

Cass Review does not guide care for trans young people

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The *Independent review of gender identity services for children and young people*, or Cass Review¹ (the Review), was commissioned by England's National Health Service (NHS) following increased referrals to the NHS Gender Identity Development Service (GIDS), criticisms of GIDS, and the *Bell v Tavistock* case involving one young person who regretted gender-affirming medical treatment (GAMT).² The Review's April 2024 final report recommended that puberty suppression with gonadotrophin-releasing hormone analogues (GnRHa) should only be available to transgender (trans) adolescents in a clinical trial, which has not commenced. The United Kingdom Government subsequently prohibited the supply of GnRHa as GAMT for minors,³ making it unlawful for trans adolescents to commence GnRHa treatment. Other Review recommendations restrict the provision of oestrogen and testosterone for individuals over the age of 16 years, and conceptualise social affirmation of trans children as a potentially harmful intervention.¹

Worldwide, the Review has received criticism from expert professional organisations⁴⁻⁷ and in the peer-reviewed literature⁸⁻¹² for its disregard of international expert consensus,¹³ methodological problems, and conceptual errors. UK trans community advocates have raised issues of justice and human rights.¹⁴ The UK Government cited the Review in guidance empowering schools to misgender trans students and breach their confidentiality.¹⁵ In response, the Royal College of Paediatrics and Child Health stated that this disregarded *Gilllick* competence, contradicted guidance from the National Institute for Health and Care Excellence (NICE) to use chosen name and pronouns,¹⁶ and placed young people at risk of abuse.¹⁵

The Cass Review's internal contradictions are striking. It acknowledged that some trans young people benefit from puberty suppression, but its recommendations have made this currently inaccessible to all. It found no evidence that psychological treatments improve gender dysphoria, yet recommended expanding their provision. It found that NHS provision of GAMT (GnRHa, oestrogen or testosterone) was already very restricted, and that young people were distressed by lack of access to treatment,¹ yet it recommended increased barriers to oestrogen and testosterone for any trans adolescents aged under 18 years. It dismissed the evidence of benefit from GAMT as "weak", but emphasised speculative harms based on weaker evidence. The harms of withholding GAMT were not evaluated. The Review disregarded studies observing that adolescents who requested but were unable to access GAMT had poorer mental health compared with those who could access GAMT.¹⁷⁻²¹ Despite finding that detransition and regret appear uncommon,¹ the Review's recommendations appear to have the goal of preventing regret at any cost.

The Review, and the UK Government, have taken the position that GAMT, an established treatment with

observational evidence of early and medium term benefits and acceptable safety,²² should be actively withheld from trans adolescents due to lack of high certainty evidence of very long term efficacy and safety. Few treatments for any condition meet this criterion, and it is difficult to name another field in which regulators impose such a benchmark.²³ Much health care in other areas of medicine is guided by evidence of similar or lesser strength.²³

In Australia, gender-affirming care for trans young people is recognised as best practice,²⁴ despite some vocal opposition. The National Health and Medical Research Council is currently reviewing the *Australian standards of care and treatment guidelines for transgender and gender diverse children and adolescents*²⁵ and developing updated guidelines. The conceptualisation of gender diversity which informs gender-affirming care is summarised in [the Box](#).

Paediatric gender-affirming care in Australia

The gender-affirming model of care⁵⁸ is highly acceptable to young people and families,³⁸ and quickly superseded previous unsuccessful efforts to repress gender-diverse identity.^{22,59} Gender-affirming care recognises that each person should be supported to live in the gender that is most authentic to them; trans, gender-diverse and non-binary individuals are accepted as they are.²² This involves listening to the young person. Gender-affirming care includes support for the young person's requests for social affirmation (eg, chosen name, pronouns, school accommodations, documents).¹³ Gender-affirming care can also include the option of GAMT (puberty suppression, oestrogen, testosterone) for the minority who need and request it.¹³ Gender-affirming care, as described in authoritative guidelines,^{13,25,60} is person- and family-centred, holistic, multidisciplinary, and ethically sound.⁶¹

Responding to patient need, public paediatric gender-affirming services have developed in all Australian states. Gender-affirming care providers include general practitioners, private specialists and community allied health providers, particularly in regional and remote settings.¹³

Best practice gender-affirming care involves comprehensive multidisciplinary biopsychosocial assessment before any GAMT.^{13,25} Coexisting conditions such as depression, anxiety, eating disorders, autism and attention deficit hyperactivity disorder (ADHD) can be addressed as needed alongside gender-affirming care.¹³ Family, school and community acceptance are supported.²⁵ Social affirmation steps are personal and family decisions, not clinical interventions.¹³

