UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF GEORGIA Atlanta Division

EMMA KO	OE, et	al
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Plaintiffs,

V.

Civil Action No. 1:23-cv-02904-SEG

CAYLEE NOGGLE, et al.,

Defendants.

REBUTTAL DECLARATION OF MEREDITHE MCNAMARA, M.D., M.Sc.

- I, Meredithe McNamara, M.D., M.Sc., hereby declare and state as follows:
- 1. I have been retained by counsel for Plaintiffs as a rebuttal expert in connection with the above-captioned litigation.
- 2. I have actual knowledge of the matters stated herein. If called to testify in this matter, I would testify truthfully and based on my expert opinion.

I. BACKGROUND AND OUALIFICATIONS

A. Qualifications

3. I am a board-certified pediatrician and adolescent medicine physician. I received an M.D. and Master of Science in Clinical Research from Emory University. I completed pediatrics residency training at the University of Chicago and fellowship training in adolescent medicine at the University of Illinois-Chicago. I am an Assistant

Professor of Pediatrics at the Yale School of Medicine. I provide full spectrum clinical care to youth aged 12–25 years, which includes youth experiencing gender dysphoria.

4. The information provided regarding my professional background, experiences, publications, and presentations is detailed in my curriculum vitae, a true and correct copy of the most up-to-date version of which is attached as **Exhibit A**. The materials cited herein are provided with this declaration as **Exhibit B**.

B. Prior Testimony

5. I have been retained as an expert witness in *Boe v. Marshall*, No. 2:22-cv-00184-LCB-SRW (M.D. Ala.).

C. Compensation

6. I am being compensated at an hourly rate for the actual time that I devote to this case, at the rate of \$400.00 per hour for any review of records, preparation of reports, declarations, and deposition and trial testimony. My compensation does not depend on the outcome of this litigation, the opinions that I express, or the testimony that I provide.

D. Bases for Opinions

- 7. In preparing this declaration, I reviewed the text of Senate Bill 140, titled "Hospitals; the treatment of gender dysphoria in minors performed in hospitals and other licensed healthcare facilities . . ." passed into law in 2023.
- 8. I have also reviewed the materials listed within my curriculum vitae (**Exhibit A**), as well as the materials listed in the bibliography (**Exhibit B**). The sources

cited therein include authoritative, scientific peer-reviewed publications. They include the documents specifically cited as supportive examples in particular sections of this report.

I may rely on these materials as additional support for my opinions.

- 9. In addition, I have relied on my scientific education, training, and years of clinical and research experience, and my knowledge of the scientific literature in the pertinent fields.
- 10. The materials I have relied upon in preparing this report are the same types of materials that experts in my field of study regularly rely upon when forming opinions on these subjects.
- 11. To the best of my knowledge, I have not met or spoken with the Plaintiffs.

 My opinions are based solely on my extensive background and experience treating transgender patients.
- 12. I may wish to supplement or revise these opinions or the bases for them due to new scientific research or publications or in response to statements and issues that may arise in my area of expertise.

II. EXPERT OPINIONS

- I. Transitioning Medications are Safe and Effective Treatment for Gender Dysphoria in Adolescents and are Administered in Accordance with Evidence-Based Clinical Practice Guidelines
 - 13. Gender dysphoria is a recognized condition¹ for which medical treatment

¹ American Psychiatric Association, Diagnostic and Statistical Manual of Mental

can be essential. The evidence shows that standard medical treatments for gender dysphoria improve mental health outcomes, including reducing rates of suicidal ideation and suicide attempts.

14. Standard treatments for transgender adolescents with gender dysphoria may include, if determined to be medically necessary for a given individual, gonadotropin-releasing hormone agonists—also known as puberty blockers, and hormone therapies such as estrogen or testosterone. Collectively, these medications are known as "transitioning medications."

A. International and national medical consensus supports the treatment of genderdysphoria and recommends use of standards of care from WPATH and clinical practice guidelines from the Endocrine Society

- 15. Individuals with gender dysphoria seek medical care at a wide variety of ages. In the earliest phase of treatment, the treatment plan is typically non-medical, and care consists of using the individual's gender-appropriate pronouns, psychosocial evaluation and support, and education about the next stages of transition if medically necessary.
- 16. The physical changes of puberty occur in five stages, each stage of which correlates to maturation of secondary sex characteristics. These stages are defined by biometric criteria, such as testicular volume in those assigned male sex at birth, breast morphology in those assigned female sex at birth, and pubic hair distribution more

generally. Further, the stages of puberty may also be described by blood levels of estrogen and testosterone. Critically, medical treatments for youth experiencing gender dysphoria are not indicated in the first stage of puberty because, by definition, no physical change has occurred. The first stage of puberty is synonymous with a pre-pubertal state.

- 17. After these initial visits, adolescents in the second, third or fourth stages of puberty may have a medical need for temporary use of puberty blockers to stall distressing physical change. Use of hormone therapies such as estrogen or testosterone is an established practice in older transgender adolescents experiencing gender dysphoria.
- 18. Leading guidelines for the medical treatment of transgender children and adolescents are those published by World Professional Association for Transgender Health (WPATH) and by the Endocrine Society. WPATH is a leading international organization of scientists and other professionals, which has issued standards of care for transgender adults and children since 1979.² Several revisions have been made as scientific evidence drives changes in standards. The current version, WPATH Standards of Care Version 8, is viewed as authoritative in the medical community and is widely consulted by physicians and other clinicians. The Endocrine Society is the leading international organization of endocrinologists, i.e., physicians specializing in the study and treatment of the human endocrine system, including hormonal treatment. In 2009, with updates in 2017, the Endocrine Society issued clinical practice guidelines for the

² The current version is WPATH (2022). According to WPATH, the first seven versions were published in 1979, 1980, 1981, 1990, 1998, 2001, and 2012.

treatment of gender dysphoria.3

- 19. The National Academy of Medicine, formerly the Institute of Medicine, and one of the three parts of the National Academy of Science, is the premier American organization for establishing objective, authoritative and scientific answers to important questions of our time pertaining to human health.⁴ Members of this non-governmental, non-profit organization are internationally recognized scholars with distinguished careers in all fields of medicine. The National Academy of Medicine has established standards for how clinical guidelines should be developed that minimize bias and conflicts of interest and prioritize a systematic evaluation of all relevant evidence.⁵ WPATH's Standards of Care were developed in accordance with these standards, and those of the World Health Organization.⁶
- 20. Consistent with these standards, guidelines from WPATH and the Endocrine Society are based on rigorous, structured, and iterative processes that include

³ Wylie C. Hembree et al., *Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline*, J. of Clinical Endocrinology & Metabolism (Sept. 13, 2017),

https://academic.oup.com/jcem/article/102/11/3869/4157558?login=false ("Endocrine Society (2017)").

⁴ Institute of Medicine 2011. *Clinical Practice Guidelines We Can Trust*. Washington, DC: The National Academies Press. https://doi.org/10.17226/13058.

⁵ *Id*.

⁶ "The process for development of the SOC-8 incorporated the recommendations on clinical practice guideline development set forth by the National Academies of Medicine and the World Health Organization, which addressed transparency, conflict-of-interest policy, committee composition, and group process." World Professional Association for Transgender Health (WPATH), Methodology for the Development of Standards of Care 8 ("WPATH SOC 8"), at https://www.wpath.org/soc8/Methodology.

a committee of scientific experts and external peer review by additional experts. All relevant research is collated and discussed in committee meetings by experts. The guidelines are based on careful reviews of the scientific literature and are revised periodically to reflect scientific developments. These longstanding clinical practice guidelines have been used by clinicians for decades. WPATH issued its initial guidelines in 1979 and updated them in 1980, 1981, 1990, 1998, 2001, 2012, and 2022. The eighth version, entitled "Standards of Care 8" was released in September 2022, and it incorporates systematic literature reviews and ample opportunities for peer review and revision. Over one hundred experts in gender dysphoria and medical treatment for gender dysphoria are credited in its authorship.

