the way of patients who at some point get gender-affirming care, and it's always remarkable to me the profound impact it makes on so many patients in terms of their mental health.

Q. So that's your clinical experience?

A. Yes.

Q. Does that accord with the scientific literature?

A. Yes. There are -- have been many papers over the decades showing benefit from gender-affirming medical care. Some of them are listed in the Cornell, what we know document that -- that I listed in my declaration from the early 1990s to 2017 when that came out.

But there are also many published peer-reviewed systematic reviews and reports and clinical series and surveys that people take that support the benefit that people have gotten from gender-affirming medical care.

Q. And just to touch on terminology very briefly, what is a systematic review generally?

A. A systematic review is when one looks at the result of multiple studies in a systematic way to try to answer a question using not just one study, but a larger body of literature.

Q. Thank you.

THE COURT: Before we move on, let me just try to

clear up one thing in the record.

You said two or three questions ago that when somebody hadn't gotten care and then did, it was remarkable to you what a profound impact it had on their mental health.

THE WITNESS: Yes.

THE COURT: I don't think you said whether it was favorable or unfavorable.

THE WITNESS: Oh, favorable, yeah.

Yes. Thank you.

I have patients who had tremendous improvement. And, you know, I mention that when in 2013, in San Francisco when people were finally able, sometimes who had waited -- people with Medicaid who had waited for years, decades, and were finally able to have the surgery paid for that they needed and just watching the positive impact that that made in people's lives, as well as, you know, other -- in other ways, but that was one place where it was particularly notable to me.

BY MS. DeBRIERE:

Q. What should be done in the event a patient has other mental health conditions?

A. So if someone has other mental health conditions, we should try to treat them as standards of care. Standards of Care 8 for adolescents says they should be addressed. For adults it says they should be assessed with risks and benefits weighed.

And so -- and I was -- in the mental health chapter that I

was chapter lead of, we say that it is important to evaluate these co-occurring conditions, but that doesn't necessarily mean a halt to providing care. It just gives us information that we need as clinicians to know best how to help people. And often that could be treating the co-occurring condition and providing gender-affirming care together. And it's a matter of kind of weighing the risks and benefits of one versus another.

Q. AHCA and its consultants have suggested that psychotherapy alone is sufficient to address gender dysphoria.

What's your response to that?

A. So in those patients who need gender-affirming medical and surgical care, people who have a lot of distress about their body that isn't going away, psychotherapy doesn't help that.

Q. What does help that?

A. Gender-affirming medical and surgical care.

Q. Do clinicians provide care at the demand of patients or their families?

A. I'm sorry, what?

Q. Do clinicians typically provide care at the demand of their patients or families of the patients?

A. So for any kind of care a clinician makes an evaluation based on their clinical judgment; they make a diagnosis; they come up with a treatment plan based on risks and benefits and make a recommendation to patients. But you can't cut the clinician out of that. They're really, you know, central to,

you know, diagnosing and making the decision to provide care.
Q. What does the term "informed consent" mean?
A. So informed consent is an agreement that a patient makes or a patient's parents and the patient might make with a provider, weighing the risks, benefits and alternatives of a procedure.
Q. Is there anything in the WPATH Standards of Care that address informed consent prior to initiating the medical interventions for gender dysphoria?
A. Yes. People have to have capacity for informed consent and should be advised of the risk/benefits alternatives to treatment.
Q. Is that true for adults and minors?
A. Yes.
Q. What's the process for minors?
A. So for -- for informed consent for minors, it's a process that very closely involves the parents or guardian, because they're the ones who are actually providing the informed consent. The patient also is assenting, and so they're, of course, involved, and they are central to -- you know, to what care is provided. And then in the adolescent chapter, there is an assessment by the clinician that the person -- the young person has the cognitive maturity for that procedure, and it's appropriate for them.
Q. What do the guidelines say about informing patients and their families about possible risks to fertility related to the

medical interventions?
A. So both in the Standards of Care, Version 8, adolescent chapter and adult chapter, one of the requirements is that there be discussion of fertility and fertility preservation.
Q. And are there any recommendations about informing patients and/or their families about what to do if those patients may come to feel over time that care is not a good fit for them?
A. Sure. So with the exception of the histrelin implant that can -- you know, that would have to be removed, that people can -- would have them in for months, each of these treatments requires either daily pills or injections that are over relatively short periods of time.

And, you know, anytime if a patient or, in the -- in the case of adolescents, the parents decide not to -- you know, to continue with treatment, then it -- you know, treatment can be terminated.

So it's a dynamic process, and there is mention in Standards of Care, the adolescent chapter, about the clinician remaining involved not just at the start of treatment, but throughout the process until -- in the case of adolescents, until they reach 18.
Q. And I know you just mentioned an implant, too. Is that something that could be removed?
A. Yes, and it can be removed.
Q. What's your reaction to the assertion that doctors who

provide gender-affirming medical care have an informed consent process that's perfunctory?

A. It's not true. I don't think there is anywhere in medicine that -- where more attention is paid to the assessment and providing -- making sure that people have adequate information and that lay out a process in that -- in that same way where you're having, you know, someone do the assessment, you know, typically aside from the surgeon that's doing their own, you know, provision of informed consent. I think it's a more stringent process than, really, elsewhere in medicine and surgery.

Q. In your practice as a psychiatrist, other than treating individuals with gender dysphoria, are there other areas where you require informed consent for treatment?

A. Yes, for -- every treatment requires informed consent.

Q. Okay. I'm going to show you tables contained in WPATH Standards of Care 8.

MS. DeBRIERE: Which, Your Honor, is marked as Defendants' Exhibit 16, which is on the stipulated exhibits list.

BY MS. DeBRIERE:

Q. And I'm just going to ask you to read these provisions, Doctor, starting with the chapter on adolescents.

What chapter is that?

A. VI.

THE COURT: Dr. Karasic, if you're going to read these, one of the things I try to tell people when you start reading, read it slower than you can read it, because we all need to understand it, and the court reporter needs to take it down.

THE WITNESS: Okay. I will. Thank you.

BY MS. DeBRIERE:

Q. Dr. Karasic, I can zoom in on that if needed.

A. I think I'm okay.

Q. Okay.

A. So these are the Statement of Recommendations as part of Chapter VI of the adolescent chapter of Standards of Care, Version 8. It kind of summarizes the recommendations that are made.

Do you want me to read all of it?

Q. Yes, please. And just before you start, I do want to note it's on page S48 and it's in Bates stamp Dekker FL_ WPATH_34.

THE COURT: You really want him to read this whole single page?

MS. DeBRIERE: Your Honor, my understanding is that if he reads it into the record, then it can be used, not just -- it can be used as evidence.

THE COURT: It can be used as evidence already. It's already been admitted into the record by situation at the beginning, so it's part of the record.

MS. DeBRIERE: So, Your Honor, my cocounsel is advising me that part of that stipulation included an objection to this particular exhibit.

THE COURT: What's the objection?

MS. DeBRIERE: Objection preservation.

MR. JAZIL: Your Honor, we had the motion in limine that we filed and the Court denied related to the reliance on WPATH and Endocrine Society, but this is our exhibit. We said --

THE COURT: The objection is -- even though they've got a witness who says this is a standard followed by practitioners all over the country, you don't think it's true, so you object to it?

MR. JAZIL: No, Your Honor. What I'm saying is we objected. We lost the motion, so this is in evidence --

THE COURT: Right.

MR. JAZIL: -- by stipulation of the parties.

THE COURT: And just so I'll understand the objection -- and, frankly, I can't fathom what the objection would be. So explain to me how it is that when we have a well-qualified expert who says this is the standard followed by practitioners around the country -- what is objectionable about that? The basis of the objection is? Explain it to me.

MR. JAZIL: Your Honor, we don't have an objection to the use of this document.

THE COURT: Well, when I ask the substantive basis of an objection and you can't even answer the question, it tells me -- I mean, I wonder why the objection was made. But I don't know if we'll make much progress with that, but just for future reference, when you make an objection and you can't even explain it, maybe you shouldn't have made the objection.

I understand you disagree with these standards, and I don't fault you that position at all. That's part of the case. But the assertion that they can't even be admitted into evidence strikes me as just a nonstarter. We don't need to go any further with that.

This is in evidence. I've overruled any objection, whatever the basis of it is, and so there is no need to read it into the record. The document is there.

MS. DeBRIERE: Thank you, Your Honor. I'll continue with questioning.

BY MS. DeBRIERE:

Q. Dr. Karasic, I'd like to turn to your clinical experience a bit. You've spoken about a patient you treated who received gender-affirming medical interventions that have been banned by the defendants' rule.

Does that treatment -- I know you mentioned surgeries. Does it also include puberty-delaying medications?

A. Yes.

Q. Does it include hormone therapy?

A. Yes.
Q. Is that for adolescents and adults?
A. Yes.
Q. Okay. Could you just talk a little bit more about, for those patient who have received this gender-affirming medical care, how it's impacted them?
A. Sure. Do you want me to give specific examples?
Q. Whatever you want to talk about.
A. Okay. So more generally, I see an impact that -- in those people who need -- who have persistent and marked gender dysphoria, to use the wording in Standards of Care 8, who have a *DSM-5* gender dysphoria diagnosis more than six months' duration, social and occupational impairment, clinically significant distress, who have marked distress about their bodies in particular, that gender-affirming care that helps make their body more congruent or, in the case of puberty blockers, at least kind of freezes the process, it's tremendously beneficial to my patients. And often that kind of order of benefit is much greater than, let's say, the antidepressant that I'm giving for someone who has major depressive disorder or panic disorder as well as gender dysphoria.
Q. Why is it as a psychiatrist most of your patients have co-occurring mental health conditions?
A. Because that's what we do as psychiatrists. If someone is transgender and they don't have a co-occurring mental health

condition, they're less likely to see me and would be more likely to see a mental health professional who isn't able to prescribe, for example. So I tend to see people -- my practice tends to be people who have gender dysphoria and also have major depressive disorder, or panic disorder, or other psychiatric illness.

Q. How do you know the benefits experienced by your patients is not just the result of your therapy, prescribed medications that you're providing, instead of the gender-affirming medical interventions?

A. So I've been doing this work for a really long time, and I have patients who do get psychotherapy and gender-affirming medical care simultaneously and get better. And one could argue, Why are they better?

But I also have many patients who have not been able to access care and have had a lot of mental health -- who needed the care who have had a lot of mental health interventions, medications, psychotherapy without improving, and then did improve if they were able to access gender-affirming care.

So there's often a temporal difference between when people might be treated or start treatment for the co-occurring condition and when they get gender-affirming medical or surgical care.

So to give you an example, I just the -- the last couple weeks ago I had a patient who was diagnosed in adolescence with

bipolar disorder and eventually was put on an effective drug for bipolar disorder. I saw this patient several years -- several years after that. They had been actually on that medication for a decade. And they said that that medicine really stabilized their mood, but it wasn't until a year and a half ago when he started on testosterone that his suicidal ideation finally went away.

Q. Have you been able to see the impact of gender-affirming medical interventions in patients over a course of time?

A. Yes. So I've had dozens of patients that I've seen for ten years or longer. I was at UCFS for 30 years. I still see patients in -- after I -- I semiretired from UCFS in 2020 and have been doing private practice with a chunk of my time since then. So, anyway, I've been around doing this work for a long time, and so I -- you know, that includes seeing some patients over many years and seeing continuing benefits of -- you know, of treatment.

Q. And when you say "treatment," what are you referencing?

A. Oh, of gender-affirming medical or surgical care.

Q. If a patient continues to experience a co-occurring mental health condition, does that mean gender-affirming care was not effective at treating their -- and I should say gender-affirming medical care was not effective at treating their gender dysphoria?

A. No, people can get relief from gender dysphoria but still

have the co-occurring conditions. People who are not transgender have chronic depression and anxiety, and people -- some transgender people have, for example, PTSD that they experience as a result of trauma related to being transgender, but even when they have the bodily changes that reduce gender dysphoria, they still have that experience that has, you know, caused the PTSD symptoms. So it's not unusual for other symptoms to persist.

Q. And you testified a bit earlier about speaking with clinicians around the country.

So are you familiar with the clinical experience of others in the field?

A. Yes. So, you know, I'm teaching and training a large number, in the thousands -- at least a couple thousand folks with the WPATH training initiative for -- for clinicians working with trans people, teaching at UCFS, giving visiting lectures.

So I interface with a lot of other providers at the APA, and I am struck by, you know, the community of healthcare providers taking care of transgender people's, you know, firm belief that gender-affirming medical care helps their patients, often tremendously.

Q. Do you have experience reviewing treatment recommended -- excuse me. Let me start again.

Do you have experience reviewing treatment recommendations for individuals that are not your patients to determine whether

those treatment recommendations are medically necessary?
A. Yes. So I'm a consultant for Maximus, and Maximus in a number of states and for the federal government makes determinations of medical necessity. So when, particularly, if, in the state of California, there's a question of medical necessity and it's appealed to the State Department of Managed Health Care or the State Department of Insurance, they contact Maximus. And specifically for transgender people, I'll often be the person doing the independent medical review of whether the care was medically necessary or not.
Q. What kind of care are you reviewing?
A. So these are medical -- well, typically surgical procedures. Occasionally they've been for puberty blockers, for example, but the great majority of them are transgender people who are requesting surgery from their insurance and then receiving a denial.
Q. And you mentioned the process in California, how it gets to Maximus, but are your cases limited to only cases in California -- people in California?
A. So predominantly I see California cases. Sometimes Maximus has asked me to consult with them in making determinations in other states.
Q. And how many cases have you reviewed?
A. When -- the old system that Maximus used to have had, like, a running count number, and so as of a couple of years ago, I

had seen 110, and then there are those that I've seen in the last couple of years.

Q. Can you estimate for us what that number might be?

A. The number has -- it's certainly over 110. It's more of a trickle now, because in the early days, there were just a lot of insurance policies that weren't as refined, I guess. In the earlier days -- I'm talking about since California in 2013 started requiring insurance to pay for gender-affirming care. So it's been a process, and now I see fewer of them, but they are more difficult cases.

Q. Okay. Okay.

A. But it's certainly -- I don't know if that means there's now 150. I don't know. It's well over the -- it was 110 two years ago. I don't have a count anymore, but I still do them. You know, I still get the cases. I've had a few in recent weeks.

Q. Does Maximus provide you with any instructions in terms of reviewing the cases for medical necessity?

A. Yes. So they give us a State definition of medical necessity, and they say that our answers have to -- that we have to provide literature citations in our justification for our decision. And one of those literature citations has to be WPATH Standards of Care.

And I know one time I put in these really good articles because it was kind of a specific issue, and I didn't list a

Standards of Care citation, and I was contacted by Maximus saying, you know, you have to -- that they look -- their kind of overruling kind of source of what's medically necessary in transgender care is Standards of Care. And I had to include a Standards of Care citation among the others.

Q. So given your decades of experience treating people with gender dysphoria, in your expert opinion, how will AHCA's elimination of Medicaid coverage for gender-affirming care impact the beneficiaries being denied access to that care?

A. I think it's going to do tremendous harm to a lot of people.

Q. What about patients who haven't yet started care but for whom it's been recommended? Do you have any concerns about them?

A. Yes. I'm concerned that they are going to suffer needlessly.

Q. Can you talk about experience with patients who were forced to detransition and other situations you mentioned, like, for example, unsupportive families?

A. Yes. So I have -- I had a patient recently who started on puberty blockers at age 11 and then later was started on gender-affirming hormones. This was someone assigned male at birth, also had Autism Spectrum Disorder. The parents had read some of the things that are out there about concern for people with autism, and that transgender identity could just desist,

and they stopped treatment. They told the therapist that they are going to cross their fingers that their child will just be gay.

And I started -- and this patient from that time on was on psychiatric medications, not provided by me, from another psychiatrist. I wasn't involved in the care at that time when she stopped. And was on antidepressants, which didn't work very well, and really struggled.

And I started seeing the patient at age 18. They were still having tremendous struggles with depression and anxiety. At age 18 they started gender-affirming care. Not that long after, they socially transitioned. They had just started off in university, and they are doing tremendously well in school. She's doing tremendously well in school. She's not depressed anymore. I am available to see her if she needs to be seen, but I've stopped seeing her because her depression has resolved and she doesn't feel a need to see me anymore because she's feeling so well.

Q. Okay. Let's touch base quickly --

A. I would just say that she still has regret and anger even, and she loves her parents, but that they made this decision to stop her care. Because she is now -- her parents are paying for facial feminization surgery. But she's having to go through a lot in terms of really wanting to not always be identified as trans, basically, post-transition. And those are things, had

the family stayed the course, she wouldn't have had to go through. And so she -- she still has a lot of anger at what happened, but she is happy that now she's able to -- you know, to live her life as, you know -- as, you know, she desires.

Q. I'm going to switch gears about research, which is something that you've both done --

THE COURT: Why -- before we switch the gears --

MS. DeBRIERE: Yes.

THE COURT: -- let's take a morning break. Let's take 15 minutes. Let's start back at five after 11:00 by that clock.

(Recess taken at 10:51 AM.)

(Resumed at 11:05 AM.)

THE COURT: Dr. Karasic, you are still under oath.

Ms. DeBriere, you may proceed.

MS. DeBRIERE: Thank you, Your Honor.

BY MS. DeBRIERE:

Q. Dr. Karasic, just before the break, we were going to talk -- I was going to touch a bit on research in your experience reviewing the scientific literature related to gender-affirming medical care.

In assessing that literature, how does it compare to your clinical experience?

A. Sure.

So there are many publications over the years, publications over even the last 60 years that have shown benefits from

gender-affirming care. And that is -- you know, goes along with my clinical experience that people have benefited.

Q. Are there limitations in that research that you've just described?

A. Yes.

So it really isn't possible or ethical to do a randomized control trial of whether or not to give a child a puberty blocker who is having gender dysphoria, or start giving someone hormones or not giving hormones, or randomizing one person to vaginoplasty and another person to a sham surgery. None of those things are things that, you know, are ever going to be done.

Already by the time it was established that puberty blockers and hormones were beneficial to transgender people, it was known that puberty blockers stopped puberty and that feminizing and masculinizing hormones have those physical effects on whoever they're given to.

Q. I think you inferred it, but tell me why it's not ethical to do a randomized controlled trial regarding these particular medical interventions.

A. So there is both ethical and practical reasons, but when we know that -- we already know that if someone is at the start of puberty and you give a puberty blocker, that it will stop their puberty. It was established with precocious puberty. The -- you know, it's very clear from the Dutch data, which is the

early data on puberty blockers for gender dysphoria and onward, that puberty blockers do stop puberty; that if you are assigned male at birth and you take estrogen, that you'll feminize; if you are assigned female at birth and you take testosterone, then you will masculinize. There is no scientific question there.

The question is really, you know, that continues to be explored is what are the benefits outside of that to people's quality of life for mental health?

But you couldn't even practically do a study if somebody -- let's say somebody is assigned female at birth; they were -- they had gender dysphoria; they were seeking testosterone to masculinize. You couldn't even do anything in a blinded way because very shortly the person getting -- a person would know whether they got testosterone or didn't; but also that if they're somebody already seeking masculinization, we know that that will be provided.

The kind of controversy in the literature has been -- or not among the providers of gender-affirming care and not among the major medical or mental health organizations, but kind of the challenge has been when -- when opponents of gender-affirming care point out, rightly, that there are no randomized controlled trials, that when you do a systematic review according to the grade criteria that's used to score systematic reviews, that the gender-affirming -- so that grade criteria ranks the strength of the certainty of the

recommendation for that intervention, and there's not going to be a high certainty in the systematic review when you don't have -- when you don't have randomized controlled trials.

But also -- so the grade criteria have been -- are being used in kind of a peculiar way when they're being used to stop the provision of gender-affirming care. If you look at the broader literature -- for example, there was a review of all systematic reviews published in 2016 by Fleming in the *Journal of Clinical Epidemiology*, where, if you look -- they took from Cochrane Database, which is a collective database of all of the systematic reviews, and they did it for a year and a half period. So they looked at systematic reviews from medical interventions from all sorts.

And they found that there was a high degree of certainty to support the provision of care only 13 and a half percent of the time. And if you looked at the provision of care where you -- if you looked at when there was a high certainty, if there was a high certainty and a significant outcome, and there were a favorable response as kind of assessed by a panel, that only 4 percent of all of the systematic reviews showed a high certainty of making that -- making a recommendation for that outcome.

Q. This is all medical intervention, it's not just --

A. This was all -- every published systematic review in an 18-month period.

And so only 4 percent really met that highest standard. And -- but in this case, you know, in terms -- people are using that grade criteria and systematic reviews to try to stop care.

The same year there was a publication in the same journal, *Journal at Clinical Epidemiology*, by Movsisyan, et al. -- it was a team at Oxford University in England -- where they divided the reviews into a simple intervention versus a complex intervention

And so to give you an example in gender-affirming care, a simple intervention would be if you took someone assigned female at birth right at the start of puberty, and you gave that person a puberty blocker, and you measured breast bud development to see whether that would -- whether the breasts were continuing to increase or not. That would be simple: You'd give a drug; there is something you can measure, you know, is it growing or not.

But these -- these systematic reviews and with the research, we are not arguing about that. Everyone knows and, you know, it was being put forward precocious puberty research with Dutch data, et cetera, in that case that puberty blockers stop puberty. But what we are looking at is that puberty is stopped and that -- and perhaps then people get gender-affirming hormones and progress in terms of their transition.

But then you have an outcome where people have -- are basically happier, that they're -- the quality of life improves, their mental health improves. And that is from -- this

Movsisyan is really a complex intervention because of the complex result.

There's also a complex intervention in terms of that there are multiple factors of social transition and puberty blockers and hormones. But what you have very clearly is what they would define and they kind of charted out as a complex intervention.

So when you look at all of the systematic reviews of any medical intervention in the time span that they looked in the Cochrane Database, there were no interventions that had a high certainty of recommendation. And the most common systematic review result for a complex intervention was a very low certainty.

And they suggest that the grade criteria might -- kind of might not be the best way of measuring, since all of these complex interventions don't meet a high standard.

So grade -- I mean, WPATH Standards of Care 8, we use -- you know, we did a systematic review with John Hopkins. They used grade; it's not an objection to grade, it's just understanding that there are limitations to grade. And when you have the kind of interventions that we do, grade wasn't meant to deny people care, it was meant as a tool to try to kind of understand the result from the systematic review.

And so -- but when it's used that way, when it's said that the systematic reviews are not showing a high certainty of result, while that's the case for every complex intervention and

there's -- no matter how much research ever gets done, there is never going to be a high -- even if -- probably if someday somebody did, you know, a randomized controlled trial, which really can't happen. But there is never going to be a high certainty from a systematic review.

And so, you know, grade should be used for what, you know, it's used for, but it's not a reason to say, you know, that a particular kind of care shouldn't be supported. Otherwise, we in health care should stop doing complex interventions for any health care issue and only do interventions that have a simple intervention and a simple measured response.

Q. And do those Standards of Care 8 -- do they discuss any of the limitations in research?

A. Yes.

And so, as I said, Standards of Care 8 did commission systematic reviews of the literature. While there is another place where they talk about limitations in the literature that in giving informed consent to the parents of young people, you know, expressing that there are limitations to the research -- you know, because there are limitations to the research, and I think it's -- you know, it's important to give people, you know, kind of a best sense of what that is.

But there's also a ton of research, and it's been going on for decades and decades and decades. And people in all kinds of political climates and social climates have been providing this

care.

So I trained at UCLA in psychiatry, and my first mentor in transgender care was Bob Stoller who coined the term "gender identity" and started in, like, 1963 the gender identity research clinic at UCLA. And he had a patient come to him in 1958, and even though he's a psychoanalyst, he came to the conclusion that for people who needed gender-affirming medical care, psychoanalysis was not going to cut it, that they needed medical and surgical interventions.

And they at UCLA did their first vaginoplasty on a woman in 1959. And then through the 1960s and '70s, you had gender clinics all around the U.S. You had a backlash towards providing gender-affirming medical and surgical care, and those programs shut down. And in 1981, the federal government stopped funding care under Medicare.

And there was a long quiescent period, essentially, where the academic centers for gender care shut down in the U.S. You couldn't get funding for research.

I tried -- in my -- I was in, you know, kind of that age period where I did research having to do with treating depression and HIV. But, you know, I met with people in the San Francisco Department of Public Health and tried to do research on the mental health effects of gender-affirming medical care, and, you know, was basically told, It's impossible. The federal government is not funding this.

