EXHIBIT 4

APPENDIX A TO SUPPLEMENTAL EXPERT REPORT OF JAMES CANTOR, PH.D.

Contains Confidential Material Subject to Protective Order

Table of Contents

APPENDIX A: Supplemental Opinions and Support based on Documents Produced Subject	
to Pro	tective Orderi
A.	Members of the WPATH committee responsible for developing SOC 8 shared and endorsed many of the opinions I have offered
В.	Members of the Guideline Development Group were sharply critical of the AAP and positions it pressed WPATH to adopt in SOC-8iv
C.	WPATH documents reveal that the SOC-8 development process was extensively influenced by factors other than medical science, including political pressure, litigation and legislative advocacy strategy, and the financial self-interest of WPATH members
D.	WPATH's internal communications reveal that the SOC-8 development process was influenced by pressure from high-level government appointees viii
E.	After WPATH removed age minimums after finalization and publication of SOC-8 and without scientific justification, it fabricated a false explanation for public consumption
F.	WPATH did not even alert SOC-8 committee members about, nor ask questions that would identify, direct financial conflicts of interest, or intellectual conflicts of interest
G.	WPATH views evidence-based medicine as an obstacle to its policy goals, rather than as an important tool to ensure beneficent health care for patients xii

APPENDIX A: Supplemental Opinions and Support based on Documents Produced Subject to Protective Order

- A. Members of the WPATH committee responsible for developing SOC 8 shared and endorsed many of the opinions I have offered.
- 121. Several internal communications reveal that WPATH Guideline Development Group members are concerned that young patients are being treated and harmed by "sloppy," "inexperienced" and "sometimes dangerous" providers. (Emphasis added.)

I would be very interested in how we can better safeguard our clientele [including from] *opportunism by inexperienced and sometimes dangerous providers*. (BOEAL WPATH 074670.)

Thank you [redacted] for the blog article with [redacted] on *questioning 'sloppy' medicine and assessments for youth in particular*. It is an important conversation and I agree it has typically been censured for some reasonable concerns on outcome. (BOEAL_WPATH_022037.)

What I personally have much less of...is talking with colleagues about how to respond to 'sloppy' clinical work by my peers. That's what I thought was so brave about [redacted] very public statements (and I have spoken with both of them privately about this for many years. Do we agree that some folk are doing 'sloppy' work (that would not be my language btw), and if so, what (if anything) is my responsibility on this...or WPATHs. (BOEAL_WPATH_022879.)

[W]e should address topical estrogen for transmasculine people on testosterone to prevent discomfort/increase pleasure. Perhaps this would fit under statement 4? Considering how common this is, and *how many inexperienced providers may not consider it*, I really think it's essential to mention. (BOEAL_WPATH_045587.)

122. Members of the Guidelines Development Group expressed the concern that medical professionals are providing "treatment on demand" and that SOC-8 would further "open that up (emphasis added):

I do agree with [redacted] and would go a step further to say that I do have concerns about how the door has swung away from more rigorous assessments in general over time. The reaction to restricted access and barriers has been *a wave of treatment-on-demand clinics and proponents*. (BOEAL_WPATH_027626.)

I am absolutely certain that, should this content remain as-is, within weeks of SOC 8 release, there will be scores [...] opening up the tap to what is effectively *surgery on demand*. (BOEAL_WPATH_026970.)

That SOC provision referenced in this last comment did indeed "remain as-is," and is now codified as Statement 13.6 of SOC-8.

123. WPATH Guideline Development Group members explicitly worried about the *lack* of evidence supporting provisions of SOC-8 (emphasis added):

I think we need a more detailed defense that we can use that can respond to academic critics. . . .we know that *some of the studies we have cited in support of our recommendations will be torn about* by organizations such as the Society for Evidence Based Gender Medicine. (BOEAL_WPATH_074670.)

Caution about the point in the beginning about this creating a barrier/gatekeeping, particularly since we don't have evidence for what extensive exploration is helpful. (BOEAL_WPATH_018676.)

124. Members of the Guideline Development Group acknowledged that there is no consensus among treatment providers regarding the use of puberty blockers (emphasis added):

I think *there is no agreement on this within pediatric endocrinologists*, what is significant risk especially balanced against the benefits of e.g. thinking time which can be very important for a 14 year old. (BOEAL_WPATH_020864.)