21. Reflecting this scientific and medical consensus, medical care for gender dysphoria has been confirmed as standard of care by relevant medical organization in the United States, including the American Academy of Pediatrics, the American Psychological Association, and the American Academy of Child and Adolescent Psychiatry among others.⁸ The World Health Organization in the 11th edition of the

⁷ See WPATH SOC 8.

⁸ Jason Rafferty, Committee on Psychosocial Aspects of Child and Family Health; Committee on Adolescence; *Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness, Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents*, 142(4) Pediatrics E20182162 (2018); American Psychological Association, *Guidelines for Psychological Practice with Transgender and Gender Nonconforming People*, 70(9) American Psychologist, 832-64 (2015) (hereafter "Am. Psychological Ass'n (2015)"); Stewart L. Adelson, *Practice Parameter on Gay, Lesbian, or Bisexual Sexual Orientation, Gender Nonconformity, and Gender Discordance in Children and Adolescents*, 51(9) J. Am. Acad. Child &

International Classification of Disease recognizes the importance of transgender health care as essential medical care in appropriate cases.

- 22. I am generally familiar with arguments that are made by opponents of the use of transitioning medications to treat transgender youthwith gender dysphoria and have reviewed the State's memorandum in opposition to Plaintiffs' motion for a preliminary injunction.
- 23. Based upon my review of SB140 and the State's response, I understand that the State may criticize the Endocrine Society Guidelines for using "low quality" or "very low quality" evidence, without regard for how these technical terms are specifically defined by the GRADE (Grading of Recommendation Assessment, Development and Evaluation) method, which is an evidence-based assessment method that the Endocrine Society uses for its guidelines.⁹
- 24. According to the GRADE Working Group, high-quality evidence is derived from randomized controlled trials and low-quality evidence is derived from observational study designs. Indeed, randomized controlled trials do offer advantages over observational study designs, but the converse is true as well. There is no clear hierarchy where one study design is categorically superior to another. Randomized controlled trials are widely considered to be impractical in the case of rare diseases,

Adolescent Psychiatry, 957-974 (2012).

⁹ Schünemann H, Brożek J, Guyatt G, Oxman A, editors. *GRADE handbook for grading quality of evidence and strength of recommendations*, The GRADE Working Group. (Updated Oct. 2013). Available from guidelinedevelopment.org/handbook.

such as gender dysphoria in adolescents, where it is difficult to recruit sufficient participants to provide adequate statistical power that randomized controlled trials require. They are also widely considered to be unethical in situations where the difficult-to-obtain and highly-sought intervention (such as medical treatments for gender dysphoria) is studied, as participation may reflect coercion.

- 25. Great care is undertaken by Institutional Review Boards to ensure that participation in clinical research is completely voluntary and not influenced by an individual's desire to obtain care that they perceive to be highly important. Further, they are considered unnecessary in settings where observational study can provide a naturalistic, real-world, and generalizable set of results. Even rigorous observational studies can provide what GRADE designates as "low quality" evidence. Less than 15% of medical treatments are supported by "high quality evidence." According to a meta-epidemiological analysis of systematic reviews, the quality of evidence does not worsen or improve with subsequent study. This suggests that there may be practical limit of evidence quality achievable in many fields of medicine.
 - 26. The Endocrine Society has produced recommendations based on "low

¹⁰ Fleming PS, Koletsi D, Ioannidis JP, Pandis N, *High quality of the evidence for medical and other health-related interventions was uncommon in Cochrane systematic reviews*, J. Clin Epidemiol. 2016 Oct; 78:34–42.

¹¹ Jeremy Howick et al., *The Quality of Evidence for Medical Interventions Does Not Improve or Worsen: A Metaepidemiological Study of Cochrane Reviews*, J. of Clinical Epidemology (Sept. 2, 2020), https://www.jclinepi.com/article/S0895-4356(20)30777-0/fulltext.

quality" or "very low quality" evidence in a number of areas: in various aspects of the care of primary adrenal insufficiency, central hypopituitarism, pheochromocytoma and paragangliomia, and several others. ¹² Recommendations that ensure from such evidence may be either "strong" or "weak" per GRADE Guidelines, but these recommendations still detail highly valued clinical practices that are heavily relied upon by experts and benefit patients tremendously.

27. The WPATH Standards of Care and Endocrine Society are based on the best available science and expert professional consensus. Other medical organizations such as the American Academy of Pediatrics, the American Psychological Association, and the American Academy of Child and Adolescent Psychiatry have endorsed these

¹² Stefan R. Bornstein, Bruno Allolio, Wiebke Arlt, Andreas Barthel, Andrew Don-

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Wauchope, Gary D. Hammer, Eystein S. Husebye, Deborah P. Merke, M. Hassan Murad, Constantine A. Stratakis, David J. Torpy, Diagnosis and Treatment of Primary Adrenal Insufficiency: An Endocrine Society Clinical Practice Guideline, J. of Clinical Endocrinology & Metabolism, Vol. 101, Issue 2, (1 Feb. 2016), Pages 364–389, https://doi.org/10.1210/jc.2015-1710; Maria Fleseriu, Ibrahim A. Hashim, Niki Karavitaki, Shlomo Melmed, M. Hassan Murad, Roberto Salvatori, Mary H Samuels, Hormonal Replacement in Hypopituitarism in Adults: An Endocrine Society Clinical Practice Guideline, J. of Clinical Endocrinology & Metabolism, Vol. 101, Issue 11, (1 Nov. 2016), Pages 3888–3921, https://doi.org/10.1210/jc.2016-2118; Jacques W. M. Lenders, Quan-Yang Duh, Graeme Eisenhofer, Anne-Paule Gimenez-Roqueplo, Stefan K. G. Grebe, Mohammad Hassan Murad, Mitsuhide Naruse, Karel Pacak, William F. Young, Jr, Pheochromocytoma and Paraganglioma: An Endocrine Society Clinical Practice Guideline, J. of Clinical Endocrinology & Metabolism, Vol. 99, Issue 6, (1 June 2014), at 1915–42, https://doi.org/10.1210/jc.2014-1498. See generally, Endocrine Society, Clinical Practice Guidelines, https://www.endocrine.org/clinical-practiceguidelines.

standards of care.

- 28. These standards require that clinicians undertake careful assessment at all stages of treatment, from diagnosis to the prescription of transitioning medications if appropriate for an individual youth.
 - B. Clinical practice guidelines endorse transitioning medications when medically necessary and after a consultative, informative process with an interdisciplinary team that includes mental health providers, physicians, and parents or guardians.
- 29. A key feature of both the WPATH Standards of Care and the Endocrine Society Clinical Practice Guidelines is the central role of mental health professionals in assessing gender dysphoria and appropriateness of certain modes of medical treatment from a developmentally and psychologically-informed standpoint. The Endocrine Society notes that, "because of the psychological vulnerability of many individuals with [gender dysphoria], it is important that mental health care is available before, during, and sometimes also after transitioning." WPATH provides extensive guidance on how to provide psychosocial support to youth experiencing gender dysphoria, as well as a definition of what constitutes a properly trained mental health professional.
- 30. WPATH and the Endocrine Society standards recommend an individualized and staged process for interventions that considers the unique presentation of gender dysphoria in the individual and takes their medical history and psychological

¹³ Endocrine Society (2017).

functioning into account. Social transition, puberty blockers, and hormonal treatment may be used in stages, and not all transgender adolescents with gender dysphoria undergo each treatment. Decisions regarding treatment are centered upon patient needs and assent, are made with authorization by legal guardians, and are made with expert guidance from an interdisciplinary team of physicians, psychologists, and others. WPATH, for example, expressly states that, "[b]efore any physical interventions are considered for adolescents, extensive exploration of psychological, family, and social issues should be undertaken The duration of this exploration may vary considerably depending on the complexity of the situation."

