



November 22, 2022

USPATH and WPATH Respond to NY Times Article “They Paused Puberty, But Is There a Cost?” published on November 14, 2022

The recent *New York Times* article, “They Paused Puberty, But Is There a Cost?”, furthers the atmosphere of misinformation and subjectivity that has grown to surround the area of gender affirming medical interventions for transgender youth. The methods of the authors of this piece come up short in their interpretation and application of available data; the article supports inaccurate narratives that puberty blocking medicines are conclusively harmful to long-term bone density or other health outcomes, and that transition reversal/regret is a common outcome for these treatments. Additionally lacking in the article is an explicit statement that any harms which may exist are outweighed by the substantial benefits these treatments confer to transgender youth, and we wish to respond below to certain specific statements and references made in this article.

The cited bone expert from Mayo Clinic, Dr. Sundeep Khosla, MD, is an adult endocrinologist who does not work clinically with transgender youth and has only a single publication on transgender health. This [publication](#) is not a research study, but a brief review commentary on the issue of bone density in adult transgender people. Transgender youth are not addressed in the commentary. In this paper, data are reviewed and discussed, and it is concluded that in the context of hormone therapy, “bone mineral density is generally preserved in both trans women and trans men”.

The anecdote provided of an adolescent who began, and then stopped pubertal suppression due to bone density loss lacks important details, including age and pubertal stage at initiation of puberty blockers, length of time on blockers, baseline bone density (“Z-score”), and whether the bone density comparison was made to identified gender or birth-assigned sex. Additional important information not provided includes calcium intake, and vitamin D intake and level, as well as level of physical activity, all of which play a substantial role in maintenance of bone mineral density.

The single expert who performed the literature review, Dr. Farid Foroutan, PhD, is an epidemiologist with no experience in clinical medicine, child and identity development, bone density, or any aspect of the field of transgender health. Nearly the entirety of his professional experience lies in population health studies of heart disease. The interpretation of clinical studies, especially those with findings that are nuanced, inconclusive, or have a small effect size, require interpretation through a clinical lens, with clinician-scientists experienced in the

**DX
22**

translation of research data into clinical practice. In fact, Dr. Foroutan recently co-authored a [paper](#) which highlighted this very concern, so it is unclear why he did not advocate for a more nuanced and clinically grounded analysis, and an expanded roster of expertise on the review team.

We were surprised to see reference to a subjective statement from Dr. Catherine Gordon, MD regarding “getting behind” on bone density, and we question whether this comment was taken out of context. Dr. Gordon is a long-standing advocate for trans youth care, and in her [June 2022 single-author commentary](#) published in *Pediatrics*, she stated that, “The duration of pubertal suppression with gonadotropin hormone releasing hormone agonists varies, but can extend up to 4 years for younger patients who are not able to provide consent until age 16 for receipt of gender-affirming therapy. Puberty blockers represent an invaluable intervention for these children and adolescents, to reduce anxiety and ‘buy time’ until final decisions can be made about gender assignment.” A subsequent [commentary](#) co-authored by Dr. Gordon and published in November 2022 in JAMA Open Access stated, “Concerns about skeletal losses become less significant in an adolescent with active suicidal ideations. Although the significance of the risks may be unclear, there is strong evidence regarding the benefits of GnRHa in transgender youth: it can be a life-changing and lifesaving treatment for a vulnerable population who is at high risk for anxiety, depression, and suicide.”

Anecdotes are provided about two teens who were found to have severe osteoporosis after 1 and 3 years of blocker treatment. In both cases, a baseline bone density test was not done. It is unlikely that such a degree of severe osteoporosis would develop after these short courses of treatment, and there were likely other pre-existing factors at play. The 2017 [Endocrine Society Guidelines](#), co-sponsored by WPATH, as well as the SOC8 recommend baseline bone density assessment prior to initiating blocker therapy, as well as ongoing reassessments, and optimization of calcium and vitamin D.