I'm not clear on which 'agreement regarding the value of blockers' is required to be espoused by a WPATH member/mentor. My understanding is that *a global consensus on 'puberty blockers' does not exist.* (BOEAL_WPATH_022878.)

[T]hings in Europe are definitely stressful (e.g. in Sweden no blockers are provided anymore and a very skeptical documentary came out and [redacted] was in a Dutch documentary, so *the controversies are reaching Europe as well*). (BOEAL_WPATH_037482.)

The field is heavily under fire in this area, and I do not believe the change suggested is supported by the data. (BOEAL_WPATH_061196.)

125. Members of the Guideline Development Group expressed the view that SOC-8 was endorsing a "lax approach" to approval of surgery that represented "bad medicine." (Emphasis added.)

As it stands the Assessment chapter for SOC 8 has removed all pre-surgical assessment and requirements for adults, besides a 'suggestion' of 6 months on hormone therapy. In addition to being bad medicine in my view, I think this will add great fuel to the fire we are dealing with and ultimately weaken WPATH and the strength of the SOCs. (BOEAL_WPATH_027626.)

I wanted to emphasize the concerns I raised regarding the assessment chapter's statement that the guideline for surgery access will be a 'suggested' 6 months of hormone therapy prior to permanent and sterilizing genital and gonadal procedures, as well as *the general lax approach to criteria for surgical care in general*. In my view and experience, this is very inappropriate and will have several very negative effects. First, it will place any provider of any discipline who identifies any need for caution, pause, or further exploration and identity integration prior to moving forward with these surgeries to become a gatekeeper in the eyes of the patient. Second, it will fuel already opportunistic and in some cases predatory practices by some surgeons in this field, who will be emboldened as well as enabled by a removal of any waiting period. (BOEAL_WPATH_026970.)

I do agree with [redacted] and would go a step further to say that I do have concerns about how *the door has swung away from more rigorous assessments* in general over time. (BOEAL_WPATH_027626.)

All I can say is, finally. I am glad to finally hear some sense of *concern about the loosening of standards*. It should be quite clear that *we have loosened standards and lost some control* over the opportunistic nature of medicine in the US that we too started hearing concern over detransition/regret. (BOEAL_WPATH_027626.)

126. Members of the Guideline Development Group agree with me that adolescents may mistakenly come to believe they are transgender due to "social factors" and immature "decision making." (Emphasis added.)

We cannot outright dismiss the fact that social factors (also don't like the word contagion) impact identity development and decision making in adolescents. (BOEAL WPATH 074670.)

For sure is that increasing numbers are asking for medical affirming treatment. What the explanation for this increase is, is unknown and also methodologically challenging to study; *social factors likely play a role*. (BOEAL_WPATH_074670.)

Some adolescents—who have certain psychological vulnerabilities—feel comfortable within a marginalized community space and come to feel it's a safe space for them. For others, gender serves a different function, not necessarily one

that is about their gender identity even though they may feel it is about their identity in the moment. (BOEAL_WPATH_074670.)

However, what is true for anyone who works with adolescents is that *social* factors are indeed an aspect of identity development for adolescents, and some young people are more influenced than others, which can be both positive (need to be surrounded by like-minded peers for love and support) and/or negative (can sometimes impact more vulnerable or susceptible young people to adopt and exploration process that might not be authentic for them). (BOEAL_WPATH_082675.)

127. Group members agreed that, as I explained in my prior report (Cantor Report, ¶¶ 160–63), symptoms of Borderline Personality Disorder can be mistaken for gender dysphoria and lead to mistaken diagnoses. (Emphasis added.)

There's no assessment tool that captures all the ways *internal signals can* sometimes be misread as related to gender when they're not, or not completely, as can happen with borderline personality and other identity-related conditions. (BOEAL_WPATH_027536.)

- B. Members of the Guideline Development Group were sharply critical of the AAP and positions it pressed WPATH to adopt in SOC-8.
- 128. Members of the Guideline Development Group disagreed with AAP's contention that transgender identity is innate and unchanging.