And, you know, we finally had, you know, a sea change in the 2010s in terms of funding. But, you know, we've kind of -- anyway, we've been through all this before. But even then you have a study I cited from University of Virginia in my declaration where they tried to find the people at University of Virginia's gender program from the 1970s. And they found -- I don't know. It was -- maybe it was 15 of them 40 years later and found that they had continued to benefit from gender-affirming medical care over those four decades that there was no one to follow up with them because the program had been shut down.

So, you know, we know that these people are getting better, and there's a lot of evidence for that in the literature.

There are weaknesses to that literature as well. You know, it's certainly something that we acknowledge and take into account. But, you know, that's all known by the various committees at the American Medical Association, the American Psychiatric Association. I was on the Work Group on Gender Dysphoria, you know, some experts from the American Psychiatric Association discussing the research and weighing things, et cetera. And, you know -- but when you put all the pieces together, it's -- it's very clear that gender-affirming medical care is an effective powerful intervention. And that's why all these professional organizations that -- you know, mainstream organizations that reflect the kind of bulk of American medical

and health providers support that care.
Q. When you were testifying, Dr. Karasic, you did mention something about limitations in informed consent. I think there's a discussion of limitations in the research during the informed consent process --
A. Yes.
Q. -- is that correct?
A. Yes.
Q. Okay. Okay.
A. It's important when you give informed consent that you lay everything out there for people. People should, you know, go into getting care with eyes open.
Q. And you also just mentioned the major medical and mental health professional organizations that we've been discussing, the AMA, the APA, the APAA, AAP, et cetera. Some of the State's experts have asserted that those organizations have taken a position on gender-affirming medical care based on ideology rather than science. What's your response to that?
A. So each of those organizations, they are membership organizations with thousands -- tens of thousands of members. Those members elect representatives that discuss issues and come up with position papers. I can say specifically the process within the American Psychiatric Association.
So we have -- we elect members of the APA Assembly, as well as the APA -- American Psychiatric Association Board of

Trustees. The Assembly represents each, kind of, small body of psychiatric societies around the country, and they meet, and they come up with position papers and debate them. And if they're approved, then they go to the Board of Trustees, and the Board of Trustees approves them. Each -- all -- you know, at each level those are elected by the membership in annual elections.

And there's even a provision within the APA where if people don't like a decision that's made by the leadership that they can petition for a vote. I'm aware of that only happening once at the APA, which was in 1973, the APA removed homosexuality from the DSM, and there were opponents of that who petitioned for a vote, and then the whole membership voted, and they supported the Board of Trustees' decision to take homosexuality out of the *DSM.*

So these organizations are large membership organizations that are representing their constituency. If the constituencies don't agree, they do have the opportunity to -- you know, to change those positions.

Q. Is advocacy a normal part of those organizations? Is that a part of what they do in those organizations?

A. So each organization has as part of its mission to create policy or position papers that are based on its clinical knowledge. So there are kind of papers that compile clinical knowledge of treating a certain condition or -- and sometimes

there is an aspect of -- of having an opinion on something that is an issue in society, but it always goes back to the clinical expertise.

What that organization brings is they have, you know, clinical expertise in psychiatry, or pediatrics, or whatever they bring to that opinion, and each of those organizations does -- even though, you know, they are this -- a membership of professional organizations, they do make policy statements that, you know, are broadcast to the society at large.

Q. Is that abnormal?

A. No. It's what every organization does.

Q. If I can talk just briefly about WPATH.

Does WPATH's -- you know, membership of these medical and mental health organizations, talking about WPATH's membership, does that include any nonprofessional members of your community?

A. So WPATH has two categories of members. It has full members and associate members. Only the full members are voting members, and to be a voting member, you have to be a health professional, a health academic, or they've also accepted some legal experts in transgender health as part of those professionals that are allowed to be full members.

Other people could join as an associate member, but that's really just providing financial support for the organization and getting information from the organization, but you can't vote, you know, for the Board or -- you know, for example.

Q. So in your testimony, you've talked about the agreement among medical and mental health professional groups in the U.S. About the use of gender-affirming medical care to treat gender dysphoria.

As you're probably aware, Dr. Karasic, the State's experts assert that the U.S. is an outlier and points to reports from other countries and say -- and those reports say they're halting care for minor children at least.

What's your response to that?

A. So there are a handful of countries in Europe where government bodies have changed statements to exert more caution in the care of transgender youth, and -- and -- a few things.

One is that care is still provided, puberty blockers and hormones, to some youth in each of those countries even if the criteria is more restrictive than before. There's no -- there's certainly no ban or categorical withdrawal of funding for care in any of those countries. The -- those statements have been put out by government bodies, not unlike Florida's government bodies have put out statements, that aren't always reflective of the health professionals in that country, from my experience.

I was keynote speaker at -- there's kind of a Pan-Scandinavian transgender health conference and -- you know, so I've met many healthcare providers in -- from all of the Scandinavian countries who go to that conference.

And I've worked with Cecilia Dhejne, who the -- some of the

opponents of transgender care often refer to, like Dr. Levine. Expert statements always refer to her study where there was elevated suicidality in transgender adults who had received care through their program.

And Cecilia Dhejne described to me what happened in Sweden at -- with the government committee for youth, that the process had been hijacked or -- was her word, by opponents of gender-affirming care for youth that had connections to people in the United States and the United Kingdom and was opposed by many providers in Sweden.

And so what happens is, you know, something like that happens, and then, you know, with -- often with involvement with some of the same folks who are involved here, and they bring back, you know, a changed policy statement from the federal -- in the federal committee from Sweden as evidence that there's a sea change.

But, in fact, just a couple of weeks ago there was a European Professional Association for Transgender Health conference was held in Ireland, and the keynote speaker was the European coeditor of Standards of Care 8. Overwhelmingly, if you look at the schedule, it's presentations about gender-affirming care from teams from Spain, France, Italy --

MR. JAZIL: Objection, Your Honor. Hearsay, outside the scope of his expert reports as well.

THE COURT: Overruled. I'll follow up in a minute.

THE WITNESS: Okay. So, you know, Croatia, Turkey, Syria, a whole session from a Polish multidisciplinary team.

So you know, there may be differences of opinions from federal committees in Europe, but the overwhelming majority of those providing transgender health, as represented, you know, in this conference, are not going along with -- are not necessarily in line with what these statements from a handful of countries have made.

And so it's just important -- it's interesting, but it's important to take with a grain of salt that -- when there are these statements saying Europe has changed course, that that just isn't true.

THE COURT: Before we move on, Dr. Karasic, here's my question about the description you just gave me of the conference and your discussions with professionals over there.

Is that the kind of thing that experts in this field reasonably take account of in doing your own assessments and forming your own opinions?

THE WITNESS: Yes, yes. So we're -- there's an active community of people and -- you know, in Europe and the United States, and we're always, you know, in touch with each other and discussing developments. And so it's -- you know, there is an international body. It's not just those of us in the United States that are in that kind of communication.

MS. DeBRIERE: Thank you, Your Honor.

THE COURT: You may continue.

BY MS. DeBRIERE:

Q. For the record, Dr. Karasic, could you spell Cecilia Dhejne's name for us?

A. Sure. D-h-e-j-n-e.

Q. Thank you.

A. You'll see it in, you know, Dr. Levine's report and other reports.

Q. And the reporting that's coming out of this handful of countries, does it in any way pertain to gender-affirming medical care for adults?

A. No. In all those countries that are -- where there have been references to changes in policies, those countries have national health systems that fully pay for gender-affirming care for adults and have not changed -- and those minors who are accepted, and have not -- you know, there's been no change in terms of any restrictions for adults.

Q. Any of the reporting coming out of these countries on which defendants are relying, are they peer reviewed?

A. Not that the government -- the government statements are just government statements.

Q. Okay. Thank you.

Dr. Karasic, are you familiar with the term "detransition"?

A. Yes.

Q. Does it have a particular meaning in your field?

A. It sometimes has some different meanings depending on who is using it and the context. Sometimes it refers to someone who starts hormones and then stops it without necessarily regret or just as part of their journey to -- you know, how they want their body to be.

And then it also refers to people who stop gender-affirming medical care because of a -- well, people -- there's people who stop because of external circumstances, which in my experience is the great majority of people: People who stop gender-affirming medical care because they are incarcerated, because their spouse threatens to leave them, because their parents will kick them out of the house, or, you know, other kinds of -- similar kind of external reasons for stopping care, or they stop care because of a change in gender identity.

Q. How common is it for someone to stop care because of the change in gender identity?

A. That seems very uncommon.

Q. Are you familiar with the term "retransition"?

A. Yes.

Q. What does that mean?

A. So you see that, for example, in the Kristina Olson group's work on prepubertal children who have changed pronouns and socially transitioned and elsewhere. And it speaks to that not everyone is transitioning and then reverting back to the sex assigned at birth, but that people are making -- kind of moving

to different places gender-wise, that many people who -- of the relatively small number of people who change.

What's maybe more common is people changing to binary gender identity from -- I mean, to a nonbinary gender identity from a binary one. So someone assigned female at birth, for example, identifying as male and then later realizing there is a better fit being nonbinary and giving themselves that identity would be -- it's an example of retransitioning.

Q. In your clinical experience with more than a thousand patients that you've treated for gender dysphoria, have any of your patients who have medically transitioned then detransitioned in the sense of coming to identify as the sex they were assigned at birth?

A. So I've had in my practice people who detransition for external circumstances, but I've never had someone come to me and say that they have detransitioned because they no longer identify as trans and they're no longer having gender dysphoria, and, therefore, they're, you know, not getting treated anymore. That's never -- that hasn't happened. No patient of mine has said that to me.

Q. Out of all of those patients, how many patients have regretted their decision to transition?

A. Very few. And when -- it's very rare, and it -- when -- if I'm trying to think of an example, I can think of someone who -- this was years ago -- someone who had moved to San Francisco

from the South after transitioning -- had essentially transitioned and lost it all, job and family and really kind of rejected by community, and came out to San Francisco and was living in a homeless shelter. And in one of the Department of Public Health-run clinics that I was working in, this person was saying, you know, they didn't regret transitioning because they identified as female, but they -- the cost was greater than they thought it would be. So they had regret because they were in such a desperate circumstance that they hadn't anticipated.

Q. How do you react to the assertion that individuals with gender dysphoria should not be provided medical interventions because they will outgrow it?

A. That doesn't make sense to me.

So the -- some of the opponents of gender-affirming care put out these very high detransition numbers. And many of the people in those studies that were recruited, even before there was -- even before gender identity disorder of childhood came into the DSM in 1980, often they include the Feminine Voice Study at UCLA. And I knew Richard Green who did that study when I was at UCLA. And when he wrote -- published his book on that study, he called it the Sissy Boy Syndrome and something about the development of homosexuality, not the development of being transgender.

So they -- his original goal was to follow the -- to see whether feminine boys became transwomen. And very few of them

did. But as it turns out, it was because basically from a time when even homosexuality was in the DSM, parents were bringing in feminine boys because they just weren't accepted in their schools, you know, or bullied by peers. And I even spoke to some of the people who had been in that study who identify as gay men, and they never had transidentity.

There was another study that -- kind of a group of publications from Toronto that, again, they started recruiting people in 1975, before there was a GID childhood diagnosis. And they are mostly feminine boys; they're mostly pre-gay men.

The one modern study -- the one modern American study is Kristina Olson's group where they've published on over 300 pre-pubertal youth who had changed the pronouns that they used, and that was their marker for socially transitioning. And they followed them over -- I think it was a mean of four years. They followed them over a few years. And only 2 and a half percent of those who had changed their pronouns in a binary way had changed them back to their sex assigned at birth. So within that population, detransition is very rare.

It's clear that there are kind of different populations of folks, and different studies have kind of found different groups of youth. But I think we are moving in the direction of more specificity. I talked about in, you know, the *DSM* of gender dysphoria -- *DMS-5* gender dysphoria at childhood, adding this identity A1 requirement. And so -- and then, also, I think over

the years parents are less likely to bring a feminine boy in to the doctor.

And so, anyway, I don't think that old data with the super high desistance numbers is really reflective of, you know, what happens.

Q. Those older studies, what types of clinics -- what types of clinics did those studies?

A. So UCLA was a psychiatric clinic. It was before puberty blockers were administered. That was in the 1960s and '70s. It was published in 1987. It's when they had to follow up with people to adulthood.

Then the other two clinics, before Kristina Olson's work were the gender clinics for children and adolescents in Toronto -- University of Toronto, Clark Institute, CAMH, are kind of the various names of that clinic -- and then in Amsterdam, the Dutch group in Amsterdam.

And what's notable in each of those clinics is that if gender dysphoria persisted into puberty that they treated those kids with puberty blockers and then with hormones.

And so even as they were reporting on desistance, they were noting it as a prepubertal phenomenon and that if it did persist, if it did give them what was a GID of adolescents in adulthood and later gender dysphoria of adolescents in adulthood, that those people with that diagnosis were -- their gender dysphoria was likely to persist, and they offered them

medical treatment.
Q. How many individuals or professionals in the field of providing gender-affirming medical care address the concept of detransitioning? Is there attention given to it?
A. I'm sorry. What was the question?
Q. Yeah. Is there attention in the professional field of those providing gender-affirming medical care to the concept of detransitioning?
A. Yes.
So I was the chair of the first US --
(Reporter requested clarification.)
A. USPATH, United States Professional Association for Transgender Health, conference in Los Angeles in 2017. And I helped organize a panel of therapists and therapist trainees who were detransitioners themselves.
And we were contacted by some detransitioners wanting their perspective to be addressed. And we had a very lively discussion with attendees at the conference.
Later, WPATH put on a training that was devoted to helping -- help practitioners work with detransitioners. And then Standards of Care 8 talks about detransitioners and the importance of involving folks with health providers of multiple disciplines to -- you know, to help them get the care they need.
BY MS. DeBRIERE:
Q. You've been discussing that the detransition is rare, so

why would professionals pay attention to this in developing the standard of care and otherwise practicing their forms of medicine?

A. Sure.

Well, I think detransition, especially because of a change in gender identity, and also this other sense of people stopping and starting hormones, is maybe a little bit more common than rare, you know, not quite -- still uncommon, but maybe not rare.

But, you know, we -- it's one of the things that we, both as health professionals and it's something that's in the WPATH Standards of Care, that we're not invested in what any one gender identity for a patient. We are trying to help people find the best place for themselves and, you know, the -- helping them get the care that they need to, you know, be the healthiest, most comfortable person, and, you know, recognizing that for some people that -- you know, the initial transition might, you know, not provide that.

So we want to, you know, help them no matter what their, you know, identity is.

Q. The fact that detransition exists, why do you continue to recommend gender-affirming medical care as part of your practice?

A. Because the vast majority of people benefit from care. And even, in my experience, the people who have, you know, detransitioned because of external circumstances still might

need gender-affirming care in the future. And so even for some of the detransitioners, the availability of gender-affirming care is important.

Q. Is the possibility of regret -- this concept of regret, is that unique to gender-affirming medical care?

A. No. As a matter of fact, when you talk with surgeons, it's -- who are working in gender-affirming care, it's one reason that they often prefer working with their transpatients to some of their other patients, because regret is so low with transpatients. So if you look at -- there's a meta-analysis of posts by Bustos of almost 8,000 patients in various studies where they reported regret, and regret was less than 1 percent in transgender patients who had had surgery.

And then you compare that, I put in any declaration to Sheehan in 2008, where people -- women who had breast cancer, had mastectomies because of breast cancer, who were then offered or given -- had gone ahead with breast reconstruction -- so it's medically necessary breast reconstruction -- and about 40 percent of those women had some degree -- 40 percent of those woman had some degree of regret related to breast reconstruction.

So regret is there for every -- if you look at any surgery where they have reported regret, regret is present. And it's typically much higher than the regret rates for gender-affirming surgery.

Q. Dr. Karasic, are you familiar with the concept of social contagion?
A. Yes.
Q. Can you describe it for me, please?
A. So social contagion is the theory that if someone is exposed to someone who is trans, or social media or other media accounts of being transgender, that that could make that person trans.
Q. Has there been a rise in numbers of referrals to gender clinics in recent years?
A. Yes.
Q. Is that due to social contagion?
A. No.
Q. What's it due to?
A. First of all, you have in the United States, whenever you see these numbers of number of insurance claims or number of gender dysphoria diagnoses that were made, that's comparing from the early 2010s to now, and you see these numbers go up dramatically, you have to remember that transgender care had been shut down in the U.S. by the prior backlash. And because of that, there was no funding for those people to get care. There were no -- there were very few gender clinics. If you are a provider -- like even working in a gender clinic, and even though we were funded by San Francisco Department of Public Health so that it wouldn't really threaten our care, the

providers in Dimension's clinic and Transgender Life Care Program would never use the GID diagnosis, because we knew in other settings, as well as there, that it would lead to insurance rejection of care, even if, you know, we were also treating depression or, you know, other things.

And so people weren't using the diagnosis until -- 2013, the gender dysphoria diagnosis started, and it was also around when reimbursement became, you know, very common for the gender dysphoria diagnosis.

So, of course, people are using that diagnosis much more when they are getting reimbursed for it and -- as opposed to it being a specific reason for reimbursement denial.

Second of all, you can't refer people to clinics that don't exist. And they had been shut down, you know, decades earlier. And starting in the early 2020s, they grew in number. And so the numbers are going to increase greatly, the number of referrals, when you have a place to refer that person to.

When -- because I've been in this field for a long time, I think I made reference in my declaration about being contacted around the year 2000 by a parent from Florida who had resources and wanted to fly his transchild anywhere in the world that would -- could provide some care for them. And I had a colleague at Emory, and it would be a short flight, and -- that I referred him to. But he could not find any care in Florida.

And then -- also, then thinking of the very first trial and

adolescent gender clinic full meeting in San Francisco at UCFS in 2012, and the family was a family that had left Florida because their child could not get care and could not get accommodated in school. And so they moved to San Francisco and, you know, were there for that first session.

Q. What is your reaction to the assertion that if kids have lots of trans peers or consume a lot of social media regarding transpeople that this can cause gender dysphoria?

A. So my transpatients seek out other transpeople. They are looking for support. And so if you're just externally looking at a phenomenon of -- let's say, even, you're a parent and your trans kid has just come out as trans to you and you, you know, remember that six months ago they brought another kid home who was trans, that's not that that kid six months ago being trans infected the child, you know, to make them trans; it's that children are trying to understand -- adolescents, they are trying to understand themselves, and they are finding peers who are similar to themselves.

Q. Similarly, what's your reaction to the assertion that a patient is identifying -- has a transidentity because their parents or people in trusted positions want them to?

A. So are you asking that young people transition because their parents want them to?

Q. What's your reaction?

A. That's not been the experience of the young people that I

work with. You know, it's very much the young people coming to their parents in distress, or, for some, you know, from their earliest days, having very strong cross-sex, you know, cross-gender, you know, behavior and the parents, you know, recognizing that.

Q. And just touching very briefly, again, on the concept of detransition, in speaking of detransitioners, you used the phrase "change in gender identity."

By that you mean someone who stopped identifying as transgender?

A. Yeah. That some -- there are some professed detransitioners -- they are not patients of mine, per se, but, you know, I go to the conference and I see some of them in the media who say that they were -- you know, that they identified as transgender, and now they no longer do. And so people can come to some evolution of an understanding of themselves, presumably.

Q. Okay. Dr. Karasic, as this last part I just want to turn very briefly to the plaintiffs in this case.

As part of your work in this case, did you review any of the plaintiffs' medical records?

A. Yes.

Q. Specifically, did you review any records related to adult plaintiff August Dekker?

A. Yes.

Q. What did the records reveal with regards to Mr. Dekker?
A. Mr. Dekker was assessed for gender dysphoria and received testosterone and masculinizing chest surgery.
Q. Did you review any records related -- when you reviewed the records of Mr. Dekker, did the medical care he was receiving -- did it, based on your understanding, reflect the standard of care that we've been discussing?
A. Yes.
Q. Okay. Did you review any records related to adult plaintiff Brit Rothstein?
A. Yes.
Q. What were your findings?
A. Very similar to August Dekker, that they had received gender-affirming medical and surgical care, also in accordance with -- with the standard of care.
Q. How about minor plaintiff Susan Doe?
A. Yes.
Q. Can you discuss your findings about that?
A. That that plaintiff had received puberty blockers for gender dysphoria in accordance with WPATH Standards of Care.
Q. Was she diagnosed with gender dysphoria?
A. And diagnosed with gender dysphoria, yes.
Q. And then, finally, just minor plaintiff K.F.?
A. Yes.
And so minor plaintiff K.F. was diagnosed with gender

dysphoria and also received puberty blockers.
Q. Was that care in line with the standards of care?
A. Yes.
MS. DeBRIERE: All right. Thank you so much, Dr. Karasic.
Your Honor, those are all my questions.
THE COURT: All right. Cross-examine.
MS. DeBRIERE: Your Honor, I'm so sorry. May I ask one more question?
THE COURT: Surely.
MS. DeBRIERE: I'm so sorry.
BY MS. DeBRIERE:
Q. Final question, Dr. Karasic. My apologies.
In your opinion, are any of the gender-affirming care medical services listed at 59G-1.050 experimental?
A. No.
MS. DeBRIERE: Thank you.
THE COURT: All right. Cross-examine.

CROSS-EXAMINATION

BY MR. JAZIL:
Q. Good afternoon, Dr. Karasic.
A. Hi.
Q. Karasic. I apologize.
Dr. Karasic, based on your testimony, it's my understanding that your practice is devoted to helping transgender

individuals.

Did I understand that right?

A. Yes.

Q. And you're also a member of WPATH, as you testified?

A. Yes.

Q. And you'd agree with me that WPATH advocates for the rights of transgender individuals, right; that's its purpose?

A. No, it's -- I mean, like any -- as I think I've talked about, any membership organization does, you know, provide position statements and advocacy of sorts, but the primary purpose of WPATH is to provide educational trainings for its members, so continuing education trainings for its members and for others who want to increase their knowledge in transgender health, and also in formulating the standards of care. So really the organization is focused around those two things. They also do advocacy or, you know, position statements on issues that are related to transgender health.

Q. I got it.

And so the organization itself is not made up exclusively of medical professionals, though; right?

A. So the organization -- almost all the full members of the organization are health professionals. There are some health academics, legal academics who are full members. There are some associate members who are not health professionals.

Q. Okay. When you say "health professionals," you're

including folks other than MDs; right?
A. Sure, yes, psychologists, psychotherapists.
Q. Psychotherapists?
A. Yes.
Q. Anyone who self-identifies as a health professional can join as a full member?
A. You have to fill out an application, and you have to, you know, list your qualifications as a health professional, and so I suppose somebody could lie about that, but yeah.
Q. Okay. So you said the full members include lawyers; right?
A. There are a few legal advocates within the full membership of WPATH.
Q. When you say "legal advocates," you mean advocates for transgender rights who are members -- full members?
A. No, I meant -- like, I only can think of a couple of people that -- one of them is not a practicing lawyer but got a doctorate in law in the UK, and -- so there are some people who are really kind of within the kind of broader realm of health academics, I guess one would say, but the vast majority of the members are practicing clinicians.
Q. Sociologists are included, too, in the full membership group?
A. No. I mean, there -- they could be as a health academic, but when I'm talking about non-MDs, I'm talking about licensed clinical social workers, psychologists, marriage and family

counselors. And so, you know, there are a number of non-MDs who are. The vast majority of the members are people who are taking care of patients, but there are some health academics who are members as well.

Q. And the membership includes folks who provide alternative health care? I'm thinking folks who might practice Eastern medicine, for example.

A. You know, I wouldn't be surprised if -- there are maybe 3,000 members, you know, but we -- you know -- and there are some members in Asia, and, you know, their practice might reflect that. There are also psychotherapists who use mindfulness and meditation as part of their practice. So, you know, there are a range of health professionals that are in the organization.

Q. And you serve on the Board of Directors for WPATH; right?

A. Yes.

Q. Were you on the board when WPATH issued its Standards of Care, Version 7?

A. I was not on the board. I was involved as a committee member for Standards of Care 7, but that came out in 2011, and I had not -- was not yet on the board when that came out.

Q. Were you on the Board of Directors when WPATH decided to pursue Version 8 of its Standards of Care?

A. Yes.

Q. Were you on the board when the Version 8 standards came

out?
A. No.
Q. When you were on the board that decided to pursue the Version 8 Standards of Care, how many members of the board were there?
A. How many members of it -- were on the board? There would have been 7 general members and 4 Executive Committee, I believe, so 11.
Q. And this 11-member board included the UK-based lawyer, person with a Ph.D. in law --
A. Yes.
Q. -- is that right?
And all of them cared about furthering transgender health; right? That was a common denominator among the board members?
A. Yes.
Q. Now, Doctor, I'd like to walk you through the Standards of Care.
MR. JAZIL: Can we pull up DX-16, please?
Your Honor, can I approach the witness with a copy?
THE COURT: You may.
BY MR. JAZIL:
Q. Now, Doctor, your name is on the cover of this document; right?
A. Yes.
Q. Third row down?