The blockers themselves do not impact bone density. Bone density is impacted by the fact that sex steroid production is temporarily halted when puberty blockers are initiated. The adolescent in this anecdote was already using estrogen, which promotes bone health. Therefore, the point about stopping blockers due to bone density loss is moot. Many types of blockers are routinely used in combination with estrogen well through adulthood without deleterious effects on bone density. This has been the common practice for treatment of adult transgender individuals for decades. Bone density loss is generally not a concern once hormone therapy has begun. In fact, Dr. Khosla’s [paper](#) states that, “the skeleton should be relatively well protected, assuming adequate compliance with hormone therapy”.

Experts in the field are indeed concerned regarding bone density among youth using puberty blockers. The WPATH SOC8 cautions that, “for adolescents older than 14 years, there are currently no data to inform HCPs whether GnRHAs (puberty blocking medication) can be administered as monotherapy (and for what duration) without posing a significant risk to skeletal health.” The SOC8 also states that, “When deciding on the duration of GnRHa monotherapy, all contributing factors should be considered, including factors such as pretreatment bone mass...” and, “The clinical course of the treatment, e.g., the development of bone mass during GnRHa treatment and the adolescent’s response to treatment, can help to determine the length of GnRHa monotherapy.”

The spotlighting of three youth, one of whom continues on treatment, one of whom stopped due to bone density loss under unclear circumstances, and one of whom reversed their transition, is

not a proportionate representation of the actual population. Transition reversal, especially when unrelated to external factors such as discrimination or rejection by family, is rare. In fact, more study is needed on the reasons youth are kept on blockers for extended reasons; what percentage of cases are due to the youth continuing to explore goals, and what percentage involves parental hesitation to support moving forward with hormone therapy?

The findings of the seven citations provided at the end of the paper require a nuanced interpretation by clinician-scientists familiar with this population and subject matter. Many of the studies used sex assigned at birth, rather than identified gender, as the comparator. Many of the differences found failed to reach statistical significance, and of those that did, many are of questionable clinical significance. Any such risk must also be taken into context with the substantial benefits of treatment, and harms of not accessing such treatment, including high rates of mental health disorders and suicidality.

Finally, the authors of this article suggest that “England’s National Health Service last month proposed restricting use of the drugs for trans youths to research settings.” In fact, the pivot that the National Health Service took was to enroll ALL youth initiating puberty blockers for treatment of gender dysphoria into a prospective research protocol so that more comprehensive data might be collected.

We agree that “less vitriol, more science”, as stated in conclusion by the authors, is needed in this area. This includes responsible reporting that takes into consideration realistic estimates of the prevalence of transition reversal, a nuanced and transparent discussion of all bone health factors, and an overall risk-benefit analysis that includes the substantial risks of delayed or denied treatment. Misinformation about the science behind the care of trans youth, such as presented in this article, can be and has been used to justify political actions or even violence against the trans and gender diverse community. With growing efforts to ban medically necessary gender affirming care for trans youth, and attacks rise such as was recently seen in the mass murder at Club Q in Colorado Springs, CO, measured and responsible journalism is ever the more essential. With the recent release of the [WPATH SOC8](#), USPATH is working to explore quality assurance and fidelity in the provision of this life-saving care in the US, and will report the findings and recommendations of our group once the process is completed.

Signed:

USPATH Board
WPATH Executive Committee



25 November 2022

WPATH, ASIAPATH, EPATH, PATHA, and USPATH Response to NHS England in the United Kingdom (UK)

Statement regarding the Interim Service Specification for the Specialist Service for Children and Young People with Gender Dysphoria (Phase 1 Providers) by NHS England*

Following the publication of the interim report of the Cass Review of gender identity services for children and young people in England in March 2022 NHS England has now issued an interim service specification for “Phase 1” services pending establishment of new regional services in England.

See <https://www.engage.england.nhs.uk/specialised-commissioning/gender-dysphoria-services/>

WPATH, ASIAPATH, EPATH, PATHA, and USPATH have major reservations about this interim service specification.