- 31. WPATH and Endocrine Society standards recommend puberty-suppressing medications only for adolescents who have begun puberty and with guardrails to ensure that medication is medically necessary. Moreover, adolescents must give informed assent, and their parents or guardians must give informed consent to treatment.
- 32. For puberty-suppressing medications, both WPATH and the Endocrine Society standards require the participation of a qualified mental health practitioner, who confirms that the adolescent has demonstrated a long-lasting and intense pattern of gender dysphoria, and that any coexisting psychological, medical, or social problems that could interfere with treatment have been addressed, so that the adolescent's situation and functioning are stable enough to start treatment. The guidelines also require informed

¹⁴ WPATH (2012), at 16.

assent by adolescents and informed consent by their parents or guardians (if under the age of majority), and they require the involvement of a physician medically trained in gender-affirming treatment to ensure that puberty-blocking medication is warranted, that puberty has begun in the adolescent patient, and that there are no medical contraindications to puberty-blocking medication.

- 33. For those adolescents with gender dysphoria for whom progression to hormone therapy is medically indicated, WPATH and the Endocrine Society require additional counseling regarding the possible fertility effects of hormone therapy. In addition to parental consent, the guidelines require that a mental health practitioner confirm that the adolescent has sufficient mental capacity to evaluate the benefits and risks of treatment.
- 34. Informed consent (by parents) and assent (by adolescents) is a foundational practice of adolescent medicine. Virtually any medical treatment confers benefits and potential risks, and the goal of the process prescribed by WPATH and the Endocrine Society is to ensure that treatment for gender dysphoria is medically necessary and likely to be beneficial, and that parents and youth have expert psychological and medical assistance in weighing benefits and risks.
 - C. A robust body of scientific literature demonstrates that transitioning medications provide effective treatment for gender dysphoria and improve mental health.
 - 35. Adolescents undergo a critical period of cognitive and social development

between the ages of 11–18. Positive experiences and general wellness during this time carry benefits that impact adolescents well into adulthood. Conversely, untreated and suboptimally treated mental health issues and traumatic experiences inflict multidimensional harms on adolescents that persist into adulthood. For transgender youth, a careful and factual consideration of the mental health benefits of gender transition care is critical.

36. A solid body of research has shown that transitioning medications have profound mental health benefits for adolescents experiencing gender dysphoria. Mental health benefits in this sense refer to a broad range of outcomes, including: (1) improved body satisfaction, (2) psychological functioning, (3) reduced depression, (4) reduced anxiety, (5) reduced eating disorders such as anorexia nervosa and bulimia nervosa, (6) reduced suicidal ideation, (7) reduced non-suicidal self-injury, and (8) reduced suicide attempts. Mental health benefits are studied in a variety of ways, including clinician assessments, youth and parent reporting using validated psychometric tools, and objective data.

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¹⁵ Allen LR, Watson LB, Egan AM, Moser CN, Well-being and suicidality among transgender youth after gender-affirming hormones, Clinical Practice in Pediatric Psychology (2019 Sept.);7(3):302-11; Connolly MD et al., Zervos MJ, Barone II CJ, Johnson CC, Joseph CL., The Mental Health of Transgender Youth: Advances in Understanding. J. of Adolescent Health (2016 Nov); 59(5):489-95; Turban JL, King D, Kobe J, Reisner SL, Keuroghlian AS, Access to gender-affirming hormones during adolescence and mental health outcomes among transgender adults, PLoS One (2022 Jan.)12;17(1):e0261039 (hereinafter, "Turbanet al. 2022); See also Witcomb GL, Bouman WP, Claes L, Brewin N, Crawford JR, Arcelus J. Levels of depression in transgender people and its predictors: Results of a large matched control study with transgender people accessing clinical services, J. of Affective Disorders (2018 Aug. 1); 235:308-15.

- 37. Puberty blockers have been shown to have beneficial impacts on mental health for transgender youth experiencing gender dysphoria. Studies have shown that puberty blockers are associated with a decrease in suicidality in adulthood and improved psychosocial functioning. Studies of youth on puberty blockers generally report two types of findings: that quantifiable mental health scores either increase or are stable. Stability in mental health outcomes of interest over the course of a study should be interpreted within a patient-centered perspective, which means we must consider the impact of the intervention on the individual patient. Stability in mental health, rather than a decline, is profoundly beneficial for the young person who, prior to treatment, experienced distress in part due to distressing physical change, halted by puberty blockers.
- 38. Transitioning medications have been shown to reduce suicidality in transgender adolescents when compared to peers with gender dysphoria who did not receive such treatments.¹⁷ Empiric changes in measures of mental health changes are the most positive in studies that assess the effect of exogenous sex hormones such as estrogen

¹⁶ Rew L, Young CC, Monge M, Bogucka R. Review: Puberty blockers for transgender and gender diverse youth – acritical review of the literature. Child and Adolescent Mental Health 2021 Feb;26(1):3-14; de Vries AL, Steensma TD, Doreleijers TA, Cohen-Kettenis PT. *Puberty suppression in adolescents with gender identity disorder: a prospective follow-up study*. J. Sex Medicine (2011 Aug);8(8):2276-83.

¹⁷ Tordoff et al., *Mental Health Outcomes in Transgender and Nonbinary Youths Receiving Essential medical treatment for gender dysphoria*, 5(2) JAMA Network Open e220978, at 7 (2022); Sorbara JC, Chiniara LN, Thompson S, Palmert MR, *Mental health and timing of gender-affirming care*. Pediatrics (2020 Oct. 1);146(4):e20193600.

and testosterone,¹⁸ likely because these patients are acquiring physical characteristics that align with their genderidentity for the first time. The scientific evidence demonstrating the benefits of transitioning medications is substantial.¹⁹

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¹⁸ Chen D, Berona J, Chan YM, Ehrensaft D, Garofalo R, Hidalgo MA, Rosenthal SM, Tishelman AC, Olson- Kennedy J, *Psychosocial Functioning in Transgender Youth after 2 Years of Hormones*. New Eng. J. Medicine, (2023 Jan. 19);388(3):240-250. doi: 10.1056/NEJMoa2206297. PMID: 36652355.

¹⁹ De Vries AL, Steensma TD, Doreleijers TA, Cohen-Kettenis PT, *Puberty* suppression in adolescents with gender identity disorder: A prospective follow-up study. J. of Sexual Medicine (2011 Aug);8(8):2276-83; De VriesAL, McGuire JK, Steensma TD, Wagenaar EC, Doreleijers TA, Cohen-Kettenis PT, Young adult psychological outcome after puberty suppression and gender reassignment. Pediatrics (2014 Oct.);134(4):696-704; Costa R, Dunsford M, Skagerberg E, Holt V, Carmichael P, Colizzi M, Psychological Support, Puberty Suppression, and Psychosocial Functioning in Adolescents with Gender Dysphoria. J. of Sexual Medicine (2015 Nov.);12(11):2206-14; Allen LR, Watson LB, Egan AM, Moser CN, Well-being and suicidality among transgender youth after gender-affirming hormones. Clinical Practice in Pediatric Psychology (2019 Sept.);7(3):302-11; Kaltiala R, Heino E, Tyolajarvi M, Suomalainen L, Adolescent development and psychosocial functioning after starting cross- sex hormones for gender dysphoria. Nordic J. of Psychiatry (2020 Apr.);74(3):213-19; de Lara DL, Rodriguez OP, Flores IC, Masa JLP, Campos- Munoz L, Hernandez MC, Amador JTR, Psychosocial assessment in transgender adolescents. Anales de Pediatria (English Edition) (2020) Jul.);93(1):41-48; van der Miesen AI, Steensma TD, de Vries AL, Bos H, Popma A, Psychological Functioning in Transgender Adolescents Before and After Gender-Affirmative Care Compared with Cisgender General Population Peers. J. of Adolescent Health (2020 Jun);66(6):699-704; Achille C, Taggart T, Eaton NR, Osipoff J, Tafuri K, Lane A, Wilson TA, Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: preliminary results. Int'l J. of Pediatric Endocrinology (2020);2020:8; Kuper LE, Stewart S, Preston S, Lau M, Lopez X, Body Dissatisfaction and Mental Health Outcomes of Youth on Gender-Affirming Hormone Therapy. Pediatrics (2020) Apr.);145(4):e20193006; Turban JL, King D, Carswell JM, Keuroghlian AS, Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation. Pediatrics (2020 Feb.);145(2):e20191725; Carmichael P, Butler G, Masic U, Cole TJ, De Stavola BL, Davidson S, Skageberg EM, Khadr S, Viner RM, Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young