GAMT is not used before the start of puberty.¹³ Although only a minority of trans adolescents commence any GAMT,⁶² some experience it as

Gender diversity: an introduction

- Some people — adults, adolescents and children — are transgender (trans); that is, their gender identity does not align with their sex registered at birth.²⁶ For many, gender identity is stable over time; for some, gender identity evolves.²⁷
- Trans and gender-diverse people have been documented in many cultures throughout history.²⁸
- A person who is trans can be of any sexuality. Gender and sexual orientation are distinct. More trans young people identify as gay, lesbian, bisexual or another non-heterosexual orientation than their cisgender peers.^{29,30} Like diverse sexuality, trans and gender-diverse identities represent another dimension of human variation, not disorder,^{31,32} and should be accepted.¹³
- Many trans adults report that they had self-awareness of their gender from adolescence or childhood, often years before telling others. First self-recognition of one's trans identity in adolescence is not a new phenomenon.^{33,34}
- In decades past, many trans young people felt isolated, with no words to articulate their experience.³⁵ The information revolution has increased health literacy and access to health care.³⁶
- More trans young people are requesting referral to specialist gender-affirming care, as they become aware that support is available, including gender-affirming medical treatment (GAMT).³⁷
- Many trans young people do not want medical or surgical treatment. Some need and request GAMT, for relief from the intolerable distress of incongruent puberty, to be recognised as their felt gender, and to live more comfortably and safely.²² Services to meet these valid health care needs are essential. There are reported benefits from GAMT for trans young people and their families.^{20,21,38–40}
- Re-identification with the birth-registered sex following GAMT, and treatment-related regret, appear to be uncommon.^{41–45} Discontinuation of GAMT^{43,46,47} may occur for many valid personal reasons.⁴⁸
- Sexuality and gender identity change efforts or conversion practices, which aim to repress or change sexuality or gender identity, are harmful⁴⁹ and are illegal in many jurisdictions.
- Trans young people and adults, particularly those who are exposed to discrimination and abuse, are at greatly increased risk of mental health problems,⁵⁰ deliberate self-harm, suicide attempt,^{51,52} and suicide.⁵³
- Better mental health in trans young people is associated with loving acceptance by family, school and community,^{29,54} freedom from bullying and discrimination,²⁹ being called by their chosen name,⁵⁵ peer support,⁵⁴ and timely access to GAMT where needed.^{17,18,20,21,40,56,57}
- Health care for trans young people must respect their voices, emerging autonomy, and dignity.¹³

essential, even life-saving.⁵⁷ The risks and benefits of a treatment are weighed up against the risks and benefits of not having, or delaying, the treatment; and alternatives are discussed.¹³ Frank discussion of treatment effects (irreversible and reversible), risks, fertility implications, unknowns, and the possibility of regret⁴¹ are essential for informed consent. Treatment decisions are collaborative, between the young person, their parents or caregivers and clinicians.¹³

If eligible according to guidelines,^{13,25,60} largely reversible puberty suppression with GnRHa may be provided from Tanner stage 2–3. For adolescents who request GnRHa but are not yet Gillick-competent, parents can provide informed consent.⁶³ Partially irreversible sex hormone treatment (oestrogen, testosterone) may be provided to Gillick-competent older adolescents and young adults, whose identity and treatment wishes have been consistent for a long time.¹³ Legal requirements for consent differ between

states. Gender-affirming genital surgery is not provided for minors in Australia.²⁵

Cass Review recommendations and their consequences

Many of the Review's 32 recommendations align with current Australian best practice. For example, there is consensus that care should be individualised, family-centred, medical-led and multidisciplinary, and it should ensure treatment of coexisting conditions; that GAMT should be provided with a clear rationale and informed consent; and that fertility impacts should be addressed.^{1,13,25} However, other Review recommendations are incompatible with person-centred care and unsubstantiated by evidence.

The Review described social transition (social affirmation) as an “active intervention” which is “a cause of concern for many people”, despite acknowledging the observational longitudinal and cross-sectional evidence of good mental health outcomes in children and adolescents supported to socially affirm their gender.^{55,58,64,65} The child's wish to express their gender identity is incorrectly framed as a clinical problem.⁶⁶ Disturbingly, the Review speculatively conceptualised the continuation of trans identity into adulthood as a potential harm of social transition.^{1,67} It ignored the profound distress, family conflict and school refusal that often occur when a trans child's insistently expressed identity is not respected.⁶⁷ The Review recommended that families considering social transition for prepubertal children should be “seen as early as possible by a clinical professional with relevant experience”, raising concerns that families could be exposed to repressive or conversion practices.