1. The document fails to state that gender diversity is a normal and healthy aspect of human diversity (Coleman et al., 2022), and that many transgender people experience gender incongruence from childhood or adolescence (James et al., 2016). Transgender and gender diverse (TGD) people have a human right to access the highest achievable standard of health care, including gender-affirming care (World Health Organization, (2017; Yogyakarta Principles.org., 2007). WPATH, ASIAPATH, EPATH, PATHA, and USPATH are concerned that rather than emphasising the importance of equitable access to medically necessary support and treatment for children, adolescents and young adults experiencing

**DX
23**

gender incongruence, the service specification appears designed to place unnecessary barriers in their way. Additionally, we state that when gender affirming medical treatment is provided with a standardised multidisciplinary assessment and treatment process, thorough informed consent, and ongoing monitoring and psychosocial support, the rate of regret of gender-affirming medical treatment commenced in adolescence has been observed to be very low and the benefits of treatment in adolescence are potentially greater than the benefits of gender-affirming treatment commenced in adulthood (Coleman et al., 2022). Hence, the harms associated with obstructing or delaying access to wished-for and indicated treatment for the majority, appear greater than the risks of regret for the few (Coleman et al., 2022), when transgender and cisgender people are correctly regarded as equal.

2. The document makes assumptions about transgender children and adolescents which are outdated and untrue, which then form the basis of harmful interventions. Amongst these is the supposition that gender incongruence is transient in pre-pubertal children. This document quotes selectively and ignores newer evidence about the persistence of gender incongruence in children (Olson et al., 2022). Many older studies regarding the stability of gender identity enlisted children who did not have gender incongruence or gender dysphoria, but rather, had culturally non-conforming gender expression. The findings of these older studies should only carefully be applied to children and young people who are presenting to gender identity clinics seeking gender-affirming treatment: it may be a different population (Temple Newhook et al., 2018). The document also makes unsupported statements about the influence of family, social, and mental health factors on the formation of gender identity. WPATH, ASIAPATH, EPATH, PATHA, and USPATH believe that children and young people can have agency and can express their gender identity, and that the best course of action is to work collaboratively with the child or young person and family to support the TGD person (Coleman et al., 2022).
3. The document highlights that there have been approximately 5000 referrals to the NHS GIDS in 2021/2022, an increase from previous years. It states that referrals are currently 8.7 young people per 100,000 population. These figures are not put in context. The referrals to GIDS range between age 3 and 17. There are 10,752,647 young people aged between 3 and 17 in England and Wales, making up 18% of the total population (Office of National Statistics, 2021). Hence, referrals to GIDS are 8.7 young people per 18,000 same age population. This is a rate of 0.048% of this population, or fewer than 5 in 10,000 young people. Population estimates of the proportion of people who are transgender range from 0.3% to 0.5% in adults, and 1.2% to 2.7% in adolescents (Coleman et al., 2022). Hence, referrals to GIDS represent a very tiny fraction of the total population of

young people, and only a small proportion of those who self-identify as transgender. These referrals are likely to be made up of those young people who have the most severe gender incongruence. WPATH, ASIAPATH, EPATH, PATHA, and USPATH strongly recommend that services should be designed that welcome these appropriate referrals, providing expedited access to expert assessment, and treatment where appropriate (Coleman et al., 2022).

4. The document underscores the expectations of the family and parent/carer around the child/young person's gender incongruence. WPATH, ASIAPATH, EPATH, PATHA, and USPATH's position is that while it is important for health professionals to work inclusively with the family and parent/carer to assist children and young people on their gender journey, the needs of the child/young person must be paramount (Coleman et al., 2022). Family acceptance and support is essential for wellbeing (Pariseau et al., 2019; Russell et al., 2018; Simons et al., 2013).
5. This document seems to triage treatment based on an ability of the child or young person to prove the severity of their gender dysphoria. There is a reference to "the clarity, persistence and consistency of gender incongruence...". WPATH, ASIAPATH, EPATH, PATHA, and USPATH believe that each person has a unique gender journey. There can be many reasons why children and young people may have trouble expressing or understanding their own gender incongruence. WPATH, ASIAPATH, EPATH, PATHA, and USPATH believe that all healthcare should be patient-centered and individually tailored (Coleman et al., 2022).
6. This document discourages social transition in pre-pubertal children. This is despite recent evidence pointing to positive mental health and social well-being outcomes in children who are allowed to socially transition in supportive environments before puberty (Durwood et al., 2017; Gibson et al., 2021). The document refers to the so-called "risks of an inappropriate gender transition" but does not name these risks or provide a reference for this statement. There is a section with criteria to support social transition in adolescents; this seems to suggest that adolescents will only be supported to socially transition if they meet the criteria set by the service. This represents an unconscionable degree of medical and State intrusion into personal and family decision-making about simple everyday matters such as clothing, name, pronouns, and school arrangements. Ultimately, social transition in practice is a personal and family decision, led by the young person, and should not require medical permission. WPATH, ASIAPATH, EPATH, PATHA, and USPATH do not support a gatekeeping approach to social transition (Coleman et al., 2022).
7. This document severely limits access to puberty suppression by only allowing treatment in the context of a formal research protocol. The eligibility criteria for