- 39. Recent research further establishes that transitioning medications produce major benefits to physical and mental health. In a study population of 11,914 transgender and nonbinary youth, Green et al. demonstrated the significant mental health benefits of transitioning medications, particularly their impact on reduced depression and suicidal ideation.²⁰
- 40. A 2021 meta-analysis of nine studies found positive outcomes from puberty blockers including "decreased suicidality in adulthood, improved affect and

people with persistent gender dysphoria in the UK. PLoS One (2021 Feb 2.);16(2):e0243894; Grannis C, Leibowitz SF, Gahn S, Nahata L, Morningstar M, Mattson WI, Chen D, Strang JF, Nelson EE, Testosterone treatment, internalizing symptoms, and body image dissatisfaction in transgender boys. Psychoneuroendocrinology (2021 Oct.);132:105358; Hisle-Gorman E, Schvey NA, Adirim TA, Rayne AK, Susi A, Roberts TA, Klein DA, Mental Healthcare *Utilization of Transgender Youth Before and After Affirming Treatment*. The J. of Sexual Medicine (2021 Aug.);18(8):1444-54; Green AE, DeChants JP, Price MN, Davis CK, Association of Gender-Affirming Hormone Therapy with Depression, Thoughts of Suicide, and Attempted Suicide Among Transgender and Nonbinary Youth. J. of Adolescent Health (2022 Apr.);70(4):643-49; Turban JL, King D, Kobe J, Reisner SL, Keuroghlian AS, Access to gender-affirming hormones during adolescence and mental health outcomes among transgender adults, PLoS One (2022 Jan.) 12;17(1):e0261039 (hereinafter, "Turban et al. 2022"); Tordoff DM, Wanta JW, Collin A, Stephney C, Inwards-Breland DJ, Ahrens K, Mental Health Outcomes in Transgender and Nonbinary Youths Receiving Gender-Affirming Care, JAMA Network Open (2022 Feb 1.). Chen D, Berona J, Chan YM, Ehrensaft D, Garofalo R, Hidalgo MA, Rosenthal SM, Tishelman AC, Olson-Kennedy J, Psychosocial Functioning in Transgender Youth after 2 Years of Hormones. New Eng. J. Medicine (2023 Jan.) 19;388(3):240-250. doi: 10.1056/NEJMoa2206297. ²⁰ Green AE, DeChants JP, Price MN, Davis CK, Association of Gender-Affirming Hormone Therapy With Depression, Thoughts of Suicide, and Attempted Suicide Among Transgender and Nonbinary Youth. J Adolescent Health. (2022 Apr.);70(4):643-649. doi: 10.1016/j.jadohealth.2021.10.036. Epub

2021 Dec 14. PMID: 34920935.

psychological functioning, and improved social life."²¹ A 2022 study found that transitioning medications were "associated with 60% lower odds of moderate to severe depressive symptoms and 73% lower odds of self-harm or suicidal thoughts over a 12-month follow-up."²² A 2020 study found that transitioning medications were associated with "important improvements in body dissatisfaction over the first year of treatment."²³

41. The 2015 U.S. Transgender Survey of 27,715 adults showed that those who received hormone therapy in adolescence had lower suicidality and severe psychological distress in the month prior to study participation when compared to those who did not did not receive such care in their teenage years. Among children and adolescents, patients who present for gender transition care at later pubertal stages are more likely to require psychoactive medications and are more likely to have considered or attempted suicide than patients who received gender transition care at earlier stages of pubertal development. but the property of the prope

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²¹ Lynn Rew et al., *Review: Puberty Blockers for Transgender and Gender Diverse Youth-A Critical Review of the Literature*, 26 Child. Adolesc. Ment. Health 3, 3 (2021).

²² Tordoff D et al., *Mental Health Outcomes in Transgender and Nonbinary Youths Receiving Essential medical treatment for gender dysphoria*, 5(2) JAMA Network Open e220978, at 7 (2022).

²³ Kuper L et al., *Body Dissatisfaction and Mental Health Outcomes of Youth on Gender-Affirming Hormone Therapy*, 145(4) Pediatrics e20193006, at 7 (2020).

²⁴ Turban JL, King D, Kobe J, Reisner SL, Keuroghlian AS (2022) *Access to gender-affirming hormones during adolescence and mental health outcomes among transgender adults*. PLOS ONE 17(1): e0261039, https://doi.org/10.1371/journal.pone.0261039.

²⁵ Sorbara JC, Chiniara LN, Thompson S, Palmert MR. *Mental health and timing of gender-affirming care*. Pediatrics (2020 Oct. 1);146(4):e20193600.

- D. Transitioning medications have been safely used for decades. Side effects are wellknown and comparable to side effects of many commonly used medications.
- 42. Medications offered for the treatment of gender dysphoria include puberty blockers for those in the second through fourth stages of puberty and cross-sex hormones such as estrogen and testosterone, as well as medications that block the masculinizing effects of endogenous testosterone. The dosing and timing of these medications are stated in WPATH and Endocrine Society clinical practice guidelines. Studies in young adults on medications show that the long-term health profiles of transgender individuals are similar to those of the general population.
- 43. Puberty blockers can be part of a staged approach to medical treatment for gender dysphoria in adolescents. By stalling pubertal maturation, adolescents experience a pause in distressing physical change and relief of otherwise intensifying gender dysphoria. During this pause, the adolescent and their family are given time to work with a mental health provider to confirm the young person's gender identity. Those who continue to identify as transgender will have the option to proceed with hormone therapy when their medical and mental health providers determine that treatment is medically appropriate, parents consent to the care, and youth assent.
- 44. Youth may receive cross-sex hormones such as estrogen and testosterone once they have worked with a mental health provider to confirm the medical need and to ensure that parents are fully informed and that the youth has the psychological maturity

to understand the impacts of these treatments.

- 45. The effects of cross-sex hormones are not categorically irreversible. For transgender men (persons assigned female sex at birth), testosterone treatment can affect ovarian function while on hormone therapy, inhibiting menses in the majority of those on therapy. The evidence also shows that the majority of transgender men who had regular menses before starting testosterone therapyare reported to resume menses if testosterone is discontinued. Physicians carefully counsel patients and their parents on the possibility of impairments in fertility should the patient continue on cross-sex hormones. Strategies available include sperm and oocyte cryopreservation to preserve future fertility.
 - E. Gender dysphoria is a serious medical condition, and withholding transitioning medications from adolescents with gender dysphoria is harmful.
 - 46. The American Psychiatric Association explains that:

[T]he term "transgender" refers to a person whose sex assigned at birth (i.e., the sex assigned by a physician at birth, usually based on external genitalia) does not match their gender identity (i.e., one's psychological sense of their gender). Somepeople who are transgender will experience "gender dysphoria," which refers to psychological distress that results from an incongruence between one's sex assigned at birth and one's gender identity. Though gender dysphoria often beginsin childhood, some people may not experience it until after puberty or much later.²⁷

²⁶ Light AD, Obedin-Maliver J, Sevelius JM, Kerns JL, *Transgender men who* experienced pregnancy after female-to-male gender transitioning. Obstet Gynecol. 2014;124(6):1120–1127; Smith KP, Madison CM, Milne NM. Gonadal suppressive and cross-sex hormone therapy for gender dysphoria in adolescents and adults. Pharmacotherapy, 2014;34(12):1282–1297.