Looking at the AAP in Google they clearly see a group of trans people that I don't recognize, where gender identity always appears at childhood, that is not my experience. (BOEAL_WPATH_079582.)

129. Members of the WPATH Guideline Development Group shared my view that the AAP "Policy Statement" is the work of "a few friends" and not supported by science.

The AAP guidelines that they mentioned so many times have a very weak methodology, written by few friends who think the same. (BOEAL WPATH 079582.)

I will be surprised i[f] their guidelines are used at all. (BOEAL_WPATH_079582.)

I worry that AAP first publishes very affirming but not so well underpinned own guidelines. (BOEAL_WPATH_080019.)

130. WPATH committee members objected that AAP provided input and pressure into the SOC-8 development process that was not based on science.

I am seriously surprised that 'reputable' association as the AAP is so thin on scientific evidence. (BOEAL_WPATH_079852.)

I have also read all the comments from the AAP and struggle to find any sound evidence-based argument(s) underpinning these. (BOEAL_WPATH_079852.)

131. WPATH committee members were surprised to find that AAP allowed "very very junior" people to speak for it on issues of treatment of gender dysphoria.

"I don't think the AAP representatives are WPATH members and looking at their names / qualifications / accreditation they are very very junior clinicians / academics.... That's why I'm feeling increasingly uncomfortable about the direction of travel in this process. (BOEAL_WPATH_079982.)

I was shocked to see the feedback from very junior people from AAP. (BOEAL_WPATH_080004.)

This is really a shame if the experts at AAP are junior and flexing to change another societies guidelines. (BOEAL WPATH 079993.)

This was consistent with AAP's past practice. As I have noted, the author of the AAP Policy Statement was Dr. Jason Rafferty, a resident still in training as a pediatrician at the time.

132. As best as I can determine, none of the AMA, APA, or AAP have endorsed WPATH's SOC-7 or SOC-8. Indeed, the assertion that any of these organizations had endorsed SOC-7 came as a surprise to some WPATH committee members:

I have no idea how it was ever said that so many medical organizations have endorsed SOC 7. This statement is made in many legal briefs and court proceedings. (BOEAL WPATH 091215.)

- C. WPATH documents reveal that the SOC-8 development process was extensively influenced by factors other than medical science, including political pressure, litigation and legislative advocacy strategy, and the financial self-interest of WPATH members.
- 133. Members of the WPATH Guideline Development Group repeatedly and explicitly lobbied to tailor language of the guidelines for the purposes of influencing courts and legislatures, and to strengthen their own testimony as expert witnesses.
- 134. Although committee members' names were redacted, contributors identified themselves in their comments as expert witnesses in U.S. legal cases. In their comments, they pushed for wording and the exclusion of language explicitly according to how it would impact, not only legal decisions in general, but the specific cases in which they were about to testify. (Emphasis added.)

I am concerned about language such as 'insufficient evidence,' 'limited data,' etc...I say this from the perspective of current legal challenges in the US. Groups in the US are trying to claim that gender-affirming interventions are experimental and should only be performed under research protocols (this is based on two recent federal cases in which I am an expert witness). In addition, these groups already assert that research in this field is low quality (ie [sic] small series, retrospective, no controls, etc....). My specific concern is that this type of language (insufficient evidence, limited data, etc...) will empower these groups and reinforce their erroneous assertions. (BOEAL_WPATH_020387.)

It is abundantly clear to me *when I go to court* on behalf of TGD individual to secure access to medically necessary health care and other human/civil rights, *as I will be doing in a class action lawsuit deposition in 2 weeks in NC*. The wording of our section for Version 7 has been critical to our successes, and I hope the same will hold for Version 8. (BOEAL_WPATH_020628.)

Here are a number of my thoughts which may be *helpful for Chase and the legal team*. (BOEAL_WPATH_061843.)

Chase Strangio is Deputy Director for Transgender Justice with the ACLU's LGBT & HIV Project. (Emphasis added.)

I think we need a more detailed defense that we can use that can respond to academic critics and that *can be used in the many court cases that will be coming up*. (BOEAL_WPATH_074670.)