enrolment in this formal research protocol are not specified, but the concern is that they will be restrictive. WPATH, ASIAPATH, EPATH, PATHA, and USPATH disagree with this approach, and emphasise the increasing evidence that access to reversible puberty blockers, and later gender-affirming hormone treatment if wished, is associated with positive mental health and social well-being in adolescents with gender incongruence, and that adolescents are satisfied with these treatments and perceive them as essential and lifesaving (Coleman et al., 2022). We are deeply concerned that the NHS is taking inappropriate approaches to evaluating the established body of evidence and is therefore drawing erroneous conclusions underestimating the effectiveness of puberty suppression. It is ethically problematic to compel adolescents to participate in a research study to access medically necessary treatment; research participation should be voluntary and should not occur under coercive conditions and in clinical research “the safety and wellbeing of the individual prevail over the interests of science and society” (National Health Service Health Research Authority, 2022). It is also deeply concerning that the document does not describe any process for provision of estrogen or testosterone therapies for older adolescents.

8. At several points in the document, there is an emphasis on “careful exploration” of a child or young person’s co-existing mental health, neuro-developmental and/or family or social complexities. There is also a suggestion that a “care plan should be tailored to the specific needs of the individual following careful therapeutic exploration...” WPATH, ASIAPATH, EPATH, PATHA, and USPATH are concerned that this appears to imply that young people who have coexisting autism, other developmental differences, or mental health problems may be disqualified, or have unnecessary delay, in their access to gender-affirming treatment. This would be inequitable, discriminatory, and misguided (Coleman et al., 2022). WPATH, ASIAPATH, EPATH, PATHA, and USPATH recommend that puberty suppression, where urgently indicated, can be commenced promptly, and proceed alongside and at the same time as any necessary diagnostic clarification of other conditions, or treatment of other conditions. Whilst careful assessment is imperative, undue delay inherent within a model of care is not a neutral option and may cause significant harm to those accessing services (Coleman et al., 2022).
9. There is an alarming statement in the summary that “the primary intervention for children and young people... is psychosocial (including psychoeducation) and psychological support and intervention.” In another section, the document goes on to state that one outcome from the screening process would be “discharge with psychoeducation...” Disturbingly, this decision might be made without speaking directly with the young person or family. Taking No 8 and 9 together, this

document seems to view gender incongruence largely as a mental health disorder or a state of confusion and withholds gender-affirming treatments on this basis. WPATH, ASIAPATH, EPATH, PATHA, and USPATH call attention to the fact that this “psychotherapeutic” approach, which was used for decades before being superseded by evidence-based gender-affirming care, has not been shown to be effective (AUSPATH, 2021; Coleman et al., 2022). Indeed, the denial of gender-affirming treatment under the guise of “exploratory therapy” has caused enormous harm to the transgender and gender diverse community and is tantamount to “conversion” or “reparative” therapy under another name.