²⁷ Am. Psychiatric Ass'n, What is Gender Dysphoria?; (2020 Nov.) [cited 2022 Apr 15],

- 47. In 2013, the American Psychiatric Association released the fifth edition of the DSM-5, the standard reference for the diagnosis of mental health conditions. The DSM-5 recognizes gender dysphoria and sets forth criteria for diagnosis. These criteria include "a marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics" and "a strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender)." To meet diagnostic criteria, an individual must exhibit "clinically significant distress or impairment in social, occupational, or other important areas of functioning."²⁸
- 48. In other words, transgender individuals who live in a manner that is physically and socially incongruent to their gender identity will predictably experience gender dysphoria—a clinically significant psychological distress that can lead to depressed mood and suicidality.²⁹ Suicidal ideation and attempts have been found to be significantly higher among transgender adolescents who cannot obtain or do not receive essential medical treatment for gender dysphoriathan among their non-transgender peers. The harm of not providing essential medical treatment for gender dysphoria is well

https://www.psychiatry.org/patients-families/gender-dysphoria/what-is-gender-dysphoria.

²⁸ Am. Psychiatric Ass'n. *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed (2013).

²⁹ Sorbara JC, Chiniara LN, Thompson S, Palmert MR, *Mental health and timing of gender-affirming care*. Pediatrics (2020 Oct. 1);146(4):e20193600.

documented.³⁰ Untreated gender dysphoria can also lead to disordered eating. Patients may engage in unsafe eating behaviors (e.g., food restriction or purging) as a body-affirming tool and an effort to align their bodies with their gender identity.

- 49. These behaviors can impair physical health and development.³¹ Further, there is data that shows that waiting until adulthood to offer hormone therapy to transgender adolescents is associated with past-year suicidal ideation, past-month severe psychological distress, past-month binge drinking and illicit drug use.³² The scientific consensus shows that denying medical treatment for gender dysphoria harms transgender people and puts their lives at risk.
- 50. I have cared for many patients who have disclosed gender dysphoria to me in later adolescence or early adulthood and report, during the time in which they were

³⁰ Herman JL, Brown TNT, Haas AP, *Suicide Thoughts and Attempts Among Transgender Adults*. The Williams Institute, UCLA School of Law (2019 Sept.) [cited 2022 Apr 1], https://williamsinstitute.law.ucla.edu/publications/suicidality-transgender-adults/; Turban JL, Beckwith N, Reisner SL, Keuroghlian AS, *Association Between Recalled Exposure to Gender Identity Conversion Efforts and Psychological Distress and Suicide Attempts Among Transgender Adults*, JAMA Psychiatry (2019 Sept 11.);77(1):68-76.

³¹ Coelho JS, Suen J, Clark BA, Marshall SK, Geller J, Lam PY, Eating Disorder Diagnoses and Symptom Presentation in Transgender Youth: a Scoping Review. Curr Psychiatry Rep. (2019 Oct. 15);21(11):107; Kamody RC, Yonkers K, Pluhar EI, Olezeski CL, Disordered Eating Among Trans-Masculine Youth: Considerations Through a Developmental Lens. LGBT Health. (2020 May/June);7(4):170-73; Legroux I, Cortet B, Factors influencing bone loss in anorexia nervosa: assessment and therapeutic options, RMD Open. (2019 Nov. 13);5(2):e001009.

³² Turban, J. L., King, D., Kobe, J., et al. Access to gender-affirming hormones during adolescence andmental health outcomes among transgender adults, PLoS One (2022) 17(1), e0261039.

suffering from gender dysphoria but not receiving treatment, poor psychosocial functioning, social isolation, worsening mental health, restrictive eating patterns and suicidal ideation.

- F. There is no evidence-based alternative to standard treatments for gender dysphoria. Furthermore, no research demonstrates psychotherapy alone is an effective treatment for gender dysphoria in adolescents.
- 51. Best available evidence establishes a clear *causal link* between transitioning medications and well-being *independent* of psychotherapy and other measures of support.
- 52. In a 2022 study, Tordoff et al. found that transitioning medications (both blockers and hormone therapy) are associated with improvements in depression and suicidality in a population of transgender and nonbinary youths aged 13 to 20.³³ The authors showed the independent effects of transitioning medications on depression, anxiety, and gender dysphoria. They controlled for temporal trends and other confounding factors, expressly including whether the teen received "ongoing mental health therapy other than for the purpose of a mental health assessment to receive a gender dysphoria diagnosis."³⁴ Put simply, Tordoff et al. found that youth with gender dysphoria reported better outcomes if they received transitioning medications after controlling for the effects of supportive psychotherapy.
 - 53. Similarly, in a 2020 study, Kuper et al. found that hormone therapy made

³³ Diana M. Tordoff et al., *Mental Health Outcomes in Transgender and Nonbinary Youths Receiving Gender-Affirming Care*, 5(2) JAMA Network Open e220978 (2022). ³⁴ *Id.*

improvements in adolescents' body-related distress and led to improvement in symptoms of depression and anxiety.³⁵ Kuper et al. specifically collected data on patient participation in psychotherapy and the use of psychiatric medications and expressly controlled for both. Thus, Kuper et al.'s study shows that hormone treatment for gender dysphoria is effective above and beyond the benefits of supportive psychotherapy and psychiatric medications.

54. In a 2023 study by Chen et al, the investigators found that appearance congruence achieved by hormone therapy was strongly associated with improvements in various measures of mental health and psychosocial functioning.³⁶

G. Adolescents with gender dysphoria persist in their cross-gender identification.

55. The scientific evidence on the course of gender dysphoria emphasizes the importance of distinguishing between prepubertal children and adolescents. The evidence suggests that the course of dysphoria is more diverse for prepubertal children, and so it is critical to recognize them as a distinct population from adolescents. The evidence shows that the vast majority of adolescents who are diagnosed with gender dysphoria will persist

³⁵ Laura E. Kuper, et al., *Body Dissatisfaction and Mental Health Outcomes of Youth on Gender-Affirming Hormone Therapy*, 145(4) Pediatrics e20193006 (2020).

³⁶ Chen D, Berona J, Chan YM, Ehrensaft D, Garofalo R, Hidalgo MA, Rosenthal SM, Tishelman AC, Olson-Kennedy J, *Psychosocial Functioning in Transgender Youth after 2 Years of Hormones*. New Eng. J. Medicine (2023 Jan. 19);388(3):240-250. doi: 10.1056/NEJMoa2206297. PMID: 36652355; PMCID: PMC10081536.

in their gender identity and will benefit from gender transition.³⁷ In a Dutch study, among 70 adolescents diagnosed with gender dysphoria and treated with puberty blockers, 100% opted to continue with transitioning medications.³⁸ A recent U.S. study found a consistent pattern. Following a large cohort of U.S. young people who reported some evidence of gender dysphoria but had not yet been formally diagnosed, the study found that adolescents were far more likely than prepubertal children to goon to a formal diagnosis of gender dysphoria and to receive medical treatment.³⁹

56. Even with respect to prepubertal children, the studies relied on to argue desistance overstate the percentage of children who cease to have gender dysphoria because their data was based on overly broad diagnostic criteria.⁴⁰ That is, the studies

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³⁷ Am. Psychological Ass'n (2015), 841-43; WPATH (2012), p. 11; Endocrine Society (2017). *See also* Turban JL, DeVries ALC, Zucker K. Gender Incongruence & Gender Dysphoria. In Martin A, Bloch MH, Volkmar FR (editors): Lewis's Child and Adolescent Psychiatry: A Comprehensive Textbook, Fifth Edition. Philadelphia: Wolters Kluwer 2018, pp. 20-21 ("we must recognize that [the existing studies of persistence] have been quite limited in power and generalizability and should not be misused to create barriers for TGD youth seeking gender- affirming care. The most relevant conclusions from these studies are that insistent cross-gender identification in adolescence most often correlates with persistent TGD identities in adulthood").