I agree it is very clear from an epidemiological standpoint. However *when used in court* estimates will be dismissed as being simply unreliable guesses in a way in which other words will not—which will disadvantage the people *we are trying to advocate for.* (BOEAL_WPATH_036301.)

Medical necessity is at the center of dozens of lawsuits in the US right now over state actions to make trans care inaccessible, as well as being at the center of all reimbursement for trans care in the US. (BOEAL_WPATH_061843.)

There are important lawsuits happening right now in the US, one or more of which could go to the Supreme Court, on whether trans care is medically necessary vs experimental or cosmetic. I cannot overstate the importance of SOC 8 getting this right at this important time. (BOEAL_WPATH_020273.)

I would avoid absolute numbers [for ages] that can be taken out of context or used in court. (BOEAL_WPATH_022919.)

- 135. For individuals who are or were serving as paid expert witnesses to serve on WPATH's Guideline Development Group or otherwise have input into that process is, as I have explained above, a direct conflict of interest, and in these comments we see these committee members working to further their own work as expert witnesses. These direct conflicts of interest were not disclosed by WPATH.
- 136. Other comments revealed broader pressure to tailor SOC-8 to further political advocacy goals, rather than based on medical science.

If our concern is with legislation (which I don't think it should be—we should be basing this on science and expert consensus if we're being ethical) wouldn't including the ages be helpful? I need someone to explain to me how taking out the ages will help in the fight against the conservative anti trans agenda. (BOEAL WPATH 072147.)

137. Members of the WPATH Guideline Development Group went so far as to explicitly advocate that SOC 8 be written to maximize impact on litigation and policy *even at the expense of scientific accuracy*. (Emphasis added.)

My hope with these SoC is that they land in such a way as to have serious effect in the law and policy settings that have affected us so much recently; even if the wording isn't quite correct for people who have the background you and I have. (BOEAL_WPATH_036301.)

- D. WPATH's internal communications reveal that the SOC-8 development process was influenced by pressure from high-level government appointees.
- 138. Assistant Secretary for Health Dr. Rachel Levine strongly pressured WPATH leadership to rush the development and issuance of SOC-8, in order to assist with Administration political strategy.

I have just spoken to Admiral Levine today, who—as always is extremely supportive of the SOC 8, but also very eager for its release—so to ensure integration in the US health policies of the Biden government. So, let's crack on with the job!!! (BOEAL_WPATH_061521.)

I am meeting with Rachel Levine and her team next week, as the US Department of Health is very keen to bring the trans health agenda forward. (BOEAL_WPATH_019314.)

The failure of WPATH to be ready with SOC 8 is proving a barrier to optimal policy progress and she [Dr. Levine] was eager to learn when SOC 8 might be published. (BOEAL_WPATH_018924.)

[T]his should be taken as a charge from the United States government to do what is required to complete the project immediately. (BOEAL_WPATH_018924.)

139. Assistant Secretary Levine also attempted to and did influence the substantive content of SOC-8, based on political goals rather than science. Specifically, Assistant Secretary Levine, though a staff member, pressured WPATH to remove recommended minimum ages for medical transition treatments from SOC-8. (Emphasis added.)

Sarah Boateng, who is Adm. Levine's chief of staff [said the] biggest concern is the section below in the Adolescent Chapter that lists specific minimum ages for treatment, she is confident, based on the rhetoric she is hearing in DC, and from what we have already seen, that these specific listings of ages, under 18, will result in devastating legislation for trans care. She wonders if the specific ages can be taken out and perhaps an adjunct document could be created that is published or distributed in a way that is less visible than the SOC8, is the way to go. (BOEAL_WPATH_071455.)

The issue of ages and treatment has been quite controversial (mainly for surgery) and it has come up again. We sent the document to Admiral Levine . . . She like

viii

¹³ These were age 14 for cross-sex hormone treatment; age 15 for chest masculinization surgery; age 16 for breast augmentation and facial surgery; and age 17 for metoidioplasty, orchidectomy (castration), hysterectomy, and fronto-orbital remodeling.

the SOC-8 very much but she was very concerned that having ages (mainly for surgery) will affect access to health care for trans youth and maybe adults too. Apparently the situation in the USA is terrible and she and the Biden administration worried that having ages in the document will make matters worse. She asked us to remove them. We have the WPATH executive committee in this meeting and we explained to her that we could not just remove them at this stage. (BOEAL_WPATH_072114.)