A. Yes.
Q. What I'd like to do is start at the back of this document. If you go to what's Bates labeled page 249, so the bottom right. If you'd look at page 249.
A. Yes.
Q. And, Doctor, I'd like to direct your attention to subheading 3, which is on the right side of the document.
A. Yes.
Q. This lays out the process that WPATH took in coming up with Standards of Care, Version 8; right?
A. Yes.
Q. And if we look at step 17, it says that the document had to be approved by the WPATH Board of Directors before its publication and dissemination?
A. Yes.
Q. That's the 11-member board?
A. Yes.
Q. Let's move on to page 250. So if you can just flip over to the next page, Doctor.
I'd like to direct your attention to 3.3, "Selection of chapter members."
A. Yes.
Q. Now, this says that a call for applications was sent to the WPATH membership?
A. Yes.

Q. And it says that the chapter leads and members were required to be WPATH full members?
A. Yes.
Q. Now, were you a full member when the call went out?
A. Yes.
Q. Now, if we go down to the third paragraph, it says: *Each chapter also included stakeholders as members who bring perspectives of transgender health advocacy or work in the community, or as members of a family that included a transgender child, sibling, partner, parent, etc.*
A. Yes.
Q. Did your -- Doctor, you wrote a chapter for --
A. Yeah.
Q. -- the Standards of Care 8?
A. I was a chapter lead, yes.
Q. And it was a chapter on mental health; right?
A. Yes.
Q. And did your chapter include the stakeholders that included the folks listed in 3.3, transgender children, et cetera?
A. Yeah. So the stakeholder on our chapter who we -- there was an appointment in our chapter, and there was a stakeholder who was a licensed psychotherapist who is transgender herself.
Q. So your stakeholder group included a licensed psychotherapist who is transgender herself; it included you as a lead; it included other mental health professionals?

A. Yeah. So it included leaders of the gender programs of Sweden, Belgium, and Turkey, and then included a psychiatrist who -- it was a mental health chapter, so it was very psychiatrist heavy -- a psychiatrist who's vice chair of psychiatry at Northwestern University. It included a psychologist at the Whitman-Walker clinic in Washington, D.C. -- I think that's where he practiced at the time -- a psychiatrist at Columbia University, and myself. And I'm trying to think if I'm missing anyone there. I think that kind of makes up the chapter.

Q. I understand.

And your committee talked to people about the issues involved and sought their perspectives; right?

A. So our -- the charge of our committee was to review relevant research. We came up with potential statements that were reflections of -- not only reflections of research, but recommendations that could be made, and that was in consultation with the editors.

Each of us, though, came with the background, of course, of having, you know, much discussion about providing mental health care for transgender people. You know, there was the lead psychiatrist for the gender programs in Sweden, Belgium, and Turkey, and, of course, they, you know, talked with patients and professional colleagues like I would do in the United States.

Q. And so, Doctor, you said folks talk to professional

colleagues.

Did you reach out to Dr. Stephen Levine to get his perspective on the chapter on mental health?

A. No.

Q. But he was the author of the Standards of Care, Version 5 -- right? -- the mental health chapter?

A. Right. So what had happened -- my understanding of what happened with Dr. Levine was that after Standards of Care 5 came out, that he attended a conference, and there were people who objected to Standards of Care 5. There were some transgender people there who objected to Standards of Care 5, and he ended up cutting off ties with the organization.

So I became involved with WPATH not until 2001, and it was right around the time that Dr. Levine was cutting off ties with WPATH. So I never saw Dr. Levine at -- you know, at any WPATH conferences. Dr. Levine did present at a couple of APA conferences over the years, but I was always somewhere else -- presenting somewhere else.

Q. So you didn't talk to him, but did you seek him out just to get his perspective on it as a former author of the chapter that you worked on?

A. No.

Q. Okay. Do you know who Dr. Hilary Cass is from the United Kingdom?

A. Yes.

Q. You know that she takes a more cautious approach to providing gender-affirming medical care than you would like; right?
A. So I -- I have read the Cass report. It was a little confusing to me because there was part of the report where they talked about expanding access to care, and then the report became -- what came out of that became more conservative. And I read the Robers (phonetic) reporting that the report had changed at the Prime Minister's office or Ministry of Health after the last two Prime Ministers had announced support for restricting gender-affirming care.

So I certainly have read the report and, you know, what was put out. I don't know the whole process and what was behind it, you know, going -- you know, what was going on in the United Kingdom.
Q. Understood.

And you testified earlier that your chapter included folks from Sweden; right? It included folks from Turkey; right?
A. Yeah.
Q. But did you think about picking up the phone and calling Dr. Cass to get her perspective on the issues?
A. So the supervisor, the person who is the leader of our chapter, was John Arcelus, one of the coeditors of WPATH Standards of Care, who is one of the leading academics in the United Kingdom in transgender health.

When we were starting the process, I'd never heard of Hilary Cass. I did not hear -- I did not know who she was. She was somewhere kind of coming through the National Health Service of Britain. She was not somebody in -- you know, that I was aware of in transgender health at the start of the process. I only became aware of her when she -- you know, when the Cass report came out.

Q. So that's a no, is the answer to my question?

A. Yeah. You asked when we were doing this.

Q. Did you pick up the phone and call her and get her perspective?

A. I don't have her phone number.

Q. Okay. Fair enough.

Now, you testified earlier about some of the European countries that are taking a more cautious approach. That was, I believe, the word you used.

Do you recall that testimony on gender-affirming care?

A. So there are -- as I said, there are a handful of countries that are -- that kind of urge caution in the sense that became more restrictive of care for transgender youth.

Q. And did you contact any of the advocates for this more cautious approach in these countries as you were working on the mental health chapter for the WPATH report?

A. One of the members of our mental health chapter was the founder of the Swedish gender clinics, Cecilia Dhejne, who

Stephen Levine and others are always making reference to with the high sucidality numbers in one of her papers, and so I have spoken with Cecilia Dhejne through the process since we were working on the mental health chapter together. And since that chapter was done, we -- you know, I've known her for many, many years. And I've also spoken with others in Scandinavia, you know, over time. I went to -- you know, was a speaker at a Pan-Scandinavian Transgender Health conference several years ago.

Q. And is she one of the advocates for taking a more cautious approach now?

A. No. She's the founder -- she's kind of the most prominent person in transgender health in Sweden, and she is a supporter of WPATH Standards of Care 8.

Q. So, Doctor, in the mental health chapter in WPATH Standards of Care, Version 8, I count ten statements from your chapter that were put out there.

A. Yes.

Q. Does that sound right?

A. Yes.

Q. And were all of those statements approved by the committee that was working to put the chapter together?

A. Yes, the ten statements.

Q. Any statements that were rejected as the committee was working to put its chapter together?

A. Yeah. So we -- we initially had 20 statements provisionally, and the editors had said that we needed to -- that many of them were kind of good practice statements, and we needed to focus really -- for the sake of Standards of Care not being *War and Peace,* we needed to focus on statements that were recommendations that could improve care.

And so, you know, there was this back and forth. It was our committee coming up with statements and literature related to those statements and reasons for maybe doing those statements, and then also the editors saying, Well, you can incorporate some of that into your explanatory text and not everything has to be a statement.

And so they -- their mission was not an ideological way to change things one way or the other, but they were using, you know, their, kind of, knowledge base of putting out a document like this to -- you know, to guide us, and that dwindled things down to ten statements.

Q. Doctor, of the folks who were working on the mental health chapter for WPATH Standards of Care 8, did all of them share the perspective that the availability of medical gender-affirming care is a good idea?

A. Yes, they were all -- you know, you look at that -- our representative from Turkey was the president of the Turkey psychiatric association. These were not marginal, you know, people. They were representing the mainstream of health in

their various countries.
Q. Now, Doctor, I'd like to walk through the chapter on mental health, Chapter 18.
A. Sure.
Q. If you can go to page 173 of the document, the second full paragraph on the left column: *Some studios have shown...*
A. I'm sorry. You said 170?
Q. 173, Doctor. I apologize.
A. 173, yes.
Q. And it should also be on your screen if you need it.
It says here that*:* *Some studies have shown a higher prevalence of depression and suicidality among TGD people than in the general population.*
A. Yeah.
Q. Now, Doctor, first, what does TGD stand for?
A. Transgender and gender diverse. That was the editor's initials for -- for transgender and gender-diverse people.
Q. And then if we go to the next page, Doctor, statement 18.1, where it says --
A. Yes.
Q. -- *Psychiatric illness and substance...*
It's halfway down.
A. I'm sorry. 18.1?
Q. Yes, Doctor. If you go three-fourths of the way down, it says*:* *Psychiatric illness and substance use disorders, in*

particular cognitive impairment and psychosis, may impair an individual's ability to understand the risks and benefits of the treatment.

A. Yes.

Q. *Conversely, a patient may also have significant mental illness, yet still be able to understand the risks and benefits of the treatment.*

Now, Doctor, putting the statement we just saw from page 173 together with the statement here, when you're working with patients who present for gender dysphoria, are you trying, as part of your practice, to disentangle the other psychiatric illnesses and substance use disorders they may present with as well?

A. So for these references we're talking about even the general population. These were not specifically just with transgender people. This -- these couple of sentences refer generally in psychiatry that cognitive impairment and psychosis can impair the individual's ability to give informed consent, but other people can have significant mental illness and still be able to give informed consent.

That's a separate thing if you are saying disentangling it. I'm not sure when you say "disentangling," disentangling from what?

Q. Suppose a patient comes to you and they present with depression.

A. Yes.
Q. They present with anxiety, and they also have gender dysphoria.
A. Yes.
Q. As part of your discussions with those patients, you're trying to figure out the root cause of their mental anguish; right?
A. Yes, sir.
Q. And that root cause could be just depression; right?
A. Yes.
Q. It could be just the anxiety; right?
A. Well, not if they have all three. But, yes, it -- there could well -- it could well -- I mean, theoretically it's possible that they could have depression, anxiety, gender dysphoria. And there are certain kinds of anguish that one could assign to each of those. I'm not sure if that's what you mean.
Q. So all three of those things are mental disorders; right?
A. Yes.
Q. In the *DSM-5*?
A. *DSM*, yes.
Q. And you could help the patient and make sure that they have a fulfilling life if you treat just the depression in a particular patient; right? It's possible that if you treat just depression, they will feel better; they might not need

treatments for the other two issues?
A. It hasn't been my experience that if people need treatment for gender dysphoria -- you know, I had people who have already transitioned, for example, or are in a stable place with their gender dysphoria, but are depressed and -- you know, so you take into account that the person is transgender, but, you know, the focus is really the depression. But if this is somebody who is coming in with active distress related to their gender dysphoria, one needs to look at both and, you know, certainly, as in the Standards of Care 8, one might need to treat both simultaneously, both the gender dysphoria and the depression.
Q. Okay. And the preexisting psychiatric illnesses could impair a particular patient's ability to give informed consent; right?
A. Yes.
Q. That's what this statement is getting at?
A. Yes.
So this, as it says --
Q. Was it a yes, Doctor?
A. This says "Cognitive impairment and psychosis," -- "in particular cognitive impairment and psychosis." And so generally it's cognitive impairment and psychosis that impair informed consent. And even some people can have cognitive impairment and psychosis and still be able to give informed consent.

So I haven't -- I can't recall a patient where depression or anxiety has prevented them from capacity for informed consent.

I used to do consultation liaison psychiatry early in my career, and we would get called to somebody out of capacity to consent, let's say if they decided to leave the hospital or accept or reject care, and, you know, it's either that they were cognitively impaired, delirium or dementia, or that they had a severe psychosis, not just -- being depressed would not be a reason that somebody couldn't consent for their health care.

Q. I understand.

So let's break this down. If I have a psychiatric illness, and I come to you for gender dysphoria treatment, does my preexisting psychiatric illness make it more difficult for you to get my informed consent for a treatment? Yes or no.

A. Well, it depends, right.

So if somebody is really psychotic, then of course it would. But if somebody has a preexisting psychiatric history, but they, you know, are not in acute psychosis, then they can still give informed consent.

Q. Okay. So let me ask you another question.

I come to you with a substance use disorder.

A. Yes.

Q. And does that make it more difficult for you to get my informed consent for medical care? Yes or no.

A. So it can, you know. That's why -- okay. Yes or no is kind of incomplete.

People can be substance abuse users and be able to give informed consent. It's possible for someone with substance abuse to impair their capacity for informed consent.

That certainly is possible.

MR. JAZIL: Okay. Can we go to page 78 -- 178?

BY MR. JAZIL:

Q. Let's look at the part that says: *Experience suggests many transgender and nonbinary individuals decide to undergo gender-affirming medical care with little or no use of psychotherapy*.

A. Yes.

Q. Now, you agree with that statement; right?

A. Yes.

Q. And you've said that you've studied Florida's rule concerning gender-affirming care that you are testifying here about; right?

A. Yeah, I've read it. Yes.

Q. And that rule doesn't prohibit the reimbursement of any psychotherapy treatments for anyone diagnosed with gender dysphoria, does it?

A. No, it doesn't ban coverage for psychotherapy.

Q. Okay. And, Doctor, I'd like to move on to another topic.

You testified earlier that you diagnosed gender dysphoria

using the *DSM-5*; right?
A. Yes.
Q. Remind us again what the *DSM-5* is.
A. The *DSM-5* is the *Diagnostic and Statistical Manual for Mental Disorders* put out by the American Psychiatric Association and updated periodically.
Q. And we agree that gender dysphoria is a mental disorder under the *DSM-5*; right?
A. Yes.
Q. But we also agree that transgender is not a mental disorder under the *DSM-5*?
A. So transgender people can have gender dysphoria, but being transgender, as *DSM* states, in and of itself is not a mental disorder.
Q. You'd agree with me, Doctor, that there's no blood test that we can use to diagnosis someone with gender dysphoria; right?
A. Right.
Q. And there is no X-ray we can use?
A. Right.
Q. No MRI?
A. Right.
Q. No CT scan?
A. Right.
Q. No imaging of any kind?

A. Right.
Q. And there's been no gene that's been identified linking that gene to the existence of gender dysphoria, is there?
A. Correct.
Q. And, Doctor, just so the record is clear, not all transgender individuals suffer from gender dysphoria; right?
A. Yes.
Q. I'm a little confused by that answer. I apologize. I should have asked a better question.
THE COURT: I got it. You said that twice.
THE WITNESS: I can say, you know, we know that there's, you know, at least a half a percent of people in large population surveys who identify as transgender, that that number is substantially larger than the number of people who are going to clinicians and getting a diagnosis of gender dysphoria.
So that does speak that there are some people out there who are transgender, they have not received the diagnosis of gender dysphoria. We might not know whether they have gender dysphoria or not. But there is a discrepancy in terms of the numbers who identify and the numbers seeking treatment.
THE COURT: Well, Mr. Jazil, I tried to stop you because I thought I had the answer, and now I'm not sure I do.
THE WITNESS: Okay.
THE COURT: The last thing you told me is the percentage of the population compared to the number that have

sought treatment or been diagnosed.

THE WITNESS: Yes.

THE COURT: That really wasn't the question.

THE WITNESS: Okay.

THE COURT: So you're the clinician.

THE WITNESS: Yes.

THE COURT: You've worked in this field.

THE WITNESS: Yes.

THE COURT: Are there people who are transgender who do not have gender dysphoria?

THE WITNESS: And so I would say --

THE COURT: That really is a yes-or-no question.

THE WITNESS: I would say yes. To have gender dysphoria, it's not just that you have the distress, that the distress has to be significant enough that it's causing social or occupational impairment or clinically significant distress. So not -- some of those other transgender people may well have a symptom of gender dysphoria. They may have distress about some aspects of their body being different than their gender identity, but they don't meet criteria for gender dysphoria.

So I assume that those people exist. The people who come to see me are people who are seeking help, and they're transgender people. And at least until they have received, kind of, adequate treatment for their gender dysphoria, they have gender dysphoria like in the *DSM*.

There are some people who have transitioned and are not suffering from clinically significant distress. The *DSM* does have this post-transition modifier that we don't really use very much to try to account for them. And I see 11 which we don't use yet in the United States, just talks about gender incongruence. So the distress part isn't a part of it to kind of account for people maybe needing refills on their hormones but otherwise no longer in distress.

So there are people who are treated, for example, who are not impaired by their gender dysphoria now. And so one might say they don't have the disorder, except maybe this specifier in the *DSM*, so in addition to those people who never come into care.

THE COURT: Are there some transpeople who are just fine with it?

THE WITNESS: So there are some transpeople, mostly nonbinary in my experience, who are not seeking hormones and are not seeking surgery. They may have some level of distress. But especially some nonbinary people don't feel that maybe taking testosterone, for example, that they -- you know, they might see pros and cons to doing it. Some of them have taken it for a little while and stopped, but they don't want full masculinization because they don't identify as men either.

THE COURT: That, again, was a little different than what I was precisely trying to get at.

THE WITNESS: Yeah.

THE COURT: I wasn't asking about people seeking treatment.

THE WITNESS: Okay.

THE COURT: I really am asking about their mental state.

THE WITNESS: Yeah.

THE COURT: Are there people who are trans --

THE WITNESS: Yeah.

THE COURT: -- who are not upset about it, don't have a concern about it, so that they don't have a mental health issue with being trans, whether or not they seek hormones, for example?

I'm not asking whether it's somebody who is happy with their condition and does not seek hormone treatment or happy with their condition and they do seek hormone treatment. Either way, I'm just asking, are there people who are trans that are not upset about it?

THE WITNESS: Oh, yeah, sure. And that's why being trans is not a mental disorder; it's the presence or absence of distress. It's just that gender dysphoria happens within the population of transgender people.

THE COURT: Precisely. To add --

THE WITNESS: You can have a Venn diagram of transgender people, and then within that are the people with

gender dysphoria. That's a diagnosis, at least.

THE COURT: And the point of, I thought, Mr. Jazil's question and certainly mine is when you look at that Venn diagram, the little circle is going to be entirely inside the big circle --

THE WITNESS: Yes.

THE COURT: -- but it's not going to be congruent; it's going to be a smaller circle.

THE WITNESS: It's a smaller circle in terms of people, right, who've -- either aren't seeking treatment or have already had treatment and no longer meet the diagnosis.

THE COURT: Well --

THE WITNESS: Either way.

THE COURT: -- the little circle I'm talking about is the people that are -- concerned may not be the best word. The people who have mental dissatisfaction --

THE WITNESS: Yeah.

THE COURT: -- or a mental issue with their gender identity, that circle is smaller than the number of people who are trans, who identify as a different gender than the sex assigned at birth?

THE WITNESS: Yes.

THE COURT: Mr. Jazil, I interrupted. And I don't know if I made it better or worse, but at least I made it different.

You can proceed.

BY MR. JAZIL:

Q. Doctor, when you are diagnosing someone with gender dysphoria, the first step in that process is to figure out whether or not there is an incongruence between a person's gender identity and their natal sex; right?

A. Well, I don't mean to be difficult, but it depends. I mean, I have people who come to me very -- quite clearly and say, you know, I'm transgender. So I don't know if it's -- but, yes, it does. You know, making a diagnosis of gender dysphoria is kind of a required part of the process.

MR. JAZIL: Can we go to PX45, please, page 834?

Can we blow up the line by Rationale.

BY MR. JAZIL:

Q. Now, this -- now, Doctor, it says that: *Gender identity is defined as a person's deeply felt, inherent sense of being a girl, woman, female, a boy, a man, or male; a blend of male or female; or an alternative gender.*

Do you see that statement?

A. Yes.

Q. Do you agree with that statement?

A. Yes.

Q. And how do you, when presented with a patient who's coming into your practice, disentangle a person's deeply felt, inherent sense of being?

A. I -- I'm doing a clinical interview --

MS. DeBRIERE: Objection, Your Honor. It's my understanding that the exhibit that Mr. Jazil is referencing is not admitted into evidence and, therefore, lacks foundation.

THE COURT: Is there an objection to it?

MS. DeBRIERE: There is, Your Honor. That's my objection.

THE COURT: What --

MR. JAZIL: Your Honor, I just asked if he agreed with the statement that was made.

THE COURT: That's probably okay. But let me catch up.

I was pulling up the exhibit, and I didn't immediately find it. But I will. Give me just a second.

(Pause in proceedings.)

THE COURT: Let me make sure I've got the right document. Is this the Guidelines for Psychological Practice from the American Psychological Association?

MR. JAZIL: Yes, Your Honor.

THE WITNESS: From 2015.

THE COURT: It's the plaintiffs' exhibit and you object to it?

MS. DeBRIERE: Your Honor, we are happy to admit it into evidence. But if Mr. Jazil is going to rely on it, then we wanted to have a discussion of amending it.

MR. JAZIL: Your Honor, I'm not moving it into evidence. I just simply asked him if he agrees with one sentence in the paper, and then I'm asking him a follow-up question.

THE COURT: All right. You don't want it admitted?

MR. JAZIL: No, no, Your Honor.

THE COURT: All right. Now I've at least caught up, and I know what we are talking about.

Go ahead.

I overrule the objection.

But ask the question again so I'll have it.

MR. JAZIL: I'll try, Your Honor.

BY MR. JAZIL:

Q. Doctor, you'd agree with me that it's difficult to -- as part of your diagnosis to disentangle a person's deeply felt, inherent sense of being a girl or a woman or a female for a natal boy; right? That's a difficult task when someone comes to you and you've got to disentangle that?

A. Disentangle it from what?

Q. How do you substantiate someone's deeply felt, inherent sense of being? That's a difficult task that is put on your shoulders when you're the clinician; right?

A. Well, you know, I'm an experienced clinician, and whatever people are presenting with, you know, I am doing my psychiatric evaluation and -- whether that's one thing -- one complaint that

they have or multiple complaints. So I'm not sure what you mean by difficult to -- you know, it's what I do all day.
Q. You -- let me see if I understand this. All day you try to assess people's deeply felt, inherent sense of being?
A. No, all day I work as a psychiatrist with people and try to get a sense of the complaint that they bring into initial treatment and, you know, how best to understand it and how best to address it.
Q. Okay. Doctor, you talked with my friend about the Endocrine Society guidelines. I'd like to ask you a few questions about those.
MR. JAZIL: Your Honor, if I may approach the witness with a copy?
THE COURT: You may.
Give me the exhibit number.
MR. JAZIL: Your Honor, it's Defendants' Exhibit 24.
BY MR. JAZIL:
Q. Now, Doctor, when my friend was asking you questions, you testified that the Endocrine Society's guidelines, together with the WPATH guidelines, are the standards that you adhere to in your practice; right?
A. Well, I have the proviso that the Endocrine guidelines -- each guidelines is a product of its time. The Endocrine guidelines was -- came out in 2017, and so it was useful because Standards of Care 7 came out in 2011, published in 2012. And so

there were times where recommendations were updated relative to Standards of Care 7. Now we have Standards of Care 8 and -- so, you know, it's still important, but personally I'm more referring to Standards of Care 8, but there are still many people who are, you know, still using the endocrine guidelines from 2017.

Q. Do you think the Endocrine guidelines are a useful tool --

A. Yes.

Q. -- when --

A. Yes, yes, they're a useful set of information.

Q. Let's take a look at the cover of the Endocrine Society guidelines, Doctor.

A. Yes.

Q. Where it says "Cosponsoring Associations," it says the World Professional Association for Transgender Health was a cosponsoring organization.

You see that; right?

A. Yes.

Q. Now, looking at the authors, do you recognize any of the authors of this guideline as being WPATH members?

A. Yes.

Q. Which ones?

A. So in terms of people that I recognize as having been involved in WPATH, Peggy Cohen-Kettenis, who is also very involved with the APA revision of the *DSM-5* and World Health

Organization ICD-11. Walter Meyer had been involved -- has been involved in WPATH. Steve Rosenthal has been involved in WPATH. Joshua Safer, Vin Tangpricha, G. T'Sjoen have all been involved in WPATH.

So it's not unusual for the people whose academic focus is any given field to be part of multiple professional efforts, you know, around that, but these certainly overlap with people who are members of WPATH, as well as these other associations.