³⁸ de Vries et al. 2011, *see* n. 16 ("None of the gender dysphoric adolescents in this study renounced their wish for [gender reassignment] during puberty suppression. This finding supports earlier studies showing that young adolescents who had been carefully diagnosed show persisting gender dysphoria into late adolescence or young adulthood").

³⁹ Wagner S, Panagiotakopoulos L, Nash R, Bradlyn A, Getahun D, Lash TL,

Nash R, Bradlyn A, Getahun D, Lash TL, Roblin D, Silverberg MJ, Tangpricha V, Vupputuri S, Goodman M, *Progression of Gender Dysphoria in Children and Adolescents: A Longitudinal Study*, Pediatrics. (2021 July);148(1):e2020027722. doi: 10.1542/peds.2020-027722. Epub 2021 Jun 7.PMID: 34099504; PMCID: PMC8276590.

⁴⁰ See Temple Newhook J, Pyne J, Winters K, Feder S, Holmes C, Tosh J, Sinnott ML, Jamieson A, and Pickett S, Acritical commentary on follow-up studies and "desistance"

likely included prepubertal children with gender variant behavior (e.g., boys with feminine interests or "tomboy" girls) alongside children who would meet today's diagnostic criteria for gender dysphoria—a deeply felt and lasting transgender identity with clinically significant distress and impaired functioning.⁴¹ This is further borne out by the recent finding that "the intensity of early dysphoria appears to be an important predictor" of the persistence of dysphoria into adolescence.⁴²

57. In addition, in contrast to prepubertal children, adolescents with gender dysphoria rarely find that their dysphoria resolves without treatment. As a result, because medical treatment for gender dysphoria begins only in adolescence, and only if medically necessary for gender dysphoria, medical treatment is thus provided only to a group known to be quite stable in their gender identity. For example, a recent study, Olson et al. (2022), found that after an average of 5 years of social transition, only 2.5% of youth identified as non-transgender.⁴³ Another recent study of 720 individuals demonstrated that, in a Dutch population, the vast majority of transgender adolescents to continue receiving

theories about transgender and gender-nonconforming children, Int'l J. of Transgenderism, vol. 19(2), pp. 212-224 (2018) doi: 10.1080/15532739.2018.1456390. ⁴¹ Endocrine Society (2017).

⁴² Steensma TD, McGuire JK, Kreukels BP, Beekman AJ, Cohen-Kettenis PT, *Factors associated with desistence and persistence of childhood gender dysphoria: a quantitative follow-up study.* J. Am. Acad. Child Adolescent Psychiatry, (2013 Jun);52(6):582-90 (finding that "children with persistent GID are characterized by more extreme gender dysphoria in childhood than children with desisting gender dysphoria").

⁴³ Olson KR, Durwood L, Horton R, Gallagher NM, Devor A, *Gender Identity 5 Years After Social Transition*. Pediatrics (2022 Aug. 1);150(2):e2021056082. doi: 10.1542/peds.2021-056082. PMID: 35505568.

transition care as adults.44

H. The overwhelming majority of adolescents who receive transitioning medications continue to do so as adults

As just discussed, evidence shows that young people who receive essential treatments for gender dysphoriaduring adolescence overwhelmingly continue them into early adulthood. Indeed, recent studies demonstrate that the vast majority of youth who start medical treatments in adolescence continue these treatments in early adulthood. One study examined 720 people who had started transitioning medications at median ages of 14 to 16 years and found that 98% continued use of these medications at follow up. Another retrospective cohort study that examined 385 people, a third of which initiated transitioning medications at the median age of 15, demonstrates that discontinuation of transitioning medications is exceedingly uncommon when the therapy follows the Endocrine Society guidelines.

58. The supposed concept of a wave of transgender individuals who initially

⁴⁴ Van der Loos MATC, Hannema SE, Klink DT, den Heijer M, Wiepjes CM, *Continuation of gender-affirming hormones in transgender people starting puberty suppression in adolescence: a cohort study in the Netherlands*. Lancet Child Adolescent Health (2022 Dec.);6(12):869-875. doi: 10.1016/S2352-4642(22)00254-1. Epub (2022 Oct. 21).PMID: 36273487.

⁴⁵ *Id*.

⁴⁶ Gupta P, Patterson BC, Chu L, Gold S, Amos S, Yeung H, Goodman M, Tangpricha V, *Adherence to Gender Affirming Hormone Therapy in Transgender Adolescents and Adults: A Retrospective Cohort Study*, J. of Clinical Endocrinology & Metabolism, (2023);, dgad306, https://doi.org/10.1210/clinem/dgad306

received and consented to essential medical treatment for gender dysphoria and then regretted it is unfounded.

I. So-called "watchful waiting" is not a recognized protocol for youth once they havereached puberty.

- 59. Without scientific evidence or without proposing an evidence-based alternative, that youth with gender dysphoria should not beoffered medical treatment but instead should only receive psychotherapy, an approach that they mistakenly term "watchful waiting."
- 60. "Watchful waiting," or as Defendants may refer to as "wait-and-see approach," is a concept invoked in deciding whether or not a *pre-pubertal* child should engage in a social transition (e.g., adopting a name, pronouns, and gender expression, such as clothing and haircuts, that match their gender identity). Watchful waiting is thus irrelevant to the use of transitioning medications, which are offered only after puberty has begun. Moreover, social transition is irrelevant to SB 140, which prohibits the use of medications used after puberty has started.

III. CONCLUSION

61. In conclusion, my expert opinion is that the Georgia ban on hormone therapy for transgender minors is harmful. Gender dysphoria is a serious but highly treatable medical condition. If allowed to continue to go into effect, it will cause serious injury to transgender adolescents during a time of pivotal developmental change. The evidence demonstrates that youth who qualify for care and do not receive it suffer a range

of adverse consequences, the harms of which are likely to be long-lasting if not lifelimiting. The harms posed by the Georgia ban are entirely preventable, as many transgender youth in Georgia have supportive families and highly qualified clinical care teams that provide them with evidence-based care.

- 62. The standard of care for treatment of transgender adolescents who have begun puberty includes, as determined by individual need, the prescription of transitioning medications, including puberty blockers and hormone therapy, after rigorous medical assessment and evaluation followed by parental consent and patient assent. The medications used for treatment of transgender adolescents are safe and effective. Adolescent patients with gender dysphoria who are treated consistent with the standard of care can thrive. My experience treating patients demonstrates that, as does a solid body of scientific evidence.
- 63. I hold each of the opinions expressed in this report with a reasonable degree of scientific certainty based on the materials I have reviewed and based on my education, experience, and knowledge. I reserve the right to supplement, amend, or modify my opinions upon review of further information, including, but not limited to, testimony, documents, and reports I receive afterthe date of this report.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 12th day of July 2023.

Meredithe McNamara, M.D., M.Sc.