10. This document reasserts the outdated “gatekeeping model” of access to gender affirming care. There are many references within the document to patients only being able to access care and be referred to the next intervention down the line if they can meet criteria set by the service. There are clear statements that if adolescents are taking puberty suppression or gender-affirming hormones obtained elsewhere, the service will not provide any care. The purpose of this section seems to be about empowering the service to withhold treatment and health monitoring from children or young people who have obtained medication without the permission of the service. WPATH, ASIAPATH, EPATH, PATHA, and USPATH affirm the human right of self-determination in health care (World Health Organization, 2017). Moreover, such action contravenes the core aspects of the NHS Constitution (Department of Health and Social Care, 2021). Children and adolescents can contribute substantially to their health care decision making, with age-appropriate capacity to weigh the risks and benefits according to their own judgement (Amnesty International, 2020; Steinberg, 2013; Vrouenraets et al., 2021; Weithorn & Campbell, 1982). Furthermore, WPATH, ASIAPATH, EPATH, PATHA, and USPATH recommend a harm-minimisation approach, and encourages doctors to work with people who access treatment from other sources in a non-judgmental manner to help them to maximise their health status (Coleman et al., 2022).
11. The document states that general practitioners would be advised to “initiate local safeguarding protocols” if a child or young person obtains puberty blockers or hormones from another source. This recommendation, which would see families reported to child protection services, is gravely concerning. The draft service specification makes it clear that it will be difficult to obtain prompt access to puberty suppression. Families who are in the position of seeing their young adolescent descend into suicidal distress as they continue to experience incongruent pubertal changes, whilst being unable to access appropriate care from the NHS service, may make the difficult decision to obtain puberty suppression through non-NHS sources, as caring parents affirming their child’s identity and supporting health care according to international treatment standards. These

parents would then be at risk of being reported to child protection services, a ludicrous and dangerous situation; or a general practitioner with a better understanding of gender incongruence might be put at risk of censure for refusing to make such an inappropriate child protection referral, against the recommendations of the specialist service. WPATH, ASIAPATH, EPATH, PATHA, and USPATH believe that the appropriate interim service specification should instead be supporting GPs and families to provide the best evidence-based and compassionate care for children and young people with gender incongruence, including access to puberty suppression and gender-affirming hormones where indicated (Coleman et al., 2022; de Vries et al., 2021).

Overall, WPATH, ASIAPATH, EPATH, PATHA, and USPATH find serious flaws in this document, which sets out a plan for a service for gender diverse children and young people in England that is likely to cause enormous harm and exacerbate the higher rates of suicidality experienced by these young people in the context of ongoing pathologisation and discrimination. WPATH, ASIAPATH, EPATH, PATHA, and USPATH urge NHS England and Wales to reconsider its approach, which is now contrary to the progress being made in many countries around the world and incongruent with statements from the World Health Organization (2017) and the Yogyakarta Principles (2007) relating to the right to the highest attainable standard of health.

****WPATH thanks AUSPATH for allowing the use of the content of their Statement issued on 16 November 2022 about the Interim Service Specification for the Specialist Service for Children and Young People with Gender Dysphoria (Phase 1 Providers) by NHS England.***

References

Amnesty International (2020). *Amnesty International UK and Liberty joint statement on puberty blockers*. <https://www.amnesty.org.uk/press-releases/amnesty-international-uk-and-liberty-joint-statement-puberty-blockers>

AUSPATH (2021). *Australian Professional Association for Trans Health Public Statement on Gender-affirming Healthcare including for Trans Youth*. <https://auspath.org.au/2021/06/26/auspath-public-statement-on-gender-affirming-healthcare-including-for-trans-youth>

Coleman, E., Radix, A. E., Bouman, W.P., Brown, G.R., de Vries, A. L. C., Deutsch, M. B., Ettner, R., Fraser, L., Goodman, M., Green, J., Hancock, A. B., Johnson, T. W., Karasic, D. H., Knudson, G. A., Leibowitz, S. F., Meyer-Bahlburg, H. F.L., Monstrey, S. J., Motmans, J., Nahata, L., ... Arcelus, J. (2022). Standards of Care for the Health of

Transgender and Gender Diverse People, Version 8. *International Journal of Transgender Health*, 23(S1), S1-S260.
<https://doi.org/10.1080/26895269.2022.2100644>

de Vries, A. L. C., Richards, C., Tishelman, A. C., Motmans, J., Hannema, S. E., Green, J., & Rosenthal, S. M. (2021). Bell v Tavistock and Portman NHS Foundation Trust [2020] EWHC 3274: Weighing current knowledge and uncertainties in decisions about gender-related treatment for transgender adolescents. *International Journal of Transgender Health*, 22(3), 217–224.
<https://doi.org/10.1080/26895269.2021.1904330>