Q. And these other associations, Doctor, I think you mentioned a few. Could you repeat those? I think you said the --

A. Oh, I was saying this says cosponsoring organizations, and I assume -- I don't -- this is not an endocrinologist. I don't know, you know, where each of these folks are also members, but I assume -- you know, this was Endocrine Society of North America, but I assume that some of these people are also active in the European Society of Endocrinology, in the European Society for Pediatric Endocrinology, and the Pediatric Endocrine Society.

So all I would say is people who are experts in the field are often drawn in or invited into efforts from different organizations when it comes to practice guidelines.

Q. Understood.

You yourself, I think, mentioned that you work with the American Psychiatric Association --

A. Yes.

Q. -- on gender-affirming issues? Did I get that right?
A. Yes.
Q. Now, Doctor, if we turn to page 14 of that document. On the bottom right, that's the number I'm referring to.
Let me know when you are there.
A. So -- okay. 14.
Q. Yes, under "Evidence," the paragraph --
A. Yes.
Q. -- that says: *Individuals with gender identity issues may have psychological or psychiatric problems.* Then it goes on to say: *Examples of conditions with similar features are body dysmorphic disorder, body identity integrity disorder...or certain forms of eunuchism...*
Do you see that, Doctor?
A. Yes.
Q. So you'd agree with me that someone responsible for diagnosing gender dysphoria needs to be able to separate the diagnosis of gender dysphoria from these other similar disorders with similar features?
A. Well, I would -- I would say I would disagree with the little part of this statement that says they have similar features. Maybe the similarity is that they are -- might be involved with perception of the body. But the part I would agree with is that, yes, a clinician, you know, in making any diagnosis also excludes other possibilities.

Q. And you'd agree with me that that clinician should be experienced; right?
A. Yes.
Q. And that clinician should be careful in making the diagnosis; right?
A. Well, you know, we should certainly be careful in everything we do as clinicians. So, you know, I would agree with that.
Q. Fair enough.
You'd agree with me that someone with only a handful of hours of training should not be responsible for making a diagnosis of gender dysphoria?
A. So licensed clinicians have more than a handful of hours of training. You have to do hundreds -- even if you are a licensed clinical social worker, a licensed marriage and family therapist, you have to do hundreds and hundreds of hours of training in mental health. And so -- I mean, there may be some people who only have a few hours of training going to a conference that focuses on transgender health, but they're trained, you know, in making diagnoses from -- you know, from the other parts of the practice in order to be licensed.
Q. So you have a mental health counselor. That mental health counselor goes to one of the trainings that you've put on in Miami or San Francisco, just the one.
You'd feel comfortable with that person making a diagnosis

of gender dysphoria?
A. So it's a little bit of a complicated question because --
Q. It's a yes-or-no question.
A. No. So, first of all, when we have those conferences, we -- they were part of a certification process, which was attending several conferences, having supervision with a mentor where one could discuss cases, taking an exam. So that certification process is -- is much more extensive than just going to one conference.

In order to make a *DSM* diagnosis by yourself, people have to get licensed, and you get licensed in making, you know, a diagnosis through -- you know, through much experience.

WPATH Standards of Care has another set of recommendations, which are, you know, practice guidelines recommendations, and they recommend that people be -- have knowledge and experience in making the diagnosis.

So certainly we would support people who make the diagnosis having knowledge and experience. So that's just -- maybe I'm just being a picky academic.
Q. Understood.

Doctor, can we go to page 15 of that document that I gave to you, the column on the left under "Evidence"?
A. Yes.
Q. Now, it says here, second sentence in that paragraph: *However, the large majority (about 85%) of prepubertal children*

with a childhood diagnosis did not remain GD/gender incongruent in adolescence.

Do you have any reason to disagree with that for prepubertal children?

A. Yes. So, first of all, this was before the one large American prospective study happened from Kristina Olson and her group.

So the -- the information that backs this up are these three older studies. But even the -- the Dutch study that very often people are relying on, the Steensma 2013 study on factors relating to gender identity, even that study says there's a heterogeneity to the population of gender-nonconforming youth, and they attempted to find factors that could be associated with those people persisting.

So -- anyway, the -- you know, the other thing I would say just about this is this is all about a prepubertal phenomenon and not affecting those who have a gender -- who get a gender dysphoria diagnosis in adolescence and adulthood, which is not given until after the start of puberty.

Q. So you disagree with this statement because the science is evolving on this issue?

A. Yes.

Q. Understood.

If we go to recommendation 1.4, which is just slightly higher on that same page --

A. Yes.
Q. -- it says: *We recommend against puberty blocking and gender-affirming hormone treatment in prepubertal children with GD/gender incongruence.*
Do you agree with that recommendation?
A. Yes.
Q. So for prepubertal children, we shouldn't be expecting them to get puberty blockers; right?
A. Right. Well, it wouldn't do anything anyway because puberty hasn't started.
Q. Okay.
A. But, yes, we wouldn't give them puberty blockers.
Q. And then you brought up the Olson study.
A. Yes.
MR. JAZIL: Can we go to Plaintiffs' Exhibit 140, please?
THE COURT: Mr. Jazil, when you're changing gears, we need to take a lunch break in here somewhere. Is before the next document as good a point as any? If you're close to finishing, we'll finish.
MR. JAZIL: Your Honor, if I could just have a couple of minutes with this next document, and then we can take a break.
THE COURT: Sure. Sure. Tell me the number again.
MR. JAZIL: Plaintiffs' Exhibit 140, Your Honor.

BY MR. JAZIL:
Q. Now, is this the study you were referencing, Doctor?
A. Yes.
MR. JAZIL: Can we go to Table 3 in this study, which is on page 4.
Can you blow up the first -- can we make the first row a little bigger and the headings.
There you go.
IT STAFF: Any better?
BY MR. JAZIL:
Q. So, Doctor, looking at this table, it looks like the sample size in the study was 317 individuals; right?
A. Yes.
Q. And 92 of those individuals were already on puberty blockers; right?
A. At the end of the study.
Q. And 98 were on cross-sex hormones?
A. Yeah. At the end of the study, yes.
Q. Okay. So here we're talking about a study that looked at kids who weren't necessarily prepubertal, were they?
A. They were prepubertal when they started the study, and it's a longitudinal study. So at the end of the study, some had already gone on puberty blockers, some had already gone on gender-affirming hormones over the several years of the study.
Q. Now, Doctor, when someone begins using puberty blockers,

are they, in your experience, likely to desist?
A. So the people who are -- in my experience, who have been started on puberty blockers by and large have persisted in transgender identity.
Q. What percentage of people who start with puberty blockers go on to take cross-sex hormones?
A. So it kind of depends on the study, but certainly, the great majority of people started on puberty blockers go on to cross-sex hormones.
Q. Is that number greater than 90 percent based on those studies?
A. So, yeah, I -- in -- certainly if you look at the Dutch series and the overwhelming -- the overwhelming majority of people, you know, go on to cross-sex hormones.
Q. So you'd agree with me that desistance rates are low when someone has been on puberty blockers or cross-sex hormones; right?
A. So of the people who start puberty blockers or hormones, remember, are people who then have received a diagnosis of gender dysphoria of adults -- of adolescents and adults are likely to persist, and that these are a different population than people who have received -- especially the GID of childhood diagnosis in the past.
Q. Doctor, when we're looking at a study like this, wouldn't the study be better -- be of a higher quality if we could

control for the ratio of folks who are on puberty blockers and cross-sex hormones and those who aren't?

A. Well, when the people -- everyone who is started in this study was prepubertal when they were started on this study. They are just following people for years, and so people do, you know, eventually hit puberty and go on puberty blockers, and so -- but there was another interesting thing with this -- with Olson's group where they tried to -- they did psychological testing and found that with other children within the study or within -- you know, or in the early period of time within the longitudinal study, and they found that -- that presocial transition -- basically, they could predict the kids more likely to socially transition because they were more likely to have a cross-gender identity even before they socially transitioned. And so they were -- Olson's group was really trying to tease out kind of chicken-and-egg problems.

Q. One last question before lunch.

A. Yes. Okay.

Q. We've talked about prepubertal children.

A. Yes.

Q. For most children, doesn't puberty hit somewhere around the 12-year-old range?

A. For many children, but for some assigned female at birth, it can be early, and it's getting -- it's interesting it's a little earlier in the United States than in Europe and -- yeah,

so it can be earlier, especially for some people assigned female at birth.

MR. JAZIL: Your Honor, we can go to lunch, if that's okay with Your Honor.

THE COURT: Yeah. We'll take the lunch break.

Tell me, how much longer do you think you have with Dr. Karasic?

MR. JAZIL: I'd like to think 30 minutes, Your Honor. I'll try to be short.

THE COURT: Then the rest of the day is a couple more experts; is that the plan?

MR. GONZALEZ-PAGAN: Yes, Your Honor. We have at least one more expert for today, and we have another one on call.

THE COURT: All right. When you made openings, you didn't give me much of what you really expect. You expect experts for the foreseeable future?

MR. GONZALEZ-PAGAN: We do have five more experts, Your Honor, but they will be more targeted. We wanted Dr. Karasic to do more of an introduction to the whole topic.

THE COURT: All right. Let's take -- it's your first day finding your way around town. Let's take an hour and two minutes. Let's start back at 2:10 by that clock.

Dr. Karasic, if you'll be back on the witness stand by 2:10, please.

(Recess taken at 1:07 PM.)

(Resumed at 2:11 PM.)

THE COURT: Please be seated.

Dr. Karasic, you are still under oath.

Mr. Jazil, you may proceed.

MR. JAZIL: Thank you, Your Honor.

BY MR. JAZIL:

Q. Dr. Karasic, can we go back to the Endocrine Society guidelines?

A. Sure.

Q. If we can go back to page 15.

We talked about the statement in here about the large majority of children who remain GD incongruent.

If we go down to that paragraph, the last sentence says: *Social transition (in addition to GD/gender incongruence) has been found to contribute to the likelihood of persistence.*

Do you see that, sir?

A. Yes.

Q. Do you agree with that statement?

A. No. No. First of all, there is more data from Kristina Olson's group that -- one of things they did is psychological testing on children prospectively, and they found that social transition appeared to be more consequence of the prepubescent child's gender identity as opposed to the social transition preceding the expression of their gender identity.

Q. So, Doctor, if someone's peers accept them as a transgender person, that's something that we can categorize as an environmental factor, right, the environment the person is in?
A. Well, if they're a transgender person, being accepted and respected by their peers can be a positive factor for that --
Q. Okay.
A. -- for that person.
Q. So can we also then say that those positive environmental factors can contribute to a person's persistence in continuing to identify as they are?
A. Well, I don't think we know that. I think from the Olson group, when they actually followed people prospectively, that the gender identity preceded the social transition as opposed to vice versa.
Q. Let me ask it another way.
Do environmental factors play a role in persistence or desistance?
A. So the environmental -- can you explain what you mean when you say "environmental factors"?
Q. Well, let me ask you a couple of questions about that.
A. Okay.
Q. We agree that social acceptance is an environmental factor; right?
A. That social acceptance is an environmental factor, yes.
Q. Is social rejection an environmental factor?

A. Yes.
Q. Can we say that social media is an environmental factor as well?
A. Well, yeah. I mean, it can be. Certainly exposure to things on social media, it can be part of one's environment.
Q. Okay. And one's environment can play a role in persistence; right?
A. So I don't -- as I said, I don't think we know that. As I said, the Olson group's research kind of showed that even before social transition and, therefore, before people were -- before a child is even getting people accepting or rejecting their social transition, that they already had the cross-gender identity that -- the identity, you know, different from their sex assigned at birth.
Q. Understood.

Now, Doctor, in your practice do you counsel patients on the use of puberty blockers?
A. So I -- in my practice I'm not seeing prepubertal children. I -- there are sometimes adolescents who get started on puberty blockers as kind of a transition into hormones. But I'm not -- I'm usually -- by the time I see somebody, they are well past Tanner Stage 2, for example.

So there are times when I will, though, advise people who are a little bit past Tanner Stage 2 and their parents about puberty blockers.

Q. Okay. And when you are talking to these folks about puberty blockers, you walk through the side effects of puberty blockers with them as well?

A. Yes.

MR. JAZIL: Okay. Can we go to page 18 on this document, DX24, left column under Side Effects.

THE WITNESS: Is this a different -- which document is this?

BY MR. JAZIL:

Q. It's the Endocrine Society guidelines.

A. Okay. I'm sorry. What page?

Q. Page 18, on the bottom right.

Now, the first sentence: *The primary risks of pubertal suppression in GD/gender-incongruent adolescents may include adverse effects on bone mineralization (which can theoretically be reversed with sex hormone treatment), compromised fertility if the person subsequently is treated with sex hormones, and unknown effects on brain development.*

Do you walk through these side effects with your patients as they are coming to you for counseling on whether or not to be on puberty blockers?

A. So when -- if a patient is going on puberty blockers, we do talk about bone mineralization. I'm not the person prescribing, but we do talk about that. We do talk about fertility.

We -- there's not a lot known one way or the other about

brain development, so that's not usually -- that's not known as a risk; it's more a question.

MR. JAZIL: Okay. Can we go to the next page, 19, top left.

BY MR. JAZIL:

Q. It says: *Limited data are available regarding the effects of GnRH analogs on brain development.*

So you agree that there is limited data on that issue, right, Doctor?

A. Yes.

Q. But it goes on to say that: *...animal data suggest there may be an effect of GnRH analogs on cognitive function.*

Do you broach that issue with your patients as they come to you for puberty blocking counseling?

A. No. You know, I think it's consistent with my counseling generally, which is if something has been shown in animal models, but there's not some evidence in people -- unless I'm counseling pet owners, I suppose. But I'm not -- yeah. I don't -- I can't think of another example where I counsel people because an animal model has, you know, said there is a problem.

But, you know, for any -- I'm not the one prescribing puberty blockers. But for any medicine I am prescribing, I always talk about risks and benefits.

Q. Now, Doctor, you are not a surgeon, either; right?

A. No, I'm not a surgeon, either.

Q. Now you do counsel patients who get gender-affirming surgery; right?
A. Yes. So I do talk about both hormones and surgery with people.
Q. So if we could go to page 29 of this document, Doctor, bottom right.
Heading 5, the second sentence in the first paragraph says: *The type of surgery falls into two main categories; those that directly affect fertility and those that do not.*
Do you agree with that, Doctor?
A. I mean, certainly that's one way to categorize them.
Q. And then it goes on -- the third paragraph down says: *Surgery that affects fertility is irreversible.*
Do you counsel your patients about surgery that affects fertility being irreversible?
A. Yes. In terms of a patient getting, for example, an orchiectomy or -- with a hysterectomy nowadays a lot of people are maintaining an ovary. But certainly with an orchiectomy the people are not going to be able to, you know, maintain fertility.
Q. So if you look at the first sentence of the paragraph that follows: *Gender-affirming genital surgeries that affect fertility include gonadectomy, penectomy, creation of a neovagina --*
A. I'm sorry. Where are you?

Q. It should be highlighted on your screen, sir.
A. Oh, okay.
Q. So which one did you say, Doctor, is something that --
A. Well, it's really what is -- the part that's really affecting the fertility primarily is the gonadectomy or orchiectomy in transwomen.
If the presence or absence of a penis or the creation of a neovagina is not directly what eliminates the chance of fertility, it's that the person doesn't have testes anymore.
Q. And, Doctor, as you are counseling patients on surgeries, do they ask you questions about the long-term quality of life associated with the surgeries?
A. Well -- can you rephrase the question? I'm not quite sure what -- you are saying the patient asks me about their long-term quality of life?
Q. Yeah. Will the surgery improve my long-term quality of life? Will it adversely affect my long-term quality of life? Do you have those conversations with your patients?
A. We have those conversations. The patients usually don't ask me whether, let's say, having vaginoplasty is going to improve their quality of life. They have usually, you know, kind of thought about it one way or the other, you know, even before. But we have a conversation about the risks and benefits of having surgery.
Q. Okay. So if we go to page 31, Doctor, of that document,

the last sentence of the first paragraph: *We need more studies with appropriate controls that examine long-term quality of life, psychosocial outcomes, and psychiatric outcomes to determine the long-term benefits of surgical treatment.*

Do you see that statement, Doctor?

A. Yes.

Q. First, let me ask you, do you agree with that statement?

A. Well, I think that more research is always welcome. And certainly even since 2017, people have continued to publish on quality of life psychosocial outcomes of surgery as well as hormones.

Q. Okay. So when you are having conversations with people who are coming to your clinic, do you talk about how, Well, we just don't have that much long-term data on whether or not this is going to improve your life or not?

A. No, because we do have a lot of data that people -- people who need gender-affirming surgery are going to benefit from it, and a lot of experience in that regard.

You know, there are issues that are risks and benefits of surgery. But I am not saying -- you know, this sentence says, we need more studies. The question is we need more studies for what? I don't think that we need more studies in order to be providing the surgery. We've been providing the surgery for almost 100 years. But certainly more research is always welcome.

And so it's certainly, you know, my place to discuss with a patient, you know, the risks and benefits of whatever procedure they are going through. But I'm not saying to them, We need more research on what your long-term quality of life is going to be after surgery.

Q. Understood.

MR. JAZIL: We can take that down.

BY MR. JAZIL:

Q. Doctor, when you were being questioned by my friend, do you recall being asked about the state of the scientific literature on the availability of gender-affirming medical care?

A. Yes.

Q. And do you recall some testimony about how it would be nice to have randomized controlled trials, but we just can't do it?

A. Yes.

Q. So in the abstract, you would agree with me that randomized controlled trials are the gold standard for scientific research; right?

A. Well, it's -- randomized controlled trials give a particular kind of information. But we are providing care all the time without randomized controlled trials. Working with youth, most of the prescriptions I give of psychiatric medicines are medicines that have never been tested on minors and not FDA approved on minors, do not have -- they had a randomized control trial in adults, but sometimes they don't work as well in minors

as adults, even when there is finally a randomized controlled trial.

So we are always prescribing in a world where information is incomplete, and we are trying to use the best information we can.

Q. And did I understand your testimony correctly earlier where you said that randomized controlled trials in this area would just not be ethical?

A. Right. Because at this point we couldn't -- we already know that hormone blockers block puberty. And we already know that masculinizing and feminizing hormones masculinize or feminize the body. There is plenty of data for that.

The question that people are continuing to do studies are about its impact in other ways.

Q. Understood.

Doctor, I'd like to show you an article.

MR. JAZIL: Defendants' Exhibit 28, please, the title page.

THE WITNESS: Yes.

BY MR. JAZIL:

Q. Doctor, are you familiar with this article?

A. I actually have seen this article, just very briefly. It just was released. I think they actually did the systematic review in Sweden some time ago, but just did this publication in English just extremely recently.

Q. Are you familiar with any of the authors listed here?
A. No.
MR. JAZIL: If we could zoom out.
BY MR. JAZIL:
Q. Can you see the institutions that they are associated with, Doctor?
A. Yes.
Q. And are you familiar with these institutions?
A. Yes, particularly -- well, Columbia University, but also Karolinska Institutet.
Q. Are these reputable institutions that study gender dysphoria and gender dysphoria treatments?
A. Yes.
But, I mean, when we talk about Karolinska Institutet, I was just in a conversation with Cecilia Dhejne, who started the gender program there and is still there after all these many years, who I think agrees with some of the criticism that I gave early about the limitations of, you have a systematic review, and say the data is not as high certainty as one would like. But it does also seem like sometimes these articles have been coming out like in Florida as part of an effort to actually shut down gender-affirming care.
Q. So, Doctor, let me ask you about a particular point raised in this article.
MR. JAZIL: If we can look at page 13 of 27, please?

The second paragraph, *Our review highlights*.

BY MR. JAZIL:

Q. Doctor, where it says: *First, randomized controlled trials are lacking in gender dysphoria research*, we can all agree that's true; right?

A. Yes.

Q. The second sentence that follows says: *We call for such studies, which may be the only way to address biases that we have noted in the field.*

Then it goes on to say: *Given the current lack of evidence for hormonal therapy improving gender dysphoria, another ethically feasible option would be to randomize individuals to hormone therapy with all the study participates, independent of intervention status receive psychological and psychosocial support.*

Do you see that, Doctor?

A. Yes.

Q. Do you think that's one way to get to better, more high-quality studies on the efficacy of gender dysphoria treatment?

A. Well, I think that that is -- you know, so the one proposal is providing psychological and psychosocial support to -- so this is saying randomized individuals to hormone -- so hormone therapy to all study participants, independent of intervention status.

So are they saying giving people hormones and not giving people hormones, but giving everyone psychotherapy? I'm not quite sure exactly what they mean in this proposal.

Q. Doctor, I think if you read the next sentence, that may give you more guidance.

However, controlled trials do not necessarily require placebo treatment, but could for example build on the date or time of starting hormonal therapy to generate comparison groups.

A. Right.

Q. Is that one way to build control groups that would give you better high-quality data?

A. Well, you know, I think that's an approach, but I also think, you know, given what I talked about -- you know, this is based on a systematic review that it does -- when we are talking about complexity, you know, you can be talking about efforts to reduce the complexity of the intervention, but I still don't think that you're going to get high certainty on systematic review given the complex intervention.

Q. Fair enough.

Doctor, you testified about the work you do for Maximus?

A. Yes.

Q. Do you recall that testimony?

A. Yes.

Q. And my understanding is that Maximus is subcontracting with the State of California; right?

A. Yes.
Q. And Maximus gives you a set of files for individuals who were denied coverage for gender-affirming care; right?
A. Yes.
Q. And your job is to review those files and decide whether or not to change the initial determination of denial; is that right?
A. Right.
I'm supposed to make a determination of whether there's an -- there's a question as posed about medical necessity, and I'm supposed to answer that request.
Q. Okay. And, again, my understanding of your early testimony is that because of your experience in the field, you get the difficult cases?
A. Yes.
Well, what's happened is in the beginning I got a lot of denials. Years ago I was getting a lot of denials, simply because insurance companies in their bureaucracy had not updated their, you know, systems for approving or denying surgery where people were, you know, clearly -- and under California law they qualified for care, were receiving denials and then they appeal, and it was a very easy thing.
Over the years, there are fewer and fewer of those. And the ones I'm getting are actually more likely to be quite challenging in terms of the medical necessity.

Q. And, Doctor, correct me if I'm wrong, but you recommended that the treatment be made available to the individuals who were initially denied in about 80 percent of the cases?
A. I said in the deposition 70 or 80 percent. But if I would -- I guess you might -- I'm not sure if it's since the deposition, but the ones that I've done in recent times -- I've just done four recent ones, and two were denials -- and two were I said it was medically necessary, and two I said it was not medically necessary, in my most recent ones.

But early on, I would get a whole slew of them where there didn't seem to be any reason for the insurance company to be denying it. And so my percentage of approval started out very high, and it's gradually been going down, because I think the insurance companies are now approving more of the appropriate ones, and the denials tend to be ones that are -- where there is a little more question.
Q. Understood.

I have one last set of questions. And I want to make sure I understood your testimony correctly on this.

You testified earlier that you were on the APA, the American Psychiatric Association, Work Group on gender dysphoria?
A. Yes.
Q. And while you were on that Work Group, the APA endorsed the WPATH Version 8 Standards of Care, if I've got the chronology

right?
A. So I'm not involved in -- our Work Group is not involved in position papers or endorsements of the APA. That's a separate process. Our charge as the Work Group on gender dysphoria was, basically, what's the research. There were two position papers, one before I joined the Work Group and one after -- not position papers. I'm sorry -- research papers that basically discussed, you know, issues and care for psychiatrists, and which, within this kind of big APA, it's just a totally different track than the assembly and work trusties kind of track of approving the statement.

So there were times when I might be in touch with a scientific committee about something, but it was not about the position papers of the APA.

Q. Understand.

But the APA did endorse the WPATH Version 8 Standards of Care?

A. The APA has, in various documents, endorsed the use of WPATH Standards of Care and the provision of gender-affirming care in various statements, and has opposed discrimination against transgender people in the provision of health care.

I don't -- if they've -- I don't think they've specifically endorsed Standards of Care 8. They may have, because I'm not, kind of, involved in that kind of wing of the APA. Standards of Care only came out in September, and the APA usually doesn't

move that fast.
Q. They endorsed the Version 7 Standards of Care?
A. Well, it was in multiple documents, including our research papers and elsewhere, about, you know, referring to WPATH Standards of Care as -- for practice guidelines by the APA.
Q. Okay. And when the APA in various documents says that the Version 7 or Version 8 Standards of Care are to be considered as a clinician, do they send out a membership email blast? Do you know?
A. They usually -- APA doesn't usually send out a membership email blast, so I'm not -- I mean -- yeah, I'm not aware that they -- that they did. I'm just thinking of, you know, things like research papers and things like that that -- if they talk about transgender care, that they -- they refer to the WPATH Standards of Care.
Q. And these resource papers would be on the membership part of the website for the APA?
A. Well, for example, you know, I mean, I'm familiar with a resource paper that I was involved in, and a version of that got published in *Transgender Health*, which was openly available to everyone. There was a version that -- a shortened version that was in *American Journal of Psychiatry*, which is the journal owned by the APA. And then within APA there resides kind of a resource document on considerations in transgender care that also was a result of that document.