Exhibit A

CURRICULUM VITAE

Version Date: 1/2/23

Name: Meredithe McNamara, MD MSc

Contact Information: 789 Howard Avenue

Dana Clinic

Building, DC-014 New Haven, CT

06519

Term: Primary Appointment: Assistant Professor, 9/1/21-9/1/24

School: Yale School of Medicine

Education:

08/2003-05/2007 BA, English Literature, Rutgers University,

New Brunswick, NJ

07/2011-05/2013 MSc, Clinical Research, Emory University,

Atlanta, GA

07/2008-05/2013 MD, Emory University School of Medicine,

Atlanta, GA

Career/Academic Appointments:

07/2013-06/2016 Residency, Pediatrics, the University of Chicago,

Chicago, IL

07/2016-06/2017 Fellow, Leadership for Urban Primary Care Education

and Transformation(LUCENT), Department of Internal Medicine, the University of Chicago,

Chicago, IL

07/2017-06/2018 Clinical Associate, Department of Pediatrics, the

University of Chicago, Chicago, IL

07/2018-06/2021 Fellow, Adolescent Medicine, University of Illinois-

Chicago, Chicago, IL

9/2021-present Assistant Professor, Department of Pediatrics, Yale

University, New Haven, CT

Administrative Positions

2021-present Director, Adolescent Medicine Rotation, Pediatrics

Residency, Yale School of Medicine, New Haven,

2022-present Board Member, Yale New Haven Health

Committee for Juvenile Justice, New Haven, CT

Board Certification:

2016 American Board of Pediatrics, General

Pediatrics

American Board of Pediatrics, 2022

Adolescent Medicine

Professional Honors & Recognition:

International/National/Regional

2011 NIH/Atlanta Clinical and Translational Science Institute TL1

Predoctoral ResearchTraining Award

LUCENT Primary Care Fellowship, the University of Chicago 2016

Semi-Finalist, U.S. State Department, Fulbright Scholar Award 2020

(Uganda)

Grant/Clinical Trials History:

Past

6/2016-6/2017 Leadership for Urban Primary Care Education and

Transformation Fellowship Grant – Full salary funding

(50:50 research and clinical duties)

Mentor: Bradley Stolbach, PhD

\$5000 from the Health Resources & Services

Administration (HRSA) Taught trauma informed care

workshops in Chicago healthcare settings

"Improving Trauma-Informed Care Practices for 6/2015-6/2017

Pediatric

Victims of Violence"

Co-PI: Bradley Stolbach, Ph.D.; Meredithe McNamara, M.D. \$80,000 for two years from the Bright Promises Foundation Developed and taught a curriculum of hospital-based trauma informed care at Comer

Children's and John H. Stroger Hospitals

Invited Speaking Engagements, Presentations, Symposia & Workshops:

International and National

- 1. "How Adolescent Providers Can Support Youth-Led Advocacy," University of Washington. Seattle. 2022, 2021
- 2. "Grand Rounds: The Recovery of Adolescents and Young Adults from FirearmViolence," St. Joseph's Hospital, Paterson. 2022
- 3. "Hearing on Proposed Rule to Ban Gender Affirming Care for Youth," Florida Board of Medicine and Board of Osteopathic Medicine. Orlando. 2022
- 4. "Curriculum in Adolescent Health and Medicine," Busitema University. Mbale, Uganda. 2020

Regional

- 1. "Cross-Sector Collaboration for Police-Free Schools," Illinois Adverse ChildhoodExperiences Collaborative. Chicago. 2020
- 2. "Lessons in Trauma-Informed Care: A Panel Discussion with Youth Survivors of Violence," Windy City Emergency Medicine Conference. Chicago. 2017
- 3. "Being a Champion of Trauma-Informed Care," Student National Medical AssociationMidwest Meeting. Springfield. 2016

Local

1. "Heavy Menstrual Bleeding: High Yield Tips for the General Pediatrician." Connecticut AAP Conference. 2022

- 2. "Boosting Readiness for Eating Disorder Treatment in the Primary Care Setting." Pediatric Community Education Series, Bridgeport Hospital. 2022
- 3. "Preserving Adolescent Autonomy and Agency: Avoiding Reproductive Coercion," The University of Chicago. Chicago. 2021
- 4. "Innovation in Medical Education for Topics in Adolescent Health." University of Illinois-Chicago. Chicago. 2021
- 5. "Grand Rounds: Lessons from Police-Free Schools Advocacy in Chicago," RushUniversity. Chicago. 2021
- 6. "Mycoplasma genitalium: An Emerging STI." University of Illinois-Chicago. Chicago. 2020
- 7. "Adolescent Sports Medicine: Athlete Wellness and Risk of Injury," University of Illinois-Chicago. Chicago. 2020
- 8. "COVID-19 and Adolescent Wellness," Healing Hurt People-Chicago. Chicago. 2020

Peer-Reviewed Presentations & Symposia

International and National

- 1. **McNamara M**, Sequeira G, English A, Grubb L. "Restoring Integrity to Public Policy: Combating Science Denialism in Adolescent Health." Society of Adolescent Health and Medicine. Chicago, March 2023 (Symposium).
- 2. **McNamara M**, Olezeski C, Szilagyi N, Alstott A. "When Science is Misused in Law: How to Address the Biased Science that Underlies Legal Bans on Gender-Affirming Carefor Youth." World Professional Association of Transgender Health (WPATH). Montreal, September 2022 (Symposium).
- 3. **McNamara M**, "A Curriculum in Adolescent Health and Medicine: Lessons from Mbale, Uganda." International Association of Adolescent Health. Lima, November 2021 (Oral presentation).
- 4. **McNamara M,** Wajarasi A, Brighton K, McMorris B, Safter M, Olupot-Olupot P, Miller
 - K. "Implementation of an Adolescent Health and Medicine Course Designed for MedicalTrainees in Low- and Middle-Income Countries: Results from a Pilot Study." International Association for Adolescent Health. Lima. November 2021. (Poster)

- 5. **McNamara M**, Hardy T. "The Health Maintenance of Adolescents and Young Adults Affected by Violent Injury," Adolescent Health Initiative. Ann Arbor, May 2021 (Symposium).
- 6. Fenton R, **McNamara M**. "Police-Free Schools: How Adolescent Providers Can Support Youth-Led Advocacy," Society of Adolescent Health and Medicine. San Diego, March 2021 (Oral Presentation).
- 7. **McNamara M**. "Training Hospital Personnel in Trauma-Informed Care: Assessing the Effectiveness of an Interprofessional Workshop with Patients as Teachers," Pediatric Academic Societies Annual Meeting. Baltimore, April 2019 (Oral presentation).
- 8. **McNamara M**. "Trauma Informed Care: A Workshop for Medical Providers," Society for Adolescent Health and Medicine Annual Meeting. New Orleans March 2017 (Symposium).
- 9. Miller K, McNamara M, McMorris B, Saftner M, Olupot-Olupot P. "An Adolescent Medicine Curriculum Designed for Low Income Countries: Results from Pilot Implementation at a Medical School in Easter Uganda." Society for Adolescent Healthand Medicine. San Diego. March 2021 (Poster).
- 10. Miller K, **McNamara M**, McMorris B, Saftner M, Olupot-Olupot P. "Pilot implementation of a curriculum in adolescent health and medicine: a course designed formedical trainees in low- and middle-income countries." Virtual poster presentation at the University of Minnesota Pediatric Research, Education & Scholarship Symposium. *Winner Best Fellow Research Award*. Minneapolis. April 2020 (Poster).
- 11. Cane R, **McNamara M**, Schwartz A, Stolbach B. "Training Hospital Personnel in Trauma-Informed Care: Assessing the Effectiveness of an Interprofessional Workshopwith Patients as Teachers." Pediatric Hospital Medicine Meeting. Seattle. July 2019 (Poster).
- 12. **McNamara M**, Cane R, Schwartz A, Stolbach B. "Training Hospital Personnel in Trauma-Informed Care: Assessing the Effectiveness of an Interprofessional Workshopwith Patients as Teachers." Pediatric Academic Societies Annual Meeting. Baltimore. April 2019 (Poster).
- 13. Tucker X, Dholakia A, **McNamara M,** Cane R, Hoffman Y, Stolbach B. "Building a Trauma-Informed Hospital: A Longitudinal Qualitative Study of Participants in a Trauma-Informed Care

- Training." American Association of Medical Colleges Meeting. Grand Rapids. March 2019 (Poster).
- 14. Dholakia A, Tucker X, **McNamara M**, Cane R, Hoffman Y, Stolbach B. "Expanding theCulture of Trauma-Informed Care: A Pilot Training Workshop for Medical Students." American Association of Medical Students Conference. Grand Rapids. March 2019 (Poster).