[W]e heard your [Dr. Levine's] comments regarding the minimal age criteria for transgender healthcare adolescents; the potential negative outcome of these minimal ages as recommendations in the US [. . .] Consequently, we have changes to the SOC 8 in this respect. Given that the recommendations for minimal ages for the various gender affirming medical and surgical intervention are consensus-based, we could not remove them from the document. Therefore, we have made changes as to how the minimal ages are presented in the documents. (BOEAL_WPATH_072964.)

- 140. WPATH made changes to SOC-8 for the explicit purpose of minimizing members' risk of malpractice liability. At WPATH's next annual conference after the release of SOC-8, Dr. Amy Tishelman, one of the Guidelines Development Group members, gave a presentation at which discussed the removal of "recommended" age minimums for surgery. She stated that the minimum ages were removed rather to protect clinicians from lawsuit should the clinician decide to provide a treatment to someone younger than a specified age minimum. Again, this reflects both the existence and the harmful impact of the financial conflict of interest that WPATH and its members faced while developing SOC-8.
 - E. After WPATH removed age minimums after finalization and publication of SOC-8 and without scientific justification, it fabricated a false explanation for public consumption.
- 141. One committee member objected to the after-the-last-minute removal of the age minimums as a violation of WPATH's formal process, but acknowledged that "it's all about the messaging and marketing."

ix

¹⁴ Available at https://twitter.com/SwipeWright/status/1571999221401948161?s=20&t=ouHIObZhEllVU-QR9tZYiQ, Colin Wright (@SwipeWright), X, (last accessed February 2, 2024).

I don't see how we can simply remove something that important from the document—without going through a Delphi—at this final stage of the game [...] I realize that those in favor of the bans are going to go right to the age criteria and ignore the fact that we actually strengthened the strictness of the criteria to help clinicians better discern appropriate surgical candidates from those who are inappropriate [...] It's all about messaging and marketing. (BOEAL_WPATH_071466.)

A "Delphi" process is a recognized procedure for ascertaining consensus views among a group of experts while minimizing the risk that the outcome is biased by "group think" or peer pressure.

- 142. Another committee member said it was "the most strange experience" to see the changes (elimination, really) to the minimum age recommendations made at the "last minute" after internal discussion made clear that "nobody [on the committee] wanted to make them, and personally not agreeing with the change." (BOEAL_WPATH_081993.)
- 143. But AAP issued an ultimatum to WPATH: Should WPATH not delete the age minimums, AAP would not only withhold endorsement of SOC-8, but would publicly oppose the document. (BOEAL_WPATH_079974; BOEAL_WPATH_081502.)
- 144. As a result of this additional pressure, on top of that from Assistant Secretary Levine, WPATH capitulated and removed the text in violation of its own process despite the preference of its own committee members to retain the age limits.
- 145. Because WPATH had already released the text of SOC-8, the removal of the age minimums was publicly visible, and triggered immediate criticism and controversy. In response, the WPATH Guidelines Development Group fabricated a false explanation.

I am getting several question from international and Dutch press why the age criteria have been remove[d] from the adolescent chapter [. . .] Can you please inform me what your arguments were to remove it and why this happened in such a late phase. (BOEAL WPATH 082401.)

While I have some suggestions, I think it's best we all get on the same exact page, and PRONTO. (BOEAL_WPATH_082401.)

[T]his is my basic response. Feel free to provide input but, for me, this was the gist of my response to Reuters: (there is no shame in our removal of the age minimums). "since the open comment period, a great deal of input has been received and continued to received until the final release. I feel the final document puts the emphasis back on individualized patient care rather than some sort of minimal final hurdle that could encourage superficial evaluations and treatments outside of the thorough and comprehensive pathway recommended by WPATH standards." (BOEAL_WPATH_082452.)

I like this. Exactly—individualized care is the best care—that's a positive message and a strong rationale for the age change. (BOEAL_WPATH_082452.)