And then there was a document a few years earlier, before I was on the committee, that was published as an article and that also I think is a resource document for the APA.

Q. Do you know how many people at the APA are responsible for putting these resource materials up?

A. No.

MR. JAZIL: I have no further questions, Your Honor.

THE COURT: Redirect?

MS. DeBRIERE: Yes, Your Honor, just a few.

REDIRECT EXAMINATION

BY MS. DeBRIERE:

Q. Dr. Karasic, at the beginning of my friend's cross-examination, he was talking about the process for approving the Standards of Care 8.

Was approval by the board the only step taken to develop the Standards of Care 8?

A. I'm sorry. Can you repeat the question?

Q. Was approval by the board the only step taken to develop and adopt the Standards of Care 8?

A. No, there was a hands-off quality between the board and the Standards of Care committee -- the editors and the committee, and the board was involved initially in appointing the -- the editors, and then they were involved at the end in approving the documents.

And there were members of the board who were also members

of various Standards of Care 8 committees, but they weren't operating as board members. They were just experts, you know, in a particular field. But the board did not -- did not -- right, just -- was just -- had that initial appointment of editors and then final approval of the document, and everything that went on with the Standards of Care really were -- the three editors were the bosses.

Q. Were the authors adopters of Standards of Care -- Standards of Care 8, did they consider divergent viewpoints in developing and adopting the Standards of Care?

A. Yes. You know, Dr. Levine and others often will mention Laura Edwards-Leeper, and she was one of the only people -- there may have been one other -- who was on both the adolescent committee and the child committee. So, you know, somebody who the defendants' experts, you know, make reference to was on the Standards of Care adolescent committee, which is the most controversial committee, in a sense, because you did have these laws being passed or these, you know, debates about denying care to adolescents that were already kind of rumbling near the end of the process.

So, yes, there was a -- quite a -- there was an agreement, I think, among people who are on the committee about the utility of gender-affirming care, but there were also, you know, disagreements on all kinds of things.

And the Standards of Care's use of the Delphi process,

where recommendations were put to a vote, and everyone voted and also commented on any potential changes they would make -- if it got 75 percent, the statement, in essence, could stay, and if it got less than 75 percent, then it could be resubmitted, but only in an altered way, to Delphi, taking into account the comments. And so there was a process for resolving those kind of differences.

And then near the end of the process, there were two things. One was the Standards of Care were revealed publicly and actually as just -- you know, being chapter lead on the mental health chapter, some of it I saw for the first time at that time, and it got public comment. And so then public comment was incorporated.

And there was also an effort with the editors to bring together people on the various chapters to -- you know, if an inconsistency was found between something that was said in one chapter and something that was said in another.

Q. My friend also mentioned a Dr. Hilary Cass and whether --

A. Yes.

Q. -- she was involved in any of this process.

To your knowledge, does Dr. Cass provide gender-affirming care?

A. No, not to my knowledge. And I had never heard of her when we were actually doing this process, you know, most of which took place years ago and -- because she wasn't somebody -- I

think she was, you know, just somebody within DNHS and not somebody providing transgender help.

Q. How did you -- as the chapter lead, what was the process for selecting the authors?

A. So we had a whole pile of PDF -- virtual pile of PDFs of people's CVs, very impressive people, and I met with the three editors, and we went through the CVs. And we -- we definitely wanted people who were experts and also people who were leading efforts for gender care, in this case mostly psychiatrists in various systems, and so that's -- you know, we had experts from different places.

Q. How did you obtain those CVs?

A. So there was a -- WPATH had sent out a call for CVs for people who wanted to be involved in the effort.

Q. Did Hilary Cass submit a CV?

A. No.

Q. Did any of the other applicants my friend was discussing during your cross-examination --

A. No, Stephen Levine did not submit an application to be involved in Standards of Care 8.

Q. We discussed a bit about Cecilia Dhejne and your conversations with her and her viewpoint on gender-affirming care.

Did defendants at any time, their experts, rely on Dhejne's research in their own expert reports?

A. So did you say did the defendants rely on Cecilia Dhejne?
Q. Yes.
A. Yes.
Q. Okay. Shifting gears a little bit, what's your response to defendants' assertion that once an adolescent receives puberty-delaying medications that they're put on this conveyer belt of care and then they won't receive hormone therapy and, inevitably, surgery?
A. Yeah. So it's not true. For some reason it always brings into mind the "I Love Lucy" chocolate factory where Lucy and Ethel are stuffing, you know, the conveyer belt. To me, it's not an analogy that's relevant at all.

First of all, if you look at -- that criticism was often done in England where the wait for youth to be seen in the adolescent gender clinic -- that there was a three-year wait for the child in the adolescent gender center. So that doesn't seem to me like a very sufficient conveyer belt.

And then, secondly, once you get care, you have to continue, you know, taking the care. Presumably, the people who continue care are not trapped on a conveyer belt. They are feeling better, and if they are feeling worse, then they, you know, would stop the medication. And I gave the example of participants who had second thoughts and stopped the process for their kid. And you know, parents can do that.

Q. Judge Hinkle asked if there are transgender people who are

perfectly comfortable living as they are.

To get a better understanding of that, what is your view of how a transperson would be impacted if they are not able to live consistently with their gender identity?

A. Right. I guess I was a little confused. Just in the area of, like, living as they are, it could be living as they are when they're already living in a gender other than their sex assigned at birth.

It could be, you know, the people out there that I don't see who have endorsed on a phone survey that they have a transgender identity, and we don't know if they have clinically significant distress because they haven't presented to doctors.

Did I -- am I on the right track? I'm not quite sure.

Q. How would an individual be impacted if they weren't able to live consistently with their gender identity?

A. Right. And so for people who are needing to transition and when a halt is put to that, there can be tremendous distress, and that's something I've witnessed with many of my patients who have had -- one circumstance or another has kept them from social transition, from hormones, from surgery. And I've had patients who have suffered tremendously, patients who made suicide attempts as a result, people who have just had prolonged, you know, misery as a result.

And so I would say that's not something I would -- you know, I don't think that's, like, a reasonable option, to just

deny people from -- you know, from living as they need to live.
Q. Are there transpeople who do not have gender dysphoria because they can live consistently with their gender identity through social transition --
A. Yes.
Q. -- without gender-affirming medical care?
A. Yes. And so -- you know, I was talking about the example I see most often with people who are nonbinary identified, and I see some young people for depression or anxiety who are -- have a nonbinary identity and are not desiring hormones or surgery, at least at this time. You never know in the future.
Q. And others are able to live consistently with their gender identity with the use of medications --
A. Yes.
Q. -- or surgery?
A. Or surgery, yeah.
Q. So what is the predictable effect, then, in your opinion, of a transperson -- transgender person not being able to live consistently with their gender identity?
A. Suffering.
Q. Just a few more question, Dr. Karasic.
Are side effects unique to gender-affirming medical care?
A. No. And, you know, when the bone mineralization thing came up, I think about antidepressants. There are a number of studies that show that people who have been on antidepressants

after the age of 55 have higher rates of hip fractures, and yet not much is really even discussed, I think, with most patients about that fact.

So, you know, there are side effects to every -- or, you know, one that has gotten more attention is -- that what -- and involves my work is young people getting antidepressants, that for people under 24, antidepressants can cause increased suicidal ideation, and we always talk about that with our young people, that -- you know, we're making the judgment with the parents that giving them the antidepressant is going to do more benefit for them than harm, but there's always a chance it could make them suicidal and, you know, that they could end up, you know, needing to be hospitalized as a direct result of my prescription. So it's something we live with -- you know, doctors live with -- with every intervention we do.

Q. Are there any other types of medical care that may impact fertility?

A. Yes.

Q. Does the existence of that mean that the care should not be recommended?

A. No.

Q. And then, finally, my friend read select passages from the Endocrine Society guidelines.

But those guidelines taken as a whole, do they recommend gender-affirming medical care when medically necessary?

A. Yes.

MS. DeBRIERE: That's all I have, Your Honor.

THE COURT: Dr. Karasic, I have several questions.

THE WITNESS: Okay.

THE COURT: Mr. Jazil asked you a question about the reference in the Endocrine Society paper --

THE WITNESS: Yeah.

THE COURT: -- what everyone calls that track, that referred to animal studies.

THE WITNESS: Yeah.

THE COURT: And you said something about you're not a veterinarian. If they were bringing you their pets, it would concern you.

I take it whoever did this animal study wasn't trying to determine the effect of these hormones on the animals. They were trying to determine the effect of -- puberty blockers, I guess, not hormones.

THE WITNESS: Yes.

THE COURT: They were trying to determine the effect of puberty blockers on people.

THE WITNESS: Yes. And -- so I apologize for being glib. I actually saw a presentation that could be the one that was referred to. I think it was at the WPATH conference in 2009 in Oslo. And it was -- they had sheep who were going through puberty, and they had puberty blockers, and then they dissected

their brains and were looking at comparisons of people's brains.

The thing is that there are potential side effects of all kinds of drugs in animals where we don't know that that affects people, and we don't warn people about potential animal side effects unless we really have a sense that this is -- that there's substantial evidence that's going to cross over. For --

THE COURT: I get it --

THE WITNESS: Yeah.

THE COURT: -- not everything that affects animals affects people.

THE WITNESS: Right.

THE COURT: Lots of studies are done using animals, and sometimes that carries over; sometimes it doesn't --

THE WITNESS: Yeah.

THE COURT: -- sometimes the dosages are different. I understand you have to be very careful with this.

THE WITNESS: Yeah.

THE COURT: But I have to tell you, as I listened to that exchange --

THE WITNESS: Yeah.

THE COURT: -- I think if I'd been the parent deciding -- helping to decide for my 12-year-old --

THE WITNESS: Yeah.

THE COURT: -- what I was going to do, I wouldn't be very pleased if I found out later that there was an animal study

that at least had this and the doctor didn't even tell me.

THE WITNESS: Yeah.

THE COURT: I think what I would have expected the doctor to say is, We've got this animal study. We don't know how it carries over.

THE WITNESS: Yeah.

THE COURT: It's not something that concerns me, but it's there.

THE WITNESS: Yeah.

THE COURT: But if I understood what you told me, you don't tell people about this at all.

THE WITNESS: Well, first of all, I am not usually the person counseling people for puberty blockers at the start of puberty, which is when this happens. So it's not part of my usual practice. I see post-prepubertal adolescents.

So there can be -- puberty blockers are sometimes used up even through age 17 even alongside -- sometimes they start people on puberty blockers, and then they add in hormones even when people are past Tanner Stage 2.

And that is the kind of more common experience with my patients, because I'm not seeing the prepubescent children that are then being, you know, followed for when they start puberty. So I'm not usually in that situation to give that kind of counseling.

But the -- it is true that there are kind of a legion

of side effects for almost any drug that we give, and what I do prescribe all time and where I'm the -- because I'm the prescriber, I'm the main responsible person for prescribing -- for talking about risks and benefits.

Every psychiatric medicine I prescribe has a list of potential side effects that's so long that it is up to me to try to filter out what's relevant in part of the discussion, and I can tell people that, you know, of course they can read more on it. But, you know, it's like if you watch a commercial for medication, there's this long list. Well, if you say the actual list of things that are possible, it is actually even much longer and so --

THE COURT: I get it.

THE WITNESS: I don't know if -- I just don't know if I would tell -- you know, discuss an animal model unless I felt that that was -- that there was some reason to connect it.

And I think the same -- in the same passage they said, you know, the one -- a study in people did not show a cognitive difference.

THE COURT: Or at least on executive function.

THE WITNESS: On executive function.

THE COURT: I'm not going to get down into the weeds about --

THE WITNESS: Right, right, right.

THE COURT: -- whether that's different than

cognitive.

Let me ask you about something else.

There was some discussion back and forth about what may be described rather imprecisely as detransitions.

THE WITNESS: Yes.

THE COURT: I take it that there are some people, some kids, who start on puberty blockers, and at some point they go back to the gender identity matching their natal sex; true?

THE WITNESS: Probably, yes. There have not -- there are not a lot of them.

THE COURT: Well, I'm not talking about how many. I understand --

THE WITNESS: Okay. Sure. Yes.

I would say -- I would say it's probably true.

THE COURT: There are examples; people have testified to it; right?

THE WITNESS: Right.

No, I think that's true that somebody -- you're saying somebody goes on puberty blockers, and then when they are still in puberty, they decide to stop because -- yeah, I think that's true.

THE COURT: There are some people who -- we'll just pick one gender to start with -- sex assigned at birth is male.

THE WITNESS: Right.

THE COURT: They identify as female.

THE WITNESS: Yes.
THE COURT: They see a doctor; they start gender-affirming care.
THE WITNESS: Yeah.
THE COURT: And at some point the person then identifies again as male.
THE WITNESS: Yes.
THE COURT: That happens?
THE WITNESS: Yeah. Yes.
THE COURT: And the other way around, too?
THE WITNESS: Yes.
THE COURT: Somebody natal sex, female identifies as male.
THE WITNESS: Yes.
THE COURT: Goes back --
Is that always the result of one of the two things I'm going to describe?
The first, I think you referred to change in gender identity?
THE WITNESS: Yeah.
THE COURT: So I take it a person can identify and then change their identification?
THE WITNESS: Yeah.
THE COURT: The second would be malpractice, or close to it; a doctor that fails to ask all the questions and do the

treatment and get it right, so start somebody that shouldn't have been started in the first place.

Is it always one of those two things?

THE WITNESS: Well, no. The example that I gave was one where the adolescent did not change her gender identity, but the parents decided that they didn't want to support it. And that was -- that's the one patient that I've had that has had that experience.

THE COURT: I would not --

THE WITNESS: So there might be a third.

THE COURT: I would not have included that in my description. I get that.

THE WITNESS: Yeah.

THE COURT: But I'm talking about the patient who really identified and got treatment and then so-called detransitions.

THE WITNESS: I would think in terms of the first case that there are some people who might identify in a binary way as trans and then later realize that they may be more comfortable identifying as nonbinary and, thus, don't want to make a binary transition.

That's as opposed to -- although I'm sure there are some -- as opposed to people who, you know, are diagnosed with gender dysphoria, have six months or more of gender dysphoria that's strong enough to be impairing, and then it just vanishes.

In my experience, when I've seen people make changes, it's more just to -- kind of a reconceptualization of how to make sense of the symptoms they have, and that some feel like a binary transition doesn't feel right for them either and chose to be identified as nonbinary.

THE COURT: So you don't think there's going to be somebody that says at, say, 12 years old, born male but identify as female, and then sometime later says, I just got it wrong. I really -- I was born male and now I identify as male? You don't think that happens?

THE WITNESS: So -- and you are saying within -- within adolescents, and then stopping the puberty blocker, or are you saying that they have regret later on?

THE COURT: I'm trying to eliminate all that.

THE WITNESS: Okay.

THE COURT: All that other stuff.

THE WITNESS: Yeah.

THE COURT: And, I mean, I may have it wrong.

THE WITNESS: Yeah.

THE COURT: You're the first witness in the case.

THE WITNESS: Sure.

THE COURT: And apparently there are going to be a lot more.

THE WITNESS: Yeah.

THE COURT: And I say that just to show we can all be

glib every now and then.

THE WITNESS: Yeah.

THE COURT: So I'm not trying to prejudge anything or say I know this.

THE WITNESS: Yeah.

THE COURT: But I think I understand the defense position to be that sometimes people come in for this treatment and get the treatment, and it turns out they shouldn't have gotten it; they were wrong, that they believed --

THE WITNESS: Right.

THE COURT: They may think -- they may assert it's from social media or from peer pressure or whatever.

But I take it that's part of the theory, that sometimes impressionable kids -- and peer pressure is a big thing when you are 12 or 13 -- that sometimes the peer pressure causes somebody to say that they identify as the opposite sex when they really don't, and later they realize that they really didn't. That's the theory.

Apparently there are some people who will testify that, Yes, that's what happened to me.

THE WITNESS: Yeah.

THE COURT: And I sort of had the impression from your testimony when Mr. Jazil was asking questions that you think that just never happens.

THE WITNESS: No, I wouldn't say it never happens.

It's -- in my experience I haven't had -- I've had patients detransition for various reasons, but they've continued to have gender dysphoria and then retransition again with gender dysphoria.

THE COURT: I understand.

THE WITNESS: But I'm not denying --

THE COURT: There is a reason why somebody would stop the treatment or whatever.

THE WITNESS: Sure.

THE COURT: But I'm talking about what -- the real subjective --

THE WITNESS: Yeah.

THE COURT: -- identity the person has.

THE WITNESS: Right.

THE COURT: So I'm saying somebody who says --

THE WITNESS: Right.

THE COURT: -- I identify as female; later comes to say, I was wrong. I really identify as male, my sex assigned at birth, and did all along, I was just incorrect.

THE WITNESS: Right.

THE COURT: And then we can talk about how often it happens and what difference it would make.

But does it happen, or are you telling me it just never happens?

THE WITNESS: I always counsel people that there's a

chance of regret. And that we -- you know, that people don't always -- doctors or patients are not always able to foretell the future, and as part of weighing risks and benefits, and for every drug, for every prescription, for every intervention we make, there's a set of risks and benefits.

For many of those, the risks are actually far more common and far more severe, even than, let's say, going on a puberty blocker and then stopping the puberty blocker where, presumably, one would resume normal puberty, like the patient that I described his parents stopped.

So no intervention is risk free. And, you know, certainly there can be people who wished they had never had gender-affirming care. It's a small minority people, but it doesn't make their experiences any less valid.

But there's also risks and benefits to everything.

THE COURT: Yeah. I really wasn't getting into that.

THE WITNESS: That's what -- I'm just -- what I mean to say is, like, the present -- the fact that there are some people who may be coming later to testify, you know, of course, their stories are important and valid. But it doesn't -- when I'm providing care for people, I'm looking at, you know, risks and benefits, including the risk of regret. But that risk has just been very small in my -- you know, in my practice, in terms of numbers of -- you know, numbers of people.

THE COURT: Well, and that is a little different than

what I was trying to get at. But that's very much what I was going to ask you about next.

You're right, there are bad outcomes in almost any medical treatment. Maybe there are exceptions, but very few. Any kind of medical treatment, there's sometimes bad outcomes. And often the medical provider can put that in some kind of a percentage. So -- and we've all had these experiences. It's kind of a common experience. But I can tell you several that I've known people involved with.

So there's a procedure where you replace a heart valve in elderly people that's too old to crack open the chest and do it the old way, and you can run a heart valve up through the leg and push the old valve out of the way and put in the new one. And there's, of course, the risk of stroke and infection and various things. And they'll tell you before they do that look, here's our experience. We get -- you know, the average in the country of doing these are 6 percent infections, and we've got our rate down to 3 percent.

They can replace your hip, and they'll tell you, Look, the biggest problem you are going to have with this is if you get an infection, it's not good. And we are running about 2 percent.

For all of us that get old enough, at some point if you grew up in Florida, or you wind up with cataracts and they'll tell you, you know, 80 percent of the people come out of

this and do fine, and 20 percent are going to wind up with halos when you are driving down the road.

THE WITNESS: Yeah.

THE COURT: Percentages. Anybody got any percentages for how many folks that go through with puberty blockers lined up with bad outcomes or less than optimal outcomes? Anybody put percentages on any of this?

THE WITNESS: Yes.

So the Dutch have been following -- because they were the first people to really use puberty blockers for children with gender dysphoria, and so they've been following people for years. And they published some data that -- of people started -- who started on puberty blockers in the program who were followed for several years, that 98 percent of them were still on hormones.

And so the Dutch, of course, are very good, careful clinicians. Does that apply in every circumstance? You know -- but I think the percentages are very high of people who -- and particularly when we are talking about -- you know, we were talking about people on puberty blockers and then going to hormones. The percentage of people who stay on hormones is very high in the information that we have.

And the Dutch -- the number that the Dutch have is 98 percent.

There was, I think, a survey -- an American survey of

people who had gone off hormones at any point that was higher, but most of those people were people who went -- who had gone off hormones for other reasons, not because they weren't -- because of a change in gender identity. And that was not done as carefully as the Dutch who were just following their whole population longitudinally.

THE COURT: Questions just to follow up on mine, Ms. DeBriere?

MR. GONZALEZ-PAGAN: No, Your Honor.

THE COURT: Mr. Jazil?

MR. JAZIL: No, Your Honor.

THE COURT: Thank you, Dr. Karasic. You may step down.

THE WITNESS: Okay. Thank you.

(Dr. Karasic exited the courtroom.)

THE COURT: Please call your next witness.

MR. GONZALEZ-PAGAN: Yes, Your Honor. Ms. Coursolle will be calling our next witness.

MS. COURSOLLE: Dr. Daniel Shumer, Your Honor.

(Dr. Shumer entered the room.)

THE COURTROOM DEPUTY: Please remain standing and raise your right hand.

Dr. DANIEL SHUMER, PLAINTIFFS WITNESS, DULY SWORN

THE COURTROOM DEPUTY: Please be seated.

Please state your full name and spell your last name

for the record.

THE WITNESS: Daniel Evan Shumer, S-h-u-m-e-r.

DIRECT EXAMINATION

BY MS. COURSOLLE:

Q. Thank you, Dr. Shumer.

Can you share your profession with the Court, please?

A. Yes. I'm a pediatric endocrinologist.

Q. Can you please summarize for the Court your education and training?

A. Certainly.

I did my undergraduate and then continued medical school at Northwestern University. Afterwards I was a pediatrics resident at the University of Vermont in Burlington. I stayed for another year as for the chief resident. Afterwards I did a pediatric endocrinology fellowship at Boston Children's Hospital. And concurrent with that I received a master's of public health from the T.H Chan School of Public Health at Harvard University. And that completed my training.

Q. What is your current position?

A. I'm a pediatric endocrinologist at the University of Michigan. I'm the clinical director of the child and adolescent gender clinic at our Mott Children's Hospital at the University of Michigan. I'm also the medical director for something called the Comprehensive Gender Services Program at the University of Michigan, which is how that university provides care to the

transgender population in general, adult and pediatric.
Q. So what is your patient population overall at the University of Michigan?
A. Yes. So as a pediatric endocrinologist I don't only see patients in the Child and Adolescent Gender Clinic, but I do two half days a week, and then another half day a week I see patients in Type 1 diabetes clinic, and then another half day a week I see patients in general pediatric endocrinology clinic.

So I'm seeing patients with a whole cast of pediatric endocrine issues, about half of the time seeing patients with gender-related issues, the other part of the time other endocrine problems that children may have.
Q. What is the age range of the population -- the patient population that you see?
A. In the Child and Adolescent Gender Clinic, we are primarily seeing kids from maybe just before puberty or at the start of puberty on up to 18.
Q. And in your other clinics?
A. So other endocrine problems may occur in infancy or younger childhood. So, you know, kids with Type 1 diabetes is developed at that age. Other endocrine problems have more to do with infancy. So generally birth to 18.

In the -- my role as the medical director for the comprehensive gender services program, I help to coordinate the care for both the pediatric and adult population.

Q. Of your own patients, approximately what percentage comprise adults?
A. So I will oftentimes see patients as new patients that may be 16 or 17, for example, because they can't be seen on the adult -- in the adult clinics. And as they turn 18, I don't automatically just send them over to the adult clinic. I sometimes have a problem hanging onto patients too long because it's hard to say good-bye sometimes. So that 18- to 21-year age group is a time where we will talk about transition to adult care.

So I would say I don't have any patients probably older than about 22 that I personally take care of.
Q. And about what proportion of your patient population -- speaking of the patients to whom you're providing -- or you're seeing in the gender clinic, what proportion are prepuberty?
A. Well, of course, if a child is prepubertal, then they wouldn't require or be eligible for any medical intervention. So it's not very frequent that I'll see a young person, you know, much younger than the expected age that puberty starts.

Sometimes the parents of a young person, you know, maybe 5 or 6 years old, that patient may be referred to the pediatric gender clinic, and, you know, when a patient is referred, whether -- whatever age they are, the very first step is a triage phone call with our social worker.

And at that time the social worker gathers information

about, okay, Why were you referred? What are your goals and expectations for this referral?