Local

- 1. Tucker X, Dholakia A, **McNamara M**, Cane R, Hoffman Y, Stolbach B. "Building a Trauma-Informed Hospital: Preliminary Results from a Longitudinal Qualitative Study of Participants in a Trauma-Informed Care Training Workshop." The University of Chicago Medical Education Research Symposium. *Winner Best Medical Student Presentation*. Chicago. September 2018 (Poster)
- McNamara M, Cane R, Schuster L, Stolbach B. "Improving Trauma-Informed Care Practices for Pediatric Patients Affected by Violence." Leadership for Urban Primary Care Education and Transformation (LUCENT) Scholars Research Symposium. Chicago. June 2017 (Poster)
- 3. **McNamara M,** Cane R, Schuster L, Stolbach B. "Improving Trauma-Informed CarePractices for Pediatric Patients Affected by Violence." The University of Chicago Medical Education Research Symposium. Chicago. December 2016 (Poster)
- 4. **McNamara M**, Cane R, Stolbach B. "Healing Hurt People-Chicago: Creating a HospitalCulture of Trauma-Informed Care." University of Chicago Department of Pediatrics Research Symposium. Chicago. June 2016 (Poster)

Professional Service

Journals

2022 Reviewer for Pediatrics, Transgender Health, LGBTQ Health

Public Service/Media Presence:

Public Service:

2015-2021 Healing Hurt People – Chicago, Illinois: Coordinating

	medical care for youth recovering from violent injury, co-
	leading trauma recovery workshops with youth clients,
	providing trauma-focused psychoeducation
2020-2021	Atlas International – Mbale, Uganda: Fundraising
	and donations procurement of for Mbale Regional
	Referral Hospital and Busitema University
2019-2020	Task Force, Cook County Health Systems – Chicago,
	Illinois: Providedconfidential health screening and
	counseling to youth at social events

Bibliography:

Peer-Reviewed Original Research

- 1. **McNamara M**, Kempton C, Antun A. "The Role of Disease Severity in InfluencingBody Mass Index in People with Hemophilia: A Single Institution Cross-sectional Study." *Haemophilia*. 2013; 111th ser. 10.11 PMID: 24118577
- 2. **McNamara M**, Cane R, Hoffman Y, Reese C, Schwartz A, Stolbach B. "Training Hospital Personnel in Trauma-Informed Care: Assessing an Interprofessional Workshopwith Patients as Teachers." *Academic Pediatrics*. 2020; S1876-2859 (20) 30190-X. PMID: 32492574
- Miller K, Saftner M, McNamara M, McMorris B, Olupot-Olupot P. "Provision of adolescent health care in Resource-Limited Settings: Perceptions, practices and trainingneeds of Ugandan health care workers." *Children and Youth Services Review*, Volume 132, 2022, 106310, ISSN 0190-7409, https://doi.org/10.1016/j.childyouth.2021.106310.

Chapters

- 1. **McNamara M**, and Sharma J. Surgical Approaches to Endocrine Disorders. In Felner EI, Umpierrez G. *Endocrine Pathophysiology*. Lippincott Williams & Wilkins; 2013.
- 2. Cabral MD, Khan A, **McNamara M**, Dharmapuri S, Linares S, Cielo A. Renal manifestations of sexually transmitted infections. In Greydanus D, et al, eds: Chronic Disease and Disability: The Pediatric Kidney. 2nd edition, New York: Nova Science, 2022.

Peer-Reviewed Case Reports

1. Yano S, **McNamara M**, Halbach S, Waggoner D. "4q21 microdeletion in a patient withepilepsy and brain malformations." *American Journal of Medical Genetics*. 2015; 9999 A: 1-5. PMID: 25847229

Peer-Reviewed Commentaries

- 1. **McNamara M**, Lepore C, Alstott A, Kamody R, Kuper L, Szilagyi N, Boulware S, Olezeski C. Scientific misinformation and gender affirming care: tools for providers onthe front lines. Journal of Adolescent Health. 2022 Jul 1:S1054-139X(22)00503-1. doi: 10.1016/j.jadohealth.2022.06.008. PMID: 35787819.
- 2. Lepore C, Alstott A, **McNamara M**. Scientific misinformation is criminalizing thestandard of care for transgender youth. JAMA Pediatrics. 2022;176(10):965–966. doi:10.1001/jamapediatrics.2022.2959. PMID: 35994256.
- 3. **McNamara M**, Lepore C, Alstott A. Protecting transgender health and challenging science denialism in policy. New England Journal of Medicine. 2022 Nov 24;387(21):1919-1921. doi: 10.1056/NEJMp2213085. PMID: 36409481.

Editorials, and Letters

- 1. Markowitz M, **McNamara M**. "A call to action: considerations for pediatricians in apost-Roe healthcare system." AAP Voices Blog, August 11, 2022. https://www.aap.org/en/news-room/aap-voices/a-call-to-action-considerations-for- pediatricians-in-post-roe-health-care-system/
- 2. Olezeski C, **McNamara M**, Alstott A. "Denying trans youth gender affirming care is an affront to science and medical ethics" Los Angeles Times, June 13, 2022. https://www.latimes.com/opinion/story/2022-06-13/trans-youth-healthcare-state-bans

Exhibit B

ADDENDUM

In addition to the citations in the above attached report, I also relied on the following articles informing my expert opinions:

- AACAP. AACAP statement opposing actions in Texas [Internet]. Aacap.org. [cited 2023 Jan 31]. Available from: https://www.aacap.org/AACAP/zLatest_News/AACAP_Statement_Opposing_Actions_i n_Texas
- AACAP. AACAP statement responding to efforts to ban evidence-based care for transgender and gender diverse [Internet]. Aacap.org. [cited 2023 Jan 31]. Available from:

 https://www.aacap.org/AACAP/Latest_News/AACAP_Statement_Responding_to_Effort s-to_ban_Evidence-Based_Care_for_Transgender_and_Gender_Diverse.
- Allen LR, Watson LB, Egan AM, Moser CN. Well-being and suicidality among transgender youth after gender-affirming hormones. Clinical Practice in Pediatric Psychology. 2019Sept;7(3):302–311. doi: 10.1037/cpp0000288.
- Bornstein SR, Allolio B, Arlt W, Barthel A, Don-Wauchope A, Hammer GD, Husebye ES, Merke DP, Murad MH, Stratakis CA, Torpy DJ. Diagnosis and Treatment of Primary Adrenal Insufficiency: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab. 2016 Feb;101(2):364-89. doi: 10.1210/jc.2015-1710. Epub 2016 Jan13. PMID: 26760044; PMCID: PMC4880116.
- Brouwers M, Kho ME, Browman GP, Cluzeau F, feder G, Fervers B, Hanna S, Makarski J onbehalf of the AGREE Next Steps Consortium. AGREE II: Advancing guideline development, reporting and evaluation in healthcare. Can Med Assoc J. Dec 2010, 182:E839-842; doi: 10.1503/cmaj.090449.
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