Department of Health and Social Care (2021). NHS Constitution for England.
<https://www.gov.uk/government/publications/the-nhs-constitution-for-england>

Durwood, L., McLaughlin, K. A., & Olson, K. R. (2017). Mental health and self-worth in socially transitioned transgender youth. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(2), 116–123.
<https://doi.org/10.1016/j.jaac.2016.10.016>.

Gibson, D. J., Glazier, J. J., Olson, K. R. (2021). Evaluation of anxiety and depression in a community sample of transgender youth. *JAMA Network Open*, 4(4), e214739.
<https://doi.org/10.1001/jamanetworkopen.2021.4739>.

James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 U.S. Transgender Survey*.
<https://transequality.org/sites/default/files/docs/usts/USTS-AIAN-Report-Dec17.pdf>

National Health Service Health Research Authority (2022). *UK Policy Framework for Health and Social Care Research*.
<https://www.hra.nhs.uk/planning-and-improving-research/policies-standards-legislation/uk-policy-framework-health-social-care-research/uk-policy-framework-health-and-social-care-research/#allresearch>

Office of National Statistics (2021). *Data and analysis from Census 2021. Population estimates*. <https://www.ons.gov.uk/peoplepopulationandcommunity>

Olson, K. R., Durwood, L., Horton, R., Gallagher, N. M., & Devor, A. (2022). Gender identity 5 years after social transition. *Pediatrics*, 150(2), e2021056082.
<https://doi.org/10.1542/peds.2021-056082>

Pariseau, E. M., Chevalier, L., Long, K. A., Clapham, R., Edwards-Leeper, L., & Tishelman, A. C. (2019). The relationship between family acceptance-rejection and transgender youth psychosocial functioning. *Clinical Practice in Pediatric Psychology*, 7(3), 267. <https://doi.org/10.1037/cpp0000291>

Russell, S. T., Pollitt, A. M., Li, G., & Grossman, A. H. (2018). Chosen name use is linked to reduced depressive symptoms, suicidal ideation, and suicidal behavior among transgender youth. *Journal of Adolescent Health, 63*(4), 503–505. <https://doi.org/10.1016/j.jadohealth.2018.02.003>

Simons, L., Schragger, S. M., Clark, L. F., Belzer, M., & Olson, J. (2013). Parental support and mental health among transgender adolescents. *Journal of Adolescent Health, 53*(6), 791–793. <https://doi.org/10.1016/j.jadohealth.2013.07.019>.

Steinberg, L. (2013). Does recent research on adolescent brain development inform the mature minor doctrine? *The Journal of Medicine and Philosophy, 38*(3), 256–267. <https://doi.org/10.1093/jmp/jht017>

Temple Newhook, J., Pyne, J., Winters, K., Feder, S., Holmes, C., Tosh, J., Sinnott, M., Jamieson, A., & Pickett, S (2018). A critical commentary on follow-up studies and “desistance” theories about transgender and gender-nonconforming children. *International Journal of Transgenderism, 19*(2), 212-224. <https://www.tandfonline.com/doi/full/10.1080/15532739.2018.14563907>.

Vrouenraets, L. J. J. J., de Vries, A. L. C., de Vries, M. C., van der Miesen, A. I. R., & Hein, I. M. (2021). Assessing medical decision-making competence in transgender youth. *Pediatrics, 148*(6), e2020049643. <https://doi.org/10.1542/peds.2020-049643>

Weithorn, L.A., & Campbell, S.B. (1982). The competency of children and adolescents to make informed treatment decisions. *Child Development, 53*(6), 1589-1598. <https://doi.org/10.2307/1130087>

World Health Organization (2017). *Human rights and health*. <https://www.who.int/news-room/fact-sheets/detail/human-rights-and-health>

Yogyakarta Principles.org. (2007). Yogyakarta principles. <https://yogyakarta.org>