The parents of a 5-year-old might say, you know, This is so new to us. We don't know where to turn. We'd like -- you know, we'd like to see you for assessment.

The social worker may then schedule that assessment but explain to the parents, You don't need to see a doctor, that -- you know, one of the nice things about prepubertal kids with differences in gender identity is they can just focus on being a kid and safely explore their gender identity, that seeing a doctor isn't needed. Sometimes those parents do want to see me to sort of learn a little bit more about the state of, you know, health care for their kid down the road, but it's kind of uncommon.

But I always am happy to see those types of families to just provide the reassurance that if their child does have a difference in gender identity, that they have gender dysphoria as puberty is starting, and that we'll be there to help. If they don't have gender identity at that time, then it was nice to meet you.

Q. Over the course of your career, how many people -- to how many people have you provided gender-affirming care?

A. I'd estimate somewhere between 4- and 500.

Q. And I think you said earlier that you do two half days a week in the gender clinic currently and two days in other

endocrine clinics.

Does that mean about half of your concurrent practice is comprised of gender-affirming care?

A. Yes.

Q. Will you summarize your professional affiliations for the Court, please?

A. Yeah. So I'm a member of the Pediatric Endocrine Society, and I'm a member of the Endocrine Society.

Q. Dr. Shumer, are you a member of the World Professional Association for Transgender Health, or WPATH?

A. I'm not.

Q. When you submitted your expert report in this case, did you submit a copy of your CV?

A. I did.

Q. And does that CV accurately summarize your professional activities and qualifications?

A. It does.

MS. COURSOLLE: Your Honor, Dr. Shumer's CV is Plaintiffs' Exhibit 360 in the stipulated exhibits provided to the Court.

THE COURT: That's admitted.

(PLAINTIFFS EXHIBIT 360: Received in evidence.)

MS. COURSOLLE: Great.

At this time we'd move to have Dr. Shumer qualified as an expert in endocrinology and specifically the treatment of

gender dysphoria.

THE COURT: Questions at this time?

MR. JAZIL: No questions, Your Honor.

THE COURT: You may proceed.

MS. COURSOLLE: Thank you, Your Honor.

BY MS. COURSOLLE:

Q. Dr. Shumer, what is puberty?

A. Puberty is a stage of life, basically where a child becomes an adult through a process of physical changes.

Q. And do clinicians think of puberty in any kind of stages?

A. Yeah. Oftentimes it's helpful for a doctor to specifically describe where a person is in puberty. There's, you know, changes in the chest, changes in the genitals, changes in secondary hair, and those can be described in Tanner stages.

Dr. Tanner was someone that came up with this system of describing puberty, I think in the 1930s.

And so, for example, Tanner Stage 1 means that there's no visible signs that puberty has started.

Tanner Stage 2 is the stage where there's the first sign that there's physical changes associated with puberty. So, for example, in someone assigned female at birth, the present of breast buds would be Tanner Stage 2. A small amount of pubic hair and testicular enlargement would be the first signs that someone assigned male at birth is in Tanner Stage 2.

3, 4, and then, subsequently, Tanner Stage 5 is adult

pubertal status.
Q. At what age does someone assigned female at birth typically reach Tanner Stage 2?
A. The average is in the 11 age range, but there's a range where it's considered normal for someone assigned female at birth to reach Tanner Stage 2 anywhere between -- around 8 to 13.
Q. What about for someone assigned male at birth? When does Tanner Stage 2 usually begin?
A. Averaging in the 11 and a half sort of window, but considered normal for someone assigned male at birth to start puberty anywhere in the window from about 9 to 14.
Q. As an endocrinologist, what is endocrine treatment?
A. So endocrinology is -- has to do with hormones. So endocrinology is the science of hormones. An endocrinologist treats hormone problems or hormone differences.

So I think a hormone -- people think they might know what the word means, but it really means any chemical that's made in a -- one part of the body but then circulates throughout the body and does something.

So the place where a hormone is made is called a gland. So, for example, endocrinologists take care of people with diabetes because insulin is a hormone. Insulin is made in the pancreas, which is a gland, and insulin goes throughout the whole body and has an effect on blood sugar.

Thyroid hormone is a hormone made in a gland called the thyroid, and that thyroid hormone goes throughout the body and regulates metabolism.

Testosterone and estrogen are hormones made in testes or ovaries that go throughout the body and have a variety of different effects on the body, including the development of puberty.

Q. What kind of treatments do you provide as an endocrinologist?

A. Most endocrine treatments involve assessing and managing someone that may have a hormone that's underproduced or a hormone that's overproduced, right.

So with diabetes -- Type 1 diabetes, we are treating with insulin because insulin -- that hormone is underproduced in Type 1 diabetes.

Someone with Graves' disease has hyperthyroidism. We are giving medicine to suppress down the thyroid hormone level.

When someone has precocious puberty, puberty that starts too young, we are using medications like GnRH agonists to lower hormone levels. When someone has delayed puberty, we would be using hormones to raise hormone levels, to get that hormone level into the normal range for a person that age.

Q. Are those treatments usually provided in the form of medication?

A. Yes, the majority of endocrine treatments, because we are

raising or lowering hormones to a goal range, involve giving medications to make that happen.

Q. How do endocrinologists determine that a particular medication is effective to treat a particular endocrine condition?

A. So I think there's two things there, right. So using the example of hypothyroidism, if someone has hypothyroidism, they have low thyroid hormone. Then they have symptoms related to hypothyroidism. So they may be tired, have trouble with sleep. They may be gaining weight. And we can measure that their hormone level is lower than normal. So by giving them medication like thyroid hormone, one goal is to bring the thyroid hormone level into the normal range and, second, sort of, I'd say, bigger picture goal is are they feeling better, are those symptoms of hypothyroidism improved with the treatment.

So I think as an endocrinologist seeing that patient in follow-up we're saying, Here's where the labs are showing. We are within the normal range. And how are you feeling? Are you feeling better since we started that treatment? And let's now reevaluate the plan. Is the prescription we prescribed the right dose? Do we need to make an adjustment? Do you still need treatment for hypothyroidism? How do we move forward?

Q. How do endocrinologists determine that a particular medication is safe?

A. I think that the job of physicians is to stay up to date on

available medical literature on a whole host of topics.

Every medication that is available for prescription in the United States has been tested through a process of FDA approval, and that process involves testing the medication on humans to determine safety profile so we understand the range of possible side effects, how frequent those side effects occur.

And so we have that information from a review of the literature and also, you know, review of the approval process for a medication.

Q. When you're looking at a particular medication and looking at the literature and the results of the FDA process you described, do those speak to the safety of the drug with respect to treating a particular condition, or is it looking at the safety of the drug overall?

A. Right. So I think that when the FDA approves a drug, it goes through a process of approval where first it's determined whether the medication is safe, what side effects are found when someone takes this medication and at what rates. And so regardless of what a medication is being used for, we have that information.

I think another part of the approval process for a specific indication is what is the outcome related to that particular indication. So, for example, I think we'll be talking a lot about GnRH agonist today. That -- we know that GnRH agonists, which have been referred to as puberty blockers, are medications

that endocrinologists use all the time for precocious puberty and in treatment of precocious puberty. We know exactly how they work; right? We know that they suppress the signals from the brain that tell the pituitary gland to send messages to the ovaries or testes and -- so subsequently those hormones are suppressed.

And we know from, you know, the process that those medications went through to get approval that they're extremely safe medications to give, that in precocious puberty they're effective at stopping puberty. And they also -- when taken away, puberty picks up where it left off. So we have, you know, decades worth of experience using that particular medicine and have a really clear safety profile of its use even prior to it being used for gender dysphoria.

I think that in -- when used in precocious puberty, the outcome is does it suppress puberty -- right? -- and the answer is, of course, yes, it does. It works very well.

I think when used for gender dysphoria, one question is does it suppress puberty, and, just like in precocious puberty, yes, it certainly does.

I think another question is, is this intervention then helpful for a person's quality of life -- right? -- does it reduce gender dysphoria over time. And so we can talk more about that later.

But the long and short of it is that the literature does

support the effectiveness in both logistically stopping puberty, but also -- probably the more important question, does that help.

Q. As an endocrinologist, do you ever rely on clinical guidelines?

A. I do.

Q. And who publishes those guidelines on which you rely?

A. Well, so I think we've been talking some about the Endocrine Society today. I think that for many endocrine problems that endocrinologists treat, there's a whole host of sources that we rely on for how to chose the treatments, you know, review of the literature. You know, when I'm treating someone with hypothyroidism, I don't have to go back to the literature anymore. I know the standard of care. I know how to adjust thyroid hormone doses.

But I think what the Endocrine Society has done in some of these, you know, maybe more common endocrine conditions have helped endocrinologists by compiling that data, organizing it for us, and then providing these recommendations called Endocrine Society Clinical Practice Guidelines.

Q. You touched on this a little bit already, but maybe you can expand.

When the Endocrine Society is developing those guidelines, do they consider the quality of the evidence when they're compiling the literature on which they -- that go into those

guidelines?
A. They do. You know, I think with all of these Endocrine Society Clinical Practice Guidelines, there is a section at the beginning which kind of goes through how they've assigned grades of quality and abundance of evidence based on their sort of systematic review before writing their recommendations, and then subsequently throughout the document they then are able to explain, you know, this is the -- both the amount and quality of evidence that we use to make this particular recommendation.
Q. We've already talked -- you've been here all day. We've talked a lot about gender dysphoria already.
So maybe just tell me briefly, as an endocrinologist, what is gender dysphoria?
A. I describe gender dysphoria as a difference between someone's sex assigned at birth and their current gender identity which also is causing distress to that person that's affecting them clinically in their life.
Q. And something we talked a little bit about already today. Do all transgender people have the clinical diagnosis of gender dysphoria?
A. No, not -- transgender is sort of an umbrella term to describe someone whose gender identity does not exactly match the sex they were assigned at birth. So you can have -- you can be transgender but not have distress associated with that.
Sometimes I find it helpful to sort of compare to another

medical problem which we may have more familiarity with, which is anxiety, right. So if someone says they're anxious, right, that's not necessarily a clinical diagnosis. But there are recommend -- there are descriptions in the *DSM* to diagnosis someone with clinical anxiety.

So someone could say, I'm an anxious person, but they don't have clinical anxiety. Then someone could have -- meet -- they could meet the criteria for clinical anxiety, and then what do we do about it; right? So there's lots of treatment options for anxiety. Some are nonmedical, and some are medical.

So if an adolescent has anxiety, they're going to meet with their family, with their mental health team, with their doctor, and they are going to say, Okay. We have this anxiety. The goal is to reduce the anxiety.

So we can do nonmedical things like seeing a therapist, or avoid things that make us anxious, or meditating. And we also have medical options like antidepressants, anti -- anxiolytics. So the right combination of nonmedical and medical approaches that young person, their family, and their health team would decide upon together, and enact that plan, and then continuously reevaluate the anxiety: Is it getting better? Maybe we modify this part of the plan and continue that relationship with the goal of continuing to reduce that anxiety.

So someone who identifies as transgender would be someone that says, I'm anxious, but they don't have a clinical diagnosis

of gender dysphoria unless they meet certain criteria. Someone may have gender dysphoria and meet that criteria that the previous witness was describing. And they meet with their parents, their mental health provider, their doctor, and they say, Okay. I think that -- let's try a social transition. And the goal of that would be, Does that reduce my dysphoria?

So someone may, you know, bind their chest, or use a different name or pronouns, or, you know, do any host of things that are nonmedical. And for some people, that might really help, and a lot of them feel more comfortable and confident in the world, and that person wouldn't necessarily need another intervention, wouldn't need to see me, perhaps, wouldn't need a medical intervention.

But for some people, their gender dysphoria is more significant or severe, or those nonmedical interventions have helped but not enough. They're still having a really challenging time, and then that's where discussion of what medical interventions are available, what are those risks and benefits of those interventions, making a decision with that adolescent and family about what to do, and then, just like any other medical decision, coming back together, reevaluating: Is this helpful? Is this working? Should we continue treatment?

THE COURT: Ms. Coursolle, let me interrupt you. We're getting a reflection. That skylight is probably not helping you.

MS. COURSOLLE: Yeah, I would appreciate that. Thank you, Your Honor.

(Pause in proceedings.)

MR. JAZIL: Your Honor, might I indulge the Court for a five-minute break?

THE COURT: Sure. Six minutes. Let's start back at a quarter to 4:00.

(Recess taken at 3:39 PM.)

(Resumed at 3:47 PM.)

THE COURT: Dr. Shumer, you are under oath.

Ms. Coursolle, you may proceed.

MS. COURSOLLE: Thank you, Your Honor.

BY MS. COURSOLLE:

Q. Dr. Shumer, there is no blood test for gender dysphoria, is there?

A. There's not.

Q. You mentioned -- sorry. Let me reformulate that question.

You mentioned earlier the criteria that are used to determine whether someone meets the standard for clinical gender dysphoria diagnosis; is that right?

A. Yes.

Q. So how do doctors determine whether someone meets those criteria?

A. Well, in adolescents, most pediatric gender clinics are what we call a multidisciplinary team. For example, in the

clinic that I work in, we have four medical doctors, a nurse practitioner, two social workers, a psychiatrist, and we work together as a team.

So when a patient is referred, as I said, the social worker does the triage phone call. And then the majority of the time the next step is a biopsychosocial assessment, as I think those words were used by the last witness. What that means is the social worker will meet with the child, meet with the parents, meet with the family all together, to really get a better understanding of the child's experience with gender identity, sort of the history of the evolution of understanding of gender identity as described by the child, what the parents have noticed along the way with respect to gender identity, how that gender identity is perhaps affecting them in their daily life, how it's manifesting in their world, and, of course, getting more information about any other medical or mental health problems that the individual may have, really understanding their social situation, where did they go to school, how is school going, who is in their family, who lives at home. Sort of a really comprehensive view of who this person is who is coming to see us for help.

And at the end of that assessment phase, the social worker is able to, number one, tell the team whether that person does, in fact, meet *DSM* criteria for the diagnosis of gender dysphoria, but then also provide that richness and subcontext

that's helpful for subsequent interactions with the team. For example, if that family is going to meet with me, then I know some of the issues that they've been thinking about, some of the challenges that the child may be facing. And it gives me a good idea of sort of where to pick up that conversation and whether or not the child may benefit from any medical interventions, what sort of questions that family might be coming in to ask me about.

Q. Is the bio -- I knew I was going to trip that up. Is the biopsychosocial assessment -- is that used to diagnosis any other conditions, in your experience?

A. Yeah. So I think that mental health professionals -- when I say "biopsychosocial assessment," I'm talking about bio meaning, you know, their medical and mental health history; psychosocial, more about how their mental health is interplaying with the world around them.

And so biopsychosocial assessment I think is really just a really careful and comprehensive assessment of a person for a variety of different reasons, right. So if there is a need for assessment for the potential diagnosis of a whole host of mental health disorders, the term "biopsychosocial assessment" is used to imply that a mental health professional is getting a thorough history and trying to determine if a person does meet a certain standard for a diagnosis.

Q. Something else that we talked about earlier today is the

idea of persistence and desistance with respect to gender dysphoria.

What is your experience with gender dysphoria persisting or desisting?

A. So I think this is a topic that requires sort of a review of what people are meaning by these terms, and also the literature, right.

So a person that's prepubertal, right, is -- a child is prepubertal all the way from birth until around, you know, 8, 9, 10, 11. It's normal for all children to explore the world around them, get to know who they are as a person, get a better understanding of lots of different aspects of their person, right, their gender identity, their likes and dislikes. Do they like to play sports? Do they prefer plays? Sexual orientation. Right. Childhood is a time of normal exploration and social learning.

And so it's quite normal for children to explore gender identity, even to, you know, go through phases of preferring this or that that may seem gender to parents. So exploring in that way is not gender dysphoria, right. It's just normal childhood.

If a child does meet clinical criteria for gender dysphoria of childhood, that -- that's something different, right, and that we do know that a child's gender identity isn't as predictive of their gender identity in adolescence and

adulthood, that there are some clues, certainly. And I think some of the work by Kristina Olson that was mentioned before, I think, and Diane Ehrinsaft's writing helps us to understand that there is a difference between "I feel like a girl" and "I am a girl," right.

Those are -- sound similar, but there's differences there is -- there's differences between "I feel like a girl" and "I want to change my name and I want you to call me she/her," differences between "I like dresses" versus "I'm not leaving the house without being in a dress," right.

So there's different levels of insistence, consistence, persistence through childhood of some of these things. So I would say that the kids that are very profoundly describing intense identification with the other gender, I do think that that is somewhat predictive of future gender identity. But kids that maybe are going through phases or trying on different hats when it comes to gender identity, I wouldn't say that's very predictive.

I think that, as has been pointed out, some of the desistance literature from the 1970s and '80s is using different denominators when we are thinking about, you know, rates of persistence and desistance.

But that being said, the nice thing is it actually doesn't really matter when it comes to making medical decisions, because regardless of what someone's gender identity is when they are 5,

6, 7 years old, there is no medical intervention that's being made at that time.

What's more important is what happens at the start of puberty, that a child's gender identity may become more intense, dysphoria become more intense, more debilitating as that adolescent now is starting to see physical manifestations of puberty: I know myself to be a girl, and I'm hearing my voice get deeper, and that's making me really upset.

You know, if you think about a -- someone assigned male at birth who is living their life as a little girl, you grow your hair; you wear stereotypical feminine clothes, and everyone sees you as a girl. Puberty starts; your voice gets deeper; your facial structure starts to change; your body shape starts to change. Those adolescents that now have intensification of gender dysphoria when those things are starting, that now is very predictive of continued persistent gender identity difference later on in adolescence and adulthood.

So, you know, we reference the Dutch. You know, the Dutch original papers were describing the onset of puberty not only as an important time because that would be the only time that you would need to start medication, right, because before puberty there is no hormones to suppress, but also a helpful diagnostic time, right. It's a time where maybe some of those feminine boys figure out that their feeling was a feeling of being gay, right.

But for those individuals, those adolescents that as puberty is starting, as those, for example, masculine features are emerging, they are feeling more and more distress and more and more certain of a female gender identity or, of course, vice versa, that that is very helpful and predictive of future gender identity persistence.

So the Dutch were still wanting to be cautious, right. Because, as we discussed, puberty does start when you are pretty young; 10, 11, 12 years old. And the Dutch were feeling like, okay, this is a time where we know we want to intervene medically, but ethically we also want to delay decision-making that has a more permanent on the body.

So that's where they came up with sort of the concept of using GnRH agonists -- which is a term that I use to describe puberty blockers, because that's the medical term -- and in so doing, preventing further development of an unwanted and dysphoria-inducing puberty, but also delaying decision-making about things like testosterone or estrogen until later adolescence when that adolescent has even more capacity for assent.

And so I think -- you know, when I think about the use of GnRH agonists, I think of it as sort of a conservative approach that we are saying, you know, even though your gender dysphoria is intensifying at the start of puberty, and even though that is a helpful predictor that this is your gender identity likely to

continue into adulthood, we still want some more time. And so GnRH agonists provide that time.

After several more years, gender dysphoria is still present. That person is still identifying -- no surprise, but still identifying as a gender identity different from their sex assigned at birth. Now the child is more capable of making a more informed decision, still with their parents, about the next potential step, which would be hormonal care.

Q. Dr. Shumer, you testified that you've provided gender-affirming care to hundreds of young people; is that right?

A. Yes.

Q. About how many of those -- to how many of those approximately have you provided GnRHa?

A. Probably about a quarter. Because I think that there's sort of two groups of patients primarily that are coming to pediatric gender clinics. One are patients who are coming in the peri-pubertal window, sort of at the cusp of puberty, or just after puberty has started, and then another relatively larger group of people that are not presenting to medical attention until later on in puberty.

So for those adolescents, if puberty has already happened, we are not really talking about GnRH agonists anymore. GnRH agonists are the most helpful for that age group where, you know, progression of puberty would potentially be devastating,

but we are at an age where we want to forestall decisions about hormones. I'd say about, you know, a quarter to a third of patients that I see are in that younger age group where the discussion of GnRH agonists is had.

Q. In your clinical experience with that population, what is your experience with your patients either persisting with their gender dysphoria or desisting?

A. So I think that -- first, I would say that there's a lot of people that are referred -- a wide variety of types of patients that are referred to pediatric gender clinics, right. There may be parents of young people who, you know, their child came to them, you know, relatively recently and is exploring gender identity, and they may see us, have an assessment, and don't meet criteria for having gender dysphoria, right.

There may be people who are adolescents who have more recently been thinking about their gender identity but were given more time to see where that gender identity goes.

However, I would say that patients that end up being diagnosed with gender dysphoria in that early puberty window who are eligible to receive GnRH agonists, the vast majority of them do persist with that gender identity into adolescence and adulthood.

Q. And you said the greater majority of your patient population are older adolescents, you know, transitioning into adulthood.

In your experience treating that population, what is your clinical experience with persistence and desistance?

A. Yeah. Again, I'm so fortunate to work with really smart mental health professionals who can get this really helpful assessment of these patients and families. But when that assessment yields a conclusion that someone does have gender dysphoria, that that gender identity is persisting across time and is causing that person significant distress or impairment, then persistence of that identity is by far the most likely outcome.

Q. I'm going to switch gears a little bit.

In your practice, Dr. Shumer, treating gender dysphoria, are there clinical guidelines you rely on?

A. Yes. So as has been mentioned, both the WPATH Standards of Care, Version 8, and the Endocrine Society Clinical Practice Guidelines, which has been discussed, don't disagree very much with each other, but, you know, were written in slightly different times, are primarily the -- sort of the guidelines that help you inform modern care.

Q. Do your colleagues rely on these guidelines as well, in your experience?

A. I'm sorry?

Q. In your experience, do your colleagues also rely on those two guidelines?

A. They do.

Q. When -- we've talked about this a little bit already here and there, but maybe we can be a little more systematic about it.

When you're treating patients with gender dysphoria, what is the course of treatment that you provide?

A. Yes, so as the endocrinologist, I'm primarily responsible for conversations about medical interventions. The rest of the team may also suggest interventions such as connecting with supportive therapists through transition, working with schools, you know, other supportive care.

But the conversations that I'm having have to do with, you know, medical options, including GnRH agonists, testosterone, estrogen, and discussing why those medications may be beneficial to a patient, what to expect if prescribed, what are some of the risks or side effects of taking these medications, and working with patients and families around those decisions.

Q. Is the care that you provide consistent with the Endocrine Society guidelines and the WPATH Standards of Care?

A. Yes.

Q. We've talked a little bit about GnRH agonists.

What are those exactly?

A. GnRH agonists are medications that suppress the hormones that come from the brain to tell the body to make puberty hormones.

So going -- taking a step back for a second, the

hypothalamus is a part of the brain that makes a signal called GnRH, gonadotropin-releasing hormone. GnRH is not produced in prepubertal years, and then as puberty starts, GnRH is now secreted in pulses from the hypothalamus. Those pulses tell the pituitary, another part of the brain, to make their hormones, called luteinizing hormone, LH, and follicular-stimulating hormone, FSH. Those hormones then tell the testicles or ovaries to make their hormones, testosterone or estrogen. So it turns out you need to make GnRH in pulses for the whole process to start.

So GnRH agonists are actually the same hormone, GnRH, that the hypothalamus is making, but instead of having it go in pulses, when you're giving it as a stable dose, you're messing up those pulses, right, and without the pulses, the pituitary doesn't make its hormones, LH and FSH. So GnRH basically is a hormone that's already in the body, just when giving it as a stable dose, instead of in pulses, the body no longer makes puberty hormones.

Withdrawing the medication takes away that stable dose of GnRH. The GnRH pulse generator then resumes and puberty continues.

Q. What are GnRH agonists used to treat?

A. It's actually several things that GnRH agonists are used to treat. Pediatric endocrinologists have been most involved using GnRH agonists both for gender dysphoria and also for precocious

puberty.

So precocious puberty refers to puberty that starts too young. If you're 4 years old and your body is starting puberty, you know, that's not good. There is something wrong there, and there's lots of reasons that you'd want to not continue to allow that child to go through puberty. They would go through a growth spurt but then stop growing and be very short, that -- they would have development of sexual characteristics well before all of their peers. So GnRH agonists have been a useful tool to treat precocious puberty for many decades.

GnRH agonists have also been used for other indications that you would want to reduce hormones, such as men with prostate cancer or women with endometriosis. These conditions, lowering the production of hormones in the body could help that particular condition.

So for all these conditions, GnRH agonists can be used to stop those signals and tell the body to stop making estrogen or testosterone.