- F. WPATH did not even alert SOC-8 committee members about, nor ask questions that would identify, direct financial conflicts of interest, or intellectual conflicts of interest.
- 146. The WPATH policy on financial conflicts consisted of this half of a sentence:

The Disclosure Form collects information about financial relationships with entities with direct interest in the SOC 8 . . . (BOEAL_WPATH_000737.)

The specific instructions and questions WPATH posed to prospective guideline development participants were:

For the following section, consider stocks, bonds, and other financial activities and investments including partnership (but excluding broadly diversified mutual funds and any investment or financial interest valued at less than \$5,000 USD).

- 2.1 Do you or your partner/spouse or minor children own directly or indirectly (e.g., through a trust or an individual account in a pension or profit-sharing plan) any stocks, bonds or other financial investments that may in any way gain or lose financially from SOC 8?
- 2.2 Do you hold or are you currently applying for any patents related to the content of SOC 8?
- 2.3 Have you received research grants or contracts (restricted or unrestricted) from an organization that has interests or activities related to the content of SOC 8?
- 2.4 Have you received reimbursement, fees or salary from an organization that has interests or activities related to the content of SOC 8? (e.g., as a board member, advisor, consultant, payment for manuscripts, speakers bureaus, travel, expert testimony)? (BOEAL_WPATH_000737.)

- 2.5 Do you have any other financial interests related to SOC 8?

 No question was asked about *direct* compensation received by the participant as a result of delivering the very services that would be addressed by the guidelines.
- 147. Similarly, the WPATH conflict of interest forms reveal that their guidelines development team were not appraised of the nature and importance of intellectual conflicts of interest and were not asked questions adequate to identify all such conflicts of interest.
- 148. Nevertheless, internal documents reveal that committee members did recognize at least some of the conflict of interests that I identify. One member wrote, on his conflict disclosure form, "Everyone involved in SOC process has a non-financial interest."

 (BOEAL_WPATH_001013.)
- 149. Yet, as the language quoted in paragraph 115 above, shows, WPATH assured the public that no conflicts of interest existed.
 - G. WPATH views evidence-based medicine as an obstacle to its policy goals, rather than as an important tool to ensure beneficent health care for patients.
- 150. After the release of SOC-8 and the subsequent, politically-motivated removal of age minimums for administration of surgery and cross-sex hormones, and the ensuing public criticism of that radical and after-the-fact change, the SOC-8 committee leadership sent a "12-point Strategic Plan" to the leadership of the World Association for Sexual Health (WAS) proposing activities to defend and promote SOC-8. (BOEAL_WPATH_091211.)
- 151. This document includes some rather remarkable admissions concerning WPATH's process, the (lack of) scientific basis for its recommendations, and the lack of consensus, including:
 - (1) "we were not able to be as systematic as we could have been (e.g., we did not use GRADE explicitly)."

- (2) "Now that we have reviewed the evidence, we are painfully aware of the gaps in the literature and the kinds of research that are needed to support our recommendations"
- 152. And acknowledgment that the "policy changes" in Sweden, Finland, Australia, New Zealand, and other nations constitute "a threat on our assertion that the WPATH SOC are the Gold Standard used around the world." (BOEAL_WPATH_091211.)
- 153. While the author's name has been redacted from the document as produced by WPATH, such a proposal would typically come from a group's leader, which in this instance would be Dr. Eli Coleman, the Chair of the SOC-8 Steering Committee. And indeed, in one of the many response emails attaching that original email the name "Eli" appears.

 (BOEAL_WPATH_091231.)
- 154. The document's introduction includes a list of adversaries and obstacles which "Eli" felt were attacking trans health care, including "academics and scientists who are naturally skeptical" and "continuing pressure in health care to provide evidence-based care." It is impossible to exaggerate the fatal importance of Eli's categorization of scientific skepticism and evidence-based medicine as a problem rather than the goal. An objective observer would perceive SOC-8 to be under attack from evidence-based care *exactly because* SOC-8 does not embody evidence-based care, although WPATH and other advocates of medicalized transition assert that it does. As I have detailed in my initial report and in this supplemental report, multiple, substantial portions of SOC-8 are constructed based on exactly the anecdotal, ambiguous, subjective, and insufficient features that evidence-based medicine rejects as unreliable, and is designed to replace.