Q. I think you said earlier that the effect of these medications are the same, the biological effects, whether they are used to treat precocious puberty or gender dysphoria.

Do I have that right?

A. That's correct.

Q. Are GnRH agonists considered medically necessary to treat gender dysphoria for adolescents?

A. They are. That's based on the body of evidence supporting the safety and efficacy of GnRH agonists in treatment of gender dysphoria as -- as sort of reviewed and summarized by the WPATH and the Endocrine Society, but also in my clinical experience seeing, you know, young people who are really suffering, adolescents that have debilitating gender dysphoria. Seeing the improvement in that gender dysphoria when provided the appropriate care informs me that GnRH agonists are part of medically necessary care for gender dysphoria.

Q. Are these medications considered experimental when they're used to treat gender dysphoria?

A. I do not consider GnRH agonists to be experimental based on the reasons that I just provided.

Q. What does the peer-reviewed literature say about these medications when they're used to treat gender dysphoria?

A. So there's a lot of ways to approach answering that question. I think that there's a lot of data that has been trying to understand how pubertal suppression works with regards to treating gender dysphoria.

Let's start with longitudinal data. So as has been previously referred to, the part of the world that has been using pubertal suppression as part of gender dysphoria management for the longest is The Netherlands, and in The Netherlands, they have documented the health and well-being of people -- of transgender individuals who are diagnosed with at

the time, you know, gender identity disorder, now would be referred to as gender dysphoria, and were treated with pubertal suppression followed by hormones and in many cases surgery and are now living as middle-aged adults.

And those people have been documented to have equal to or better-than-average quality of life compared to the general Dutch population, which is pretty remarkable, because we know how bleak the statistics can sound. When we're thinking about mental health outcomes for untreated gender dysphoria to have no differences between quality of life in these people that are now my age is quite powerful evidence.

There's other ways that investigators have approached these questions. So, for example, more short-term studies saying -- you know, comparing things like body satisfaction, quality of life, self-esteem, sort of before and after different elements of care, before and after pubertal suppression, before and after hormone provision. And those have also yielded in a variety of different documents reassuring results that, yes, in fact, there is -- these improvements that occur with this type of care.

Another way that you can approach this is by, you know, comparing different groups, right. So you can compare people that have had access to this care, people that for whatever reason have not, and there's a difference there with people having access to the care doing better in a whole host of these psychological parameters.

And then I think the final approach that I'd like to speak to is sort of a retrospective view of the question, so talking to adults who weren't being studied when they were first getting the care, but, you know, comparing adults who had access to, for example, GnRH agonists versus adults who when they were adolescents did not have access. And, you know, when comparing those people, you know, the ones that report that they did have access have better quality of life and mental health indicators, less suicidality, than people who did not have access to that care.

So the question you're asking has been approached from a whole host of different angles to compile sort of what we now consider the evidence base for the safety and efficacy of gender-affirming care, including GnRH agonists.

Q. We've heard a lot today about potential side effects that that these medications can have.

In your experience, what are side effects of GnRH agonists?

A. I would say the most common side effect of GnRH agonist is pain at the injection or insertion site, right. So primarily GnRH agonists are given as every-three-month injections, which can hurt, which can cause local irritation and pain similar to having your flu shot or any other vaccine, possibly based as an implant in the arm, so you can have pain from healing.

I think that one issue that has been brought up previously in this case -- in this trial has been, you know, this

discussion around bone health. So I think that deserves sort of a further explanation from an endocrinologist's perspective.

We know that every year a child's bones get stronger. From age 4, to age 5, to age 6, to age 7, every year the bones get stronger. An adolescent going through puberty, their bones get a lot stronger faster. It's those sex hormone, testosterone and estrogen, that cause the bones to get stronger even faster than they were before puberty started.

So if you take a 13-year-old, let's say, assigned male at birth and monitor their bone density, and then put them on -- measure their bone density, put them on a GnRH agonist, and measure bone density again at age 14, it will be stronger than it was at age 13, because they are one year older, but it wouldn't have gone through that spurt of getting stronger than it would have if puberty was going on, right.

Also, if you compare two 13-year-olds, one starting GnRH agonists and one not, and look at them when they're 14, the one that isn't is going to have a higher bone density score than the one that is on a GnRH agonist.

But the point here is that you don't continue GnRH agonists forever, that at some point you're going to go through puberty, whether it's because you're withdrawing the GnRH agonist and allowing the body to go through puberty itself or providing hormones for purposes of transition and treatment of gender dysphoria. In either one of those cases, you are going to have

that spurt of bone strengthening. And so we're delaying the growth -- the bone strength spurt, as I like to call it.

But, you know, if you compare people at age 22, now well past the phase where they may have been treated with GnRH agonists, there's very little difference in bone density at that point because now everyone has gone through puberty, some just a little later than others.

I think -- when I think about concerns about bone density, what are we really talking about here? We're talking about worrying that someone may develop osteoporosis as an older person and have a higher risk for fractures. So I've seen no reports of a whole bunch of transgender people walking around that have osteoporosis that were previously treated with GnRH agonists.

And so, you know, I think that it's, I think, appropriate to think about bone health when we're using medications to affect puberty, but I don't see GnRH agonists as having a significant risk for osteoporosis, which is really what it comes down to when we're talking about bone density.

I think another thing that -- that has been brought up previously is brain development, cognition, and, you know, I have trouble understanding this one myself, that -- you know, we know that people go through puberty at all different ages, right. So let's say someone naturally has delayed puberty. A 16-year-old assigned male at birth hasn't started puberty yet.

That 16-year-old is not going to score lower on an IQ test; they're not going to score lower on their exams or SATs compared to people that had early puberty or normally timed puberty. Puberty itself does not affect cognition in that way, and we don't have to test GnRH agonists to know that. We have examples because kids go through puberty at all different ages.

And so with that being said, you know, I haven't seen any literature sort of explaining why people would think GnRH agonists would affect cognition, nor have I seen any data to support that. And so I don't consider GnRH agonists as -- one of the side effects of GnRH agonists as affecting cognition.

Something that I think I've seen brought up in the expert reports from the defendants is something called pseudotumor cerebri, which is increased intracranial pressure. So pediatric endocrinologists are really used to talking about this topic because of one of the medications that we also use a lot called growth hormone. This is a side effect that is rare but can occur with the use of growth hormones.

So growth hormone seem to in some people, less than, I think, 1 percent, cause an increase in cerebrospinal fluid production, causing what we call spinal headaches. So this is something that happens for all sorts of reasons, but growth hormone can lead to an increase in intracranial pressure, which can cause headaches. The medical term for that is pseudotumor cerebri.

So I think last year there was a report from the FDA saying that six people have been recorded as having pseudotumor cerebri that were also taking GnRH agonists. I think five of them were given GnRH agonist treatments for treatment of precocious puberty and one for gender dysphoria. And so I think that that number six out of the many tens of thousands of people that have been receiving GnRH agonists seems very small, and I guess begs the question is it actually related to the GnRH agonist or is it not. Because you're allowed to have pseudotumor cerebri just for no good reason, so we would expect that maybe some people on GnRH agonists would have pseudotumor cerebri, true, true, but unrelated, right?

Subsequently, I think that Sweden is the country that reported their experience with their entire national database, but they did not have any patients with this side effect that were also being treated with GnRH agonists.

So it's something that I talk about with patients because the FDA put out this warning, but it's also something that I've never had the experience of a patient having myself, nor do I know any colleagues who have had that side effect in a patient that they've taken care of. It's also something that can be managed; right? You stop the medication; it gets better, just like pediatric endocrinologists are used to doing when that side effect happens with growth hormone treatment.

Q. You said you talk about that particular risk with your

patients.

Do you also talk to your patients about the potential bone density implications of GnRH agonists?

A. I do, sort of similarly to how I described it to you today, so they understand why there is discussion about this, sort of what the literature shows; yes, that someone on this medication will have continued bone strengthening to a less degree than people not on the medication. We expect catch-up.

So I have a very similar conversation with parents that I am -- and patients as how I described it to you today.

Q. And do you monitor the bone density of patients while they are taking GnRH agonists?

A. Yes. So patients that are at higher risk for fracture or that are known to have low bone density, we get serial DXA scans, or bone density scans. For everyone on GnRH agonists, just because this issue exists, or is being discussed, I monitor for vitamin D deficiency to make sure vitamin D and calcium intake are appropriate.

Q. We also talked about whether there are any effects of these medications on brain development or cognition.

Are those risks that you talk about with your patients?

A. You know, I think that I try to cover all the bases of what people may be hearing, especially recently in the media, that parents oftentimes come with really valid questions and maybe some misinformation. So in a very similar way to how I

described it to you today, I have that type of conversation with patients and families as well.

Q. Do you ever prescribe GnRH agonists to treat precocious puberty?

A. I do.

Q. Do you have these same kind of conversations when you use the medications for that purpose?

A. I do.

Q. Something else that has come up in this case is the potential for infertility.

Do GnRH agonists cause infertility?

A. GnRH agonists have no impact on fertility. That specifically turning off the signals in the brain to suppress puberty at this time, you know, don't have any direct impact on the ovaries or the testes.

So, no, GrNH agonists themselves don't have any impact on fertility.

That being said, I think fertility is a really important topic to talk about with patients and families, and something that I probably spend the majority of time discussing when I'm talking to patients and families, because it's probably the most complicated, that we do know that you do need to go through the puberty that your body makes, at least to a certain degree, to make sperm or make eggs, right.

So that if someone is coming to see me who is 16, right,

they have already presumably gone through puberty. And that person, let's say assigned male at birth, I talk to them about how -- you know, people that take estrogen, if they wanted to use their sperms later on, most of them would have to come off estrogen, wait for their sperm count to come back up, and they could try to use their sperm to make a baby. But for some people it might be harder.

Subsequent -- similarly, people that are postpubertal starting testosterone, we have many examples of people taking testosterone, deciding they want to become pregnant or use their eggs to make a baby, and they stop their testosterone and wait for their periods to resume, have the baby, go back on testosterone.

And so -- but there's maybe a subset that that's harder, that fertility becomes harder if someone is on long-term testosterone or estrogen. So for those postpubertal people there is a discussion we always have about, maybe, what are the options for fertility preservation, saving eggs, saving sperm, what that process looks like. So I talk to everyone about that.

For someone that is Tanner 2 at the beginning of puberty, it's not GnRH agonists that have any impact on fertility, but, at the same time, you need to go through at least some puberty to have that conversation about freezing eggs or freezing sperm.

So someone that went from GnRH agonists to testosterone, or GnRH agonists to estrogen, and never went further into puberty,

just sort of the idea, if someone does have persisting gender dysphoria, they wouldn't have had that opportunity to make that decision about preservation of sperm or eggs.

Now, presumably, even someone that went through that sort of -- that sequence of events -- pubertal suppression, hormones -- they still have testes or ovaries in their body. They could decide to come off of medication, allow their body to commence puberty, and try to use their body to make a baby. If that was unsuccessful, see a fertility doctor to get assistance with that. I think there is lots of options for trans people wanting to use their body to make a baby. As long as those gonads, testes, or ovaries are there, there's fertility potential, that only removal of the gonads makes someone permanently infertile.

So as a pediatric endocrinologist I'm not really discussing with anyone permanent infertility, because I don't do surgery. But I do talk about the fact that you do need to progress at least -- you know, a significant way into your own body's puberty in order to be able to produce those gametes that allow someone to produce biologic children.

Q. Have you ever prescribed GnRH agonists to people with other medical conditions beside gender dysphoria?

I'm sorry. That was a poorly worded question.

I just mean, you are prescribing the medication for the gender dysphoria, but the person also has other medical

conditions. Does that ever come up?
A. Oh, yes.
Q. Are there any other conditions that would contraindicate using GnRH agonists to treat gender dysphoria?
A. Well, I think -- as with any condition that I'm treating, I think it's really important to get a very complete medical history to understand what medical problems a person may have. But simply having another medical problem doesn't typically interfere with the decision to use GnRH agonists.

You know, I would say -- we talk about bone density. If someone already has osteopenia for whatever reason, for example, they had cancer and they needed chemotherapy and it made their bones week, you know, that would be a patient that I would maybe more concerned about really talking about what we know, what we don't know about the length of time that person would be on GnRH agonists.

But, you know, typically there's not, you know, hard-and-fast contraindications for GnRH agonists. But, again, knowing the complete medical history I think is just important in any discussion of medical decision-making.
Q. These medications are prescribed to minors. What is the informed consent process that you go through before you prescribe them?
A. So I think that in the course of this question and answer I've kind of gone through a lot of what I would talk about with

patients in that process. And I think as a pediatrician I'm sort of trained to explain these things, which are sometimes complicated, at an age-appropriate level and then ascertain whether the patient is understanding, what questions the patient may have, what questions the parents may have. And as I'm going into these conversations, you know, I know a lot about how the medications work; I know a lot about the risks and benefits as we've talked about, and I know a lot about that particular patient, but I'm not making that medical decision in a vacuum by myself, right. This is a relationship that I'm forming with the patient and their parents. We are working as a team.

And so at the end of that discussion, someone that would be prescribed GnRH agonists would meet the following criteria: That they would have a diagnosis of gender dysphoria, that my understanding of their gender identity and gender dysphoria would inform me that continuing into puberty would likely cause them significant distress, that the child understands why the medication is being prescribed and agrees that it would be helpful, and that the parents are making an informed consent decision with their adolescent's health in mind. And if all those criteria are met, then I would proceed to prescribing.

Q. And is that process you just described consistent with what's recommended in the Standards of Care?

A. It is.

Q. What is your own clinical experience prescribing GnRH

agonists to treat adolescents with gender dysphoria?
A. I mean, that's why I continue to wake up in the morning and smile to go into work, right, because, you know, I have the opportunity of meeting amazing kids and amazing parents every single day. Adolescence is a really challenging time in general, right, and that if you throw in gender dysphoria on top of that, then it can be really challenging. And when I have an adolescent coming to talk to me, they've also oftentimes been circling that appointment on their calendar for many, many, months. They are very nervous. They are expressing how they've been suffering, how they are not fitting in in the world because their body is changing in a way that is making them feel very uncomfortable.

And meeting parents that are there because they love and support their adolescent, and they're wanting to allow their adolescent to live the happiest, healthiest most fulfilling life that they can have.

But those stories are often quite painful. And one of the great things about my job is I get to see these patients back in follow-up and see them doing so well, and, you know, getting Christmas cards five years later from patients off at college and having that healthy, happy, productive life that they didn't think was possible when they first came. And it's because of gender-affirming care that that's the case. And I see that every day. And, you know, it makes -- makes me able to say

without hesitation that GnRH agonists are medically necessary, that it's complicated; we need to make sure we are performing assessments, really getting to know our patients and their families, really explaining these complicated things to them, but can have profound impact on the quality of the life of these adolescents.

Q. I'm going to turn know to ask you some questions about hormone therapy.

In the context of treatment for gender dysphoria, what is hormone therapy?

A. Hormone therapy is providing testosterone or estrogen in management of gender dysphoria for late adolescents or adults.

Q. Are these same medications used to treat any other medical conditions?

A. Yes. So many other medical conditions. But, you know, I would say maybe helpful in the context, there are patients with delayed puberty that would receive estrogen or testosterone to help start puberty, or patients that have a problem making testosterone or estrogen. So, for example, someone assigned female at birth may have ovarian failure and need estrogen in order to process through puberty normally. Or someone assigned male at birth may have testicle torsion where they lose their testicles and require testosterone to go through puberty normally. In those situations we're prescribing testosterone or estrogen in order to bring that testosterone or estrogen level

into the normal male or female range for that person's age so they are able to progress through puberty at an age-appropriate predictable path.

Q. In the context of using these medications to treat gender dysphoria, at what point in someone's development does that usually occur?

A. So I think that at early puberty we talk more about GnRH agonists, right. And then afterwards I think that there's been various discussions about when to discuss testosterone and estrogen.

You know, the very first Dutch clinics were using at age 16. That was the age that you're able to consent for care in The Netherlands in the 1990s, and I think that's why they chose that age.

I think subsequently providers understand that it's not so much an age that's important here, it's the individual case, right. So there could be patients that really need, you know, quite a long time on GnRH agonists before they're, you know, capable of making that informed decision with their families about testosterone or estrogen, and maybe the exploration of gender identity is more complicated. There's patients that are very straightforward, have been living as a boy for their whole life who are using GnRH agonists now, but as soon as I feel comfortable providing the testosterone, they are ready for it.

So really taking that individualized approach, understand

someone's needs, you want to provide hormones at an age that is appropriate for their understanding. Also, you wouldn't provide hormones at an age younger than their peers are going through puberty. So somewhere in that 13 to 16-year-old window is usually the time where we are having a discussion about whether someone might benefit from testosterone or estrogen.

And then, of course, people that present older than that, like in adulthood, we are not talking about GnRH agonists; we are talking about hormonal care.

Q. Are estrogen and testosterone considered medically necessary to treat gender dysphoria?

A. Yes.

Similarly to how I described GnRH agonists, the body of literature regarding testosterone and estrogen informs us that these medications are safe and efficacious. And then people in this field's clinical experience add to that, that without this intervention we understand that people with gender dysphoria would not improve and have worsening outcomes.

Q. Are these medications considered experimental when you treat gender dysphoria?

A. They are not.

Q. You mentioned that the literature suggests that these medications are safe. Do they have any side effects?

A. Testosterone and estrogen, because they are medicines, will have risks and benefits and side effects.

I'd like to first explain that whenever we are using -- let's take testosterone, for example. Whenever we are using testosterone as a medication, whether it's in someone assigned male at birth, someone assigned female at birth, we are trying to make that person's testosterone level normal for a male that age, right.

So if someone is 16 and lost their testicles in an accident, I'm using testosterone to bring that young man's testosterone level up to the normal range for a 16-year-old. If I'm using testosterone to treat a trans man who is 16, I'm bringing that testosterone up to what's normal for a young man that age in the same way.

And if we do that right, then some very predictable things happen. We call it the development of secondary sex characteristics: The voice gets deeper. Over more time the body gets more hairy, facial hair, body hair. Bones get stronger, muscles get stronger, maybe face becomes more masculine. All of those things are sort of the normal things that we would expect with any person going through a masculinizing puberty.

Are there side effects of going through puberty? Yes, right. I'd say the biggest complaint I get with testosterone is acne. That's because testosterone induces acne, both in people making their own testosterone, people given testosterone.

I'd also say that if you take more testosterone than you

need and have a testosterone level higher than normal for a man your age, then that's not good either, right. So think of the example of a baseball player who is abusing testosterone to hit more home runs, right. That person is giving themselves the whole bottle of testosterone instead of the right dose, and they are going to maybe hit more home runs, but they are going to have high blood pressure, put them at risk for diabetes. So more is not better.

But if I'm doing my job right and their testosterone level is normal, then we would really expect that person's risk for different medical problems to be very similar to other men, which might be different than other women. Men and women have different risks for different things. But if that risk is related to having a normal male hormone level, then I would expect that person to have the same risk for those medical problems as, say, brothers that they might have.

Q. You mentioned if you are doing your job right. Is there a monitoring that you engage in to ensure that those testosterone levels are appropriate?

A. There is. So prior to starting testosterone, it's recommended to -- and I do measure some baseline labs. So measure the testosterone level before we start. It's going to be low. Measure things like cholesterol and hematocrits, liver function to get a baseline, right. A patient then starts testosterone three months later.

At the follow-up appointment, I'm going to be first checking in on how things are going, right: What have they noticed on the testosterone? Does testosterone still feel like the right choice for them? Asking them very open-endedly -- right? -- because just like any other medical decision that needs to be reevaluated at each visit.

But then also are they noticing anything about the testosterone that they don't like or that they would consider side effects -- are they having bad acne, you know -- and then measuring the same labs that I got before they started to compare. I'm expecting the testosterone level to rise, but I'm expecting the other labs to be normal for a young man their age.

And I get the baseline labs because someone might have high cholesterol. Just because they have high cholesterol and if I only measured it after they started testosterone, I won't know if it was because of their own cholesterol problem or is the testosterone contributing.

So I'm using that lab and the clinical status and the patient's experience on testosterone then in potentially changing the dose or altering the plan in some way to continue to address the patient's gender dysphoria and continuing to do that in a safe way.

Q. We've talked about testosterone. What about estrogen? Does estrogen come with any side effects?

A. Yes, and I can explain it in kind of a similar way. With

use of estrogen, we're trying to raise the estrogen level to the normal female range for someone that age, and women have different risks for different things than men do simply because of estrogen, right? So woman are at higher risk for blood clotting problems. People with breasts are at higher risk for breast cancer. So -- and I would sort of expect that someone with a normal estrogen level for that age would have the same sort of risks as other women that age that are making the same amount of estrogen. So maybe they'd have the same medical risk as sisters that they might have.

So I think the examples that I tend to use with patients is, for testosterone, going bald, right. If you never started testosterone, the chances that you would go bald is very low, right. On testosterone your chance of going bald is probably very similar to all the other men in your family, right.

With people starting estrogen, while this topic isn't as maybe lighthearted as baldness, I think breast cancer is a good example. So if you take breast cancer as an example, women are at higher risk for breast cancer than men because women have breasts, and men typically don't. There are some breast glands in every person, and so some men have breast cancer but much, much lower than women. So that there's actually screening guidelines that women with breasts are supposed to have mammograms, I believe now, starting at 40. If there has been a history, it shifts to 35 or 30, and that men do not get

mammograms for a screening test because of the low incidents.

So someone on estrogen will develop breasts. Those glands will grow. And there is a study suggesting that transgender women that have been on estrogen have a higher risk for breast cancer than men and, it turns out, probably lower than cisgender women, so somewhere in the middle.

But I think that that kind of is a helpful example to point out that, yes, some medical problems are related to the hormones in our bodies, and that when we're using hormones to bring a person's hormone level up to what's normal for that gender's normal range that we expect that health problems might mirror women in their family more than men in their family, or vice versa.

Q. Do you do any monitoring when you prescribe estrogen to your patients?

A. I do, very similarly to testosterone: Get baseline labs, subsequent follow-up labs, and then as part of that assessment, in any return visit talking with the patient about her experience with being on estrogen, what is she noticing with regard to changes to her body, changes to her mood and mental health, any negative impacts that the medication may be having for her, and then measuring these labs to monitor for safety.

Q. Do testosterone and estrogen impair fertility?

A. So, again, that's a more complicated question and something that I do spend a lot of time talking to people about.

Let's think about testosterone first. So someone that is taking testosterone for an extended period of time, there's studies to suggest that if that person stops testosterone, say, in order to try to achieve a pregnancy, that 80 percent of people will have return of menses in six months. And so the -- then that person could then either try to become pregnant or see an OB/GYN doctor to retrieve eggs to use for a pregnancy. And there have been many, many babies born to trans men in a variety of those different contexts. And so, you know, I never think of testosterone as the end of the story for someone's fertility options.

Now, there may be a subset of people that being on long-term testosterone may make it harder for them to achieve a pregnancy and even a smaller subset that it may be impossible for them to achieve a pregnancy, just like there is a subset of cisgender woman that have a harder time becoming pregnant and a subset of cisgender women that are infertile naturally.

So I think that prior to starting testosterone, I make sure that the person knows that, yes, that there's still options, but that for some people, long-term testosterone may make it harder.

That for estrogen, right -- that taking estrogen lowers testosterone, lowers sperm count, and that people that would like to subsequently use sperm to make a baby would come off of estrogen. There would be an expected rise of sperm count and testosterone over time, and then they could try to use that

sperm to make a baby. But just like, vice versa, some trans women may have a longer time to return of fertility, and a subset may have failure to return to fertility, just like some cisgender men have infertility naturally.

So people assigned male at birth more than people assigned female at birth do opt for fertility preservation, saving sperm, because the process is more straightforward. But in both cases we counsel people that, you know, fertility preservation is an option.

Now, we don't think that either estrogen or testosterone has -- you know, it's not black and white, like everyone that takes it for a certain amount of time, there's no chance in even trying. There's studies, for example, of people who have had a hysterectomy and removal of their ovaries for gender-affirming reasons and their ovaries look healthy compared to -- they were comparing it to women with polycystic ovarian syndrome and hyperandrogenism, right. So some cisgender women have high testosterone levels just normally, naturally, and that's called PCOS. And when you look at the ovaries of women with PCOS who are -- tend to be -- have a hard time with fertility, their ovaries on the microscope look abnormal, but the ovaries of trans men look more normal. So that's, I guess, some evidence to suggest that there's not so much of this architectural change to the ovaries as a result of being on testosterone.

Q. Do you ever prescribe testosterone and estrogen for the

indication of gender dysphoria to people who have other co-occurring health conditions?

A. I do, yep.

Q. Are there any other medical conditions that would contraindicate prescribing these medications to treat gender dysphoria?

A. There's not many. I think that -- you know, just like our conversation with GnRH agonists, it's really important to get a complete medical history. You know, I think that sometimes that medical history may dictate differences in approaches.

So, for example, we think that -- you know, we talked a little bit about women have a higher clotting risk, right. So if a trans woman has a family history of blood clots, we might chose transdermal patches for estrogen rather than pills, because it seems like transdermal patches have an even lower risk for clotting problems.

You know, if someone is going through cancer treatment, for example, I might say, Okay. Well, you know what? Let's get through chemo first, and then let's talk about testosterone, right. So, you know, there's -- you know, I think putting -- putting this decision in context is what we're all supposed to be doing.

Q. When you prescribe these medications to minors, what informed consent process do you go through?

A. For testosterone and estrogen?

Q. Correct.
A. Yeah. So I think that -- sort of similar to my answer with GnRH agonists, basically it's a conversation very similar to what we're having right now, that we're going through what is known about why people might benefit from testosterone or estrogen, what to expect with taking testosterone and estrogen. I'm trying to get an understanding of what they understand with regards to those topics. I'm spending a lot of time talking about some of the risks and benefits, the side effects that we've talked about, and, similarly, assessing that person's capacity to understand that information, that they understand why the medication might be helpful for them, but they understand the risks of taking the medication, that they are then assenting to that decision, and their parents are providing the informed consent.
Q. Is that consistent with the Standards of Care?
A. Yes.
Q. And what is the informed consent process you go through when you're prescribing these medications to adults?
A. So it's very similar. That -- you know, I think the difference -- sort of the subtle difference in the WPATH Standards of Care is that the diagnosis of gender dysphoria in adolescents, it's recommended for that diagnosis to be made by a mental health professional with -- you know, with experience in gender dysphoria; that in adults, the diagnosis of gender

dysphoria may be made by a healthcare professional with experience with gender dysphoria, and that could be an adult endocrinologist.

Q. And is that process you described consistent with the Standards of Care?

A. Yes.

Q. What is your own clinical experience providing hormone therapy to treat gender dysphoria?

A. Maybe even more powerful than how I described the GnRH agonists, you know, one of my favorite types of visits is that three-month follow-up visit where patients are coming back after having been on testosterone or estrogen for the last three months, and, you know, my first question, which I've prepared them for as they left the first visit or the previous visit, was: The first thing I'm going to ask you after I ask you to verify what name and pronouns you're using is do you feel like the decision to be on testosterone or estrogen is still the right choice for you? Because like any medical decision, we need to reevaluate that at every visit.

But, you know, when I ask that question, I often see a light go off in these adolescents' faces: Oh, Dr. Shumer, absolutely. I can't believe, like, my grandma called me from California and she's like, your voice, your voice sounds different, and it made my day; right? And I'm feeling so much more comfortable doing X, Y, or Z, ordering a pizza -- I guess

people use an app for that now -- or going to school, or interacting with friends.

That -- that the -- that I have the privilege of watching adolescents who are withdrawing from life, failing school, not attending school, you know, having thoughts of self-harm, sort of unlocking the potential that I knew and their parents knew that they had inside of them, that they're now able to see a future where their life is happy and fulfilling.

And so I think that's my clinical experience in providing hormonal care for adolescents.

Q. Dr. Shumer, do you ever see patients seeking surgical interventions to treat gender dysphoria?

A. Yes. As a pediatric endocrinologist, I'm not really involved in decisions around surgery, but I certainly have patients that, you know -- and I ask patients, you know, what, if any, surgical goals they may have. You know, in the majority of cases, chest surgery and genital surgery are typically being reserved for patients that are over 18. In my hospital system, there isn't genital surgery offered for people younger than 18. But I -- I -- you know, I help to, you know, answer questions that they might have about what those surgical options are, but ultimately my job would be more to discuss, you know, the route that someone might go to pursue those services once they're 18 and ask the more specific questions to the surgeon.

MS. COURSOLLE: Your Honor, I know we're approaching

late in the day. I have maybe about 30 minutes left. Would you like me to finish up on direct?

THE COURT: It works if it works for everybody else. Yeah, let's see if we can't finish.

MS. COURSOLLE: Wonderful. Thank you.

THE COURT: If you get to a point where we're not making progress as fast as we could, we can start in the morning. It sounds like Dr. Shumer is going to be here in the morning either way, but if we can finish direct, that would be good.

MS. COURSOLLE: I appreciate that. Thank you, Your Honor.

BY MS. COURSOLLE:

Q. Dr. Shumer, in your opinion, other than the three types of treatment we've talked about -- GnRH agonists, hormone therapy, and surgery -- are there alternative treatments for gender dysphoria?

A. Yeah. So how I sort of described it at the beginning of my testimony, you know, I think that there's a variety of things that people do every day to help reduce gender dysphoria. They might not think about it as treatment, right?

You know, the clothes you pick out in the morning is treating gender dysphoria in some respects; right? But that -- you know, so there are some people that maybe have a difference in gender identity but, you know, are able to modify this or

that about their presentation to the world and don't require medical intervention.

Someone who has made a social transition and has experienced consistent, insistent, persistent distress that's impairing their life and is continuing to meet criteria for gender dysphoria, I don't see that degree of gender dysphoria resolving with alternative treatment besides the type of options that we've been talking about today.

Q. Dr. Shumer, are you familiar with the concept of watchful waiting?

A. I have heard that term before.

Q. What does it mean to you?

A. How I understand the term "watchful waiting" in this context is, you know, if someone has gender dysphoria even at the start of puberty, that allowing them to continue to go through puberty and continue to watch and wait and delay any medical decision-making until adulthood is an approach that some people advocate for.

Q. In your opinion, is that approach effective to treat gender dysphoria?

A. I don't find it to be effective, I think for a couple of reasons. One is that the process of continuing to go through a puberty that is causing distress seems to only exacerbate dysphoria for someone who clearly meets criteria for gender dysphoria.

But also, you know, not treating has risks and benefits as well; right? So a risk of not treating or, as you described it, watchful waiting is that you go through puberty and develop these secondary sex characteristics that do not align with your gender identity and likely never will.

All right. So let's say a trans woman who did watchful waiting throughout her whole adolescence and is now only, you know, embarking on treatment as an 18-year-old woman is going to have a very deep voice, is going to have large hands and a masculine face. All of that not only was very painful for her at the time it was developing but is now something that she's going to think about every morning: Are people going to, you know, see me as a woman because I don't -- I don't look as feminine as I feel inside? And that's because I went through puberty; right?

And so I think -- I think any medical decision, whether it's starting a medicine or not starting a medicine, has consequences.

Q. As you've described watchful waiting, Dr. Shumer, is that form of treatment safe to treat gender dysphoria?

A. So for the reason that I've just explained, I would not consider it safe.

Q. And you've defined watchful waiting as the waiting part of that to refer to waiting until someone has reached the age of majority to start treatment; is that right?

A. That's how I was referring to it. If you have a different definition, you know --

Q. I just wanted to make sure we're on the same page.

What is -- in your experience, what is the impact of not providing treatment, either hormone treatment or surgical treatment, to treat gender dysphoria for adults?

A. So I think that -- that someone with gender dysphoria is by definition struggling, right, and that -- that because we know that there's safe and effective treatment options that reduce that suffering, I think inability to provide that type of care leads to unnecessary suffering for that adult.

Q. A little earlier when you talked about sort of the range of interventions that people can use to treat gender dysphoria, you talked about mental health treatment psychotherapy that can be an appropriate treatment; is that right?

A. Yes. In fact, you know, I may have said I feel like every teenager could use a therapist, maybe every adult too.

And -- but certainly going through something like transition as an adolescent, I always recommend that you have sort of a non-parent, nonpartisan person to sort of, like, unload to every week or every other week is -- I think is helpful for anyone that -- that -- you know, I think that, for example, someone that isn't able to access gender-affirming care, working with a therapist to say, Okay, you know, here's what we know we might need, but we can't get it. How are we

going to cope? How are we are going to keep from killing ourself? Right.

So that type of therapy can be helpful, but it doesn't address the underlying issue of trying to reduce gender dysphoria.

So I think, for example, someone with gender dysphoria and depression and anxiety, right, you know, all of those things are allowed to coexist, right.

We think that -- an example that I like to use with patients and families is, you know, your depression and anxiety is like a loaf of bread, right, and this part of the loaf of bread is tied into your gender dysphoria. You know, this part of your anxiety and depression is really at the root of it because of this gender dysphoria that you are feeling. But you still got this part of the bread, right, that's totally separate anxiety and depression.

So if we are treating gender dysphoria effectively, this gets smaller, the loaf gets smaller; your anxiety and depression is now more manageable. And, you know, that -- that we can continue to work on with your therapist, right.

So -- but I think maybe in answer to your question, you know, monotherapy with psychotherapy in someone that has significant gender dysphoria, you know, may be helpful in keeping someone out of the psych ER, but really doesn't equate to a high quality of life.

Q. Dr. Shumer, are you familiar with the concept of conversion therapy?
A. Yes.
Q. And I should specify, conversion therapy relative to gender dysphoria?
A. Yes.
Q. What does that mean to you?
A. It means, you know, a mental health approach where the goal of the intervention is to help someone to change their gender identity.
Q. In your opinion, is conversion therapy an effective treatment for gender dysphoria?
A. You know, I'm not a mental health expert, but in my review of the literature on the subject, I would not consider conversion therapy to be an effective intervention strategy.
Q. Would you consider it a safe intervention?
A. You know, again, from my review of the literature, I have an understanding that many patients that have had attempts of that type of therapy have -- you know, have had poor outcomes. And so, no, I wouldn't consider it safe.
Q. I just have one more area of questions. I know we are all anxious to go home.
Dr. Shumer, in this case you have reviewed the medical records, or some of the medical records of our four plaintiffs, August Dekker, Brit Rothstein, Susan Doe, and K.F.; is that

right?
A. That's correct.
Q. And based on your review of those records, is the care that each of those plaintiffs received consistent with clinical guidelines?
A. Yes, it was.
Q. Do you have any concerns about the care that our plaintiffs received?
A. I don't.
MS. COURSOLLE: That's all my questions.
Thank you, Your Honor.
THE COURT: Mr. Jazil, I'll give you the option. You want to cross now or come back in the morning?
MR. JAZIL: Your Honor, I'll come back in the morning. It will be shorter.
THE COURT: And all the lawyers quickly figure out that by saying it will be shorter you always get to start tomorrow.
Thank you, Dr. Shumer. If you'd be back on the witness stand at 9:00 o'clock tomorrow morning.
Anything else we need to discuss before we break for the evening?
MR. GONZALEZ-PAGAN: Your Honor --
THE COURT: Dr. Shumer, you are welcome to step down. Thank you.

(Dr. Shumer exited the courtroom.)

MR. GONZALEZ-PAGAN: Your Honor, we can move some of the discussions to tomorrow, but we did want to have at one point a conversation with the Court, just an early conversation with the Court. Obviously, there was a bill that was signed -- that was passed by the legislature after our pretrial conference last Thursday that would establish the same rule in the statute. It is plaintiffs' intent to move to amend the complaint to include that into this case.

There really are no significant differences in what the trial would look like or -- but I think -- I just want to alert the Court about this conversation. The bill is not yet signed, and that's the trigger for us to have the conversation.

THE COURT: Well, I don't like making political projections, but my guess is that bill will be signed. And I'm not sure I know any of the details.

I know that -- I thought I knew that there was a bill signed that followed up on the rule that's at issue in the other case.

Did the -- does the bill also address Medicaid payment? Or by implication it would if it made it illegal to provide this service in the state, then the Medicaid issue kind of falls by the side.

But does the bill explicitly address Medicaid payment?

MR. JAZIL: Your Honor, it is Bill 254, Section 3.

Arguably addresses the Medicaid issues. There is a Subsection 2 that says a governmental entity or postsecondary educational institute, a state group health insurance program, a managing entity as defined in this particular statute, or a managed care plan providing services under Part 404.09, may not expend state funds as described in another statute for sex reassignment, prescriptions, or procedures, as defined in yet another statute.

So, Your Honor, the honest answer is I don't know what the prohibition on State funds necessarily applies to, because Medicaid funding is both state and federal funding. So I'm trying to get an answer to whether or not this is --

THE COURT: It's the state reimbursed by the fed, isn't it? But, whatever. Maybe not.

In any event, is there any reason -- nobody asked to consolidate this case with the other case, so I've started this trial as a Medicaid trial. It overlaps in a lot of respects. I'm not sure that there is going to be any evidence in the other case that's not already coming in in this case. But I'll be willing to listen to what either side says you want to do about the statute in the other case.

MR. GONZALEZ-PAGAN: Sure, Your Honor.

If I may, our -- for what it's worth, our intent is just to -- would be just to amend this case to have it be focused on public funding for reimbursement and stay within the Medicaid lane. It wouldn't be to attach the other parts of the

bill that affect the overlap of the BOM rule that are part of the Doe v. Lapado case.

THE COURT: I get it, but let me just tell you, there is a line of cases -- and this comes up, for example, in the billboard cases. You know, there's the billboard and there's the free speech problem, but there is some other regulation that you couldn't put that billboard up anyway. And that gets analyzed not as a same decision problem but as a standing problem.

And so you ought to think about and we should discuss the -- this problem.

We have this trial, and I make a ruling. And then the Eleventh Circuit says, All for not, because there's a separate statute that prohibits this service from being provided in the state of Florida anyway, so everything you addressed in that Medicaid trial didn't make any difference. And the way it would be articulated, at least on one view, is the plaintiffs aren't affected because they are not going to get care in Florida anyway.

And if it gets articulated that way, then the Circuit says that's a standing issue. And I haven't gone back and read it, but I think there is a case from maybe last week where I think a trial in a commercial case -- not anything to do with this -- they have a trial and the plaintiff doesn't prove damages. And the Circuit says there, Well, there was no

standing.

And, frankly, I kind of scratch my head and say, Wait a minute. There is a plaintiff putting on a whole lot of money and they had a trial before the issue was even resolved.

So let me just tell you, standing is a major issue in the Circuit, and we are spending a lot of time and a lot of effort and a lot of money to have this trial. And I've worked hard at it. And my plan is to work hard on it the next however many days we are in trial. But you may want to think about whether you really want to limit this trial to the Medicaid issue. And what's your answer going to be when you either win or lose and you're up in the Eleventh Circuit, and the first question the judge says is, How do we have jurisdiction? Why is there standing?

And if the answer is, Ah, shucks, because Hinkle worked really hard on this, that ain't going to get you there.

MR. GONZALEZ-PAGAN: No, of course, Your Honor.

So, first, I do want to address two quick points with regards to the standing and why we believe we should still move forward. But our intent is actually not to get to that, "ah, shucks" point and, in fact, to prevent that issue and situation.

So, first, we would posit that the statutory claim as to 1557 would still be live and standing. There has been care that has been denied in the past as a result of the rule, prior to the enactment of the statute. So that would still keep this

case as a live case or controversy.

But separate and apart from that, I would also note that --

(Reporter requests clarification.)

MR. GONZALEZ-PAGAN: 42 CFR 421.52.

While they're dire regulations under Medicaid, states do have to cover care that is not available within their state, if available elsewhere and actually pay for the travel of the Medicaid beneficiary to obtain that care.

All that said, however, our intent, actually, Your Honor, in raising this right now is that we would like to move to amend the complaint to include this statute, given that there would be really no difference in what the trial would look like if it were happening right now versus a month later, to avoid this issue going, "Ah, shucks," at the Eleventh Circuit, if you will.

THE COURT: But if I understood what you said earlier, what you want to amend is to challenge only the new part of the statute that prohibits payment of the care under Medicaid, not the part of my other case that challenges as unconstitutional the ban on doctors providing this care in the state.

MR. GONZALEZ-PAGAN: I'm happy to revisit with my team, Your Honor, but that is correct.

And the reason why is part A, the Medicaid aspect of this case, applies to both adults and minors. That other part

of the statute is only limited to minors. And even -- and as I mentioned under the Medicaid regulations, even if the care is not available in Florida, Medicaid does have to cover it when available elsewhere in the United States.

THE COURT: All right.

You object to the amendment?

MR. JAZIL: Your Honor, the bill hadn't been signed, so the amendment is premature, number one.

Number two, I think there is an added complication. If I understood it right, the plaintiffs have, in part, an animus claim. It's an animus claim rooted to how the rule was promulgated. If now the statute is the thing that is prohibiting the availability of care, I think the focus then shifts from the rule to the statute to look at the process.

THE COURT: Well, it does. I mean, I assume it's the same animus claim with respect to the statute now as opposed to the rule.

MR. JAZIL: The evidence was all, you know, directed at the rule with Jeff English, the process the State uses to promulgate the rule, et cetera.

THE COURT: Well, that was the evidence so far. The evidence is what's going to come in during the rest of this trial.

MR. JAZIL: Fair enough.

MR. GONZALEZ-PAGAN: For what it's worth, Your Honor,

if I may, I would just posit that when it comes to the animus prong of the claims that are at play, the trial is honestly focused on Your Honor's guidance on really the medical knowledge and *Rush v. Parham*.

The question of animus is really driven by, frankly, what would be considered more legislative fact finding by the Court. That is not -- it's not like we are calling in the Governor as a witness or anything like that in this case, nor do we intend to, nor would we in the other case, right?

And it wouldn't make any --

THE COURT: I never said animus wasn't an issue in the case. I addressed *Rush versus Parham* and the standards under the Medicaid statute. Your papers are full of references to animus.

MR. GONZALEZ-PAGAN: Yes.

THE COURT: Look, there's a -- I mean, I don't read the newspapers about this stuff with any care, but I see the headlines, and some of it just as it comes by. There was a legislator who on the -- was it a committee hearing that said, These people are mutants. I mean, animus is in the case.

MR. GONZALEZ-PAGAN: And again, a bit premature, but I would just posit that that doesn't prevent us from continuing with either the amendment or this trial. We could have separate truncated findings of fact of discovery with regards to just that question and proceed with the trial as is with regards to

the rest of the aspects, to the extent that my friend thinks that that question is different with regards to the bill.

We do -- I think we both agree that the trigger for us to amend has not yet come to pass. But once it does, we do intend to present the Court with a motion if -- for that effect. And we believe it would just be the most efficient way to deal with this, to meet the policies and the statutes of the State that deal with the same issue, one that has both come to pass, most likely during the pendency of this trial, and to preserve the resources, frankly, of all parties and the Court, given all the efforts that have been provided so far into this.

THE COURT: Well, I understand the amendment isn't timely until the new statute is signed. It seems likely to me that the statute will be signed.

I'm all for handling all of this in the most efficient way it can all be handled. I suspect that this case is not going to end in the district court. I will -- my ruling likely will make one side or the other, and perhaps both, dissatisfied in at least some respects. And one side or the other, or perhaps both, will wind up appealing. And so there will be a decision one day in the Eleventh Circuit, possibly in one of these cases, from one of the states where all this is going on, one day in the Supreme Court.

I view a major part of my job to compile a good record, at least as good as you folks bring and as well as I can

do it on this side. I'd like to do that as efficiently as I can. I'd rather not repeat stuff unnecessarily.

I mean, I don't know that Dr. Karasic would say anything different testifying in the other trial. I don't know that Dr. Shumer would say anything different in testifying in the other trial. By the other trial, I mean the trial of the new case, the one dealing with the medical profession -- or the prohibition in the new statute.

Now, there are all kinds of ways to deal with that. I may be wrong about that. There may be particular things they would say so that we need to have a trial in the other case and bring them back. But even there, to the extent we can treat testimony here as admissible and admitted there, that probably makes sense. But you should both be thinking about how best to get this presented.

I don't think it's a good answer just to say, Well, we're not going to amend the complaint. And so we just put things off, and we don't do any coordinating. Amending the complaint strikes me as fine. Mr. Jazil may persuade me otherwise, but it strikes me as probably just fine to amend the complaint, to go forward with the trial. If there really are new things that we can't get all presented -- one nice thing about a bench trial is you don't have to worry about bringing jurors back or whatever. If we just try this case as thoroughly as we can try it and keep the record open if we have to bring

back some other evidence a couple weeks or even a month or a couple of months down the road, that can be done. You've got everybody scheduled. So it seems to me that if we can make it work to keep on the schedule we have now and bring in all the witnesses on the schedule we have right now, that makes sense to do that.

And then you ought to talk about the other case and whether there is really anything different in the other case. I referred to a comment that I saw in the paper having been made, but the truth is those kind of comments really don't amount to much. What really matters is -- more is what was passed and if there's any history of what was introduced and how it got changed. That probably makes more difference than what one legislator said. You know the kind of things that go in and get properly considered on that kind of an issue and whatever else. There may be other testimony or other experts.

But if you can talk to each other about how much of this trial we can preserve for that other case, and then the possibility is to take the evidence we have now -- and if you want to wait and try the other case, it seems to me it shouldn't take very long because most of it is right here. But if we want to try the other case, consolidate the records, treat the two cases together and get a ruling at that point, that's the kind of thing we can do.

I'm very flexible on all of this. I'd like to do it

as efficiently as we can. If I can write one opinion instead of two, that's certainly okay with me. There will be a lot of overlap.

But you must have been thinking about this some because you knew this statute was in the works. We talked about it briefly at the pretrial, and everybody just wanted to keep marching as we are, and so that's why we're here.

MR. GONZALEZ-PAGAN: Yes, Your Honor, we're happy to have all of those conversations, and we do agree that efficiency here would be welcomed.

Just briefly, there's a small overlap between the team representing the plaintiffs in the other case and our team, but --

THE COURT: That's right. It's a different set of lawyers.

MR. GONZALEZ-PAGAN: It's a whole different set of attorneys, so -- but we're happy to talk to that -- plaintiffs' counsel in that case, and my colleague Simone Chriss is on both cases.

THE COURT: I'm sorry. I forgot that. I wouldn't have been talking about their case so much without them here if I had recalled.

You're in the other case?

MR. JAZIL: Yes, Your Honor. And the lead counsel for the plaintiffs in the other case is in the gallery as well.

THE COURT: All right. So I haven't talked too much behind your back.

All right. Well, all of you talk and see how you want to do, but the plan as of now is to just keep marching. So I'll be here at 9:00 in the morning, and we'll have Dr. Shumer on the stand, and we'll keep going with it.

MR. JAZIL: Your Honor, I just highlight for the Court -- I mean, if we're working through the *Arlington Heights, Greater Birmingham* factors, the sequence of events leading up to the passage of what -- the rule or the legislation, I think the focus does change a bit, the thing that we're looking at if we have a process claim. And, again, the State's position is under *Rush v. Parham* there is no process claim, but I understand --

THE COURT: Yeah, I have to tell you I find it -- curious may not be the right word. You're all up in arms because WPATH won't tell you how they adopted their standards, but you don't think the State of Florida ought to tell us how they adopted their rule. It seems to me that one can argue that how the State of Florida did it ought to be fair game, but how WPATH did it doesn't matter. But I think it's a whole lot harder to make the argument that how WPATH did it needs to be looked at under a microscope, but how the State of Florida did it doesn't matter. That seems to me to be a very hard argument.

MR. JAZIL: I understand, Your Honor. I'm simply making that argument under the *Rush* paradigm. Under the Equal

Protection paradigm, if we're using the *Arlington Heights* framework, that is all fair, and it is what it is.

THE COURT: It is what it is, yeah.

All right. Well, we've probably gone as much on this as we can. We'll keep going with it. But keep me posted. I'll go back and read the bill so that I've got a better idea of this, and we'll see where we go. My goal at least is not to have a trial that winds up being meaningless, so -- and that's probably everybody else's goal.

I'll see you at 9:00 in the morning.

MR. GONZALEZ-PAGAN: Thank you, Your Honor.

(Proceedings recessed at 5:26 PM on Tuesday, May 09, 2023.)

* * * * * * * *

I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter. Any redaction of personal data identifiers pursuant to the Judicial Conference Policy on Privacy is noted within the transcript.

/s/ Megan A. Hague 5/9/2023

Megan A. Hague, RPR, FCRR, CSR Date
Official U.S. Court Reporter

I N D E X

E X H I B I T S

EXHIBITS	OFFERED	RECEIVED
ECF NO. 219 -- All exhibits listed in ECF 219 are admitted	17	17

PLAINTIFFS' EXHIBITS	OFFERED	RECEIVED
359	22	22
360	178	178

PLAINTIFFS' WITNESSES

DR. DAN HALABAN KARASIC

Dr. DANIEL SHUMER