The Review recommended that puberty suppression for trans young people should only occur in a research trial of unspecified methodology, without discussing the questionable ethics of compulsory research,⁶⁸ the impossibility of blinding due to obvious GAMT effects, or the harms of allocation to a non-treatment group.⁶⁹ Although research-only provision of GnRHa was signalled in the Review's Interim Report in 2022,⁷⁰ no such trial has commenced to date.

The Review recommended that oestrogen and testosterone for trans 16- and 17-year-olds should be prescribed only with “extreme caution”, after approval by a “national multidisciplinary team”. The Review's audit of the NHS paediatric gender service found that of 3306 patients, after long waiting times, only 22% were prescribed any GAMT following assessment,¹ indicating that hormonal treatments were already restricted to a minority of patients. The rationale for increasing restrictions is unclear.

A Cass Review-commissioned systematic review⁷¹ identified only ten studies analysing psychosocial interventions for young people “experiencing gender dysphoria or incongruence”, none of which reported on relief of gender dysphoria. Nine were rated low quality. One small study with only eight trans participants, was rated moderate quality. The Review concluded that there was a “lack of evidence” for psychosocial

treatments in this patient population. Despite this finding, the Review recommended the expansion of “psychological and psychosocial interventions” for young people referred to gender services, while withholding GAMT.¹

Paradoxically, although the Review advocated for individualised care, its blanket recommendations, and their consequences in UK trans health care provision to date, prevent the exercise of patient choice, parental responsibility, and clinical judgement.

How did the Review come to make these harmful recommendations?

The sociopolitical context

It has been reported that the UK sociopolitical climate is increasingly unsafe for trans people of all ages, with escalating anti-trans hate crimes,⁷² prejudice,⁷³ and dehumanising media commentary.⁷⁴ Factions of feminist thought in which trans women are framed as a threat are prominent.⁷⁵ Traditionalist psychoanalytic theories that pathologise gender diversity remain influential.⁷⁶ Of the health professionals in the Review’s clinical engagement process, one-third agreed with the statement “there is no such thing as a trans child”.⁷⁷

However, trans people are not a moral, philosophical or social issue. They are people. The statement “some people are transgender” is a demographic fact,²⁶ not an ideological position.

Lack of both clinical expertise and trans authorship led to errors

The Review team were explicitly selected for their absence of experience in trans health care, supposedly to avoid bias.⁹ Remarkably, in the era of *nothing about us without us*,⁷⁸ no Review authors were trans people. This enacted stigma presumably resulted in a lack of both clinical and lived expertise, increasing vulnerability to misinformation. Indeed, the Review report echoes fallacies promoted by anti-trans disinformation.⁷⁹

Pathologisation of gender diversity

The Review report did not include consideration of evidence of gender diversity across cultures.²⁸ It did not acknowledge the existence of healthy trans children, or trans adults who were once trans children and/or adolescents.³⁴ It speculated baselessly about causes of gender diversity, from pornography to trauma. The literature on sex-hormone receptor polymorphisms and trans identity was not discussed at all,⁸⁰ which we find to be a surprising omission.

Conceptualisation of increased gender clinic referrals and changed sex ratio as a problem

The Review cites the increased number of paediatric gender clinic referrals, and the increased proportion of trans masculine (birth-registered female) adolescents referred since around 2014, as reasons to question the validity of present-day patients. This lacks historical perspective.

First, the most likely explanation for increased referrals was not entertained: when young people become aware that trans people exist, and that gender-affirming care is available, they will seek this help if they need it.³⁷ Historically, the uptake of effective treatments has been similarly swift; for example, the huge increase in women using the oral contraceptive pill between 1960 and 1975.⁸¹

Second, regarding the sex ratio, gender-non-conforming prepubertal boys (many of whom would not have met diagnostic criteria for gender incongruence) from the 1960s onward were referred to non-affirming clinics by parents who feared that they would grow up gay or trans.⁶⁷ Gender-non-conforming girls were less often referred, reflecting societal tolerance of broader gender expression in females. Studies of these historical cohorts, including desistence statistics, cannot be extrapolated to present-day, adolescent-led referrals of peripubertal and postpubertal trans youth to affirming clinics.⁶⁷

Trans males have sometimes been less visible in society than trans females,⁸² but the first adolescent who commenced gender-affirming GnRHa, in 1987, was a trans male.⁸³ In publications from 1980 to 2014 reporting on adolescents who received GAMT, more than half were trans males (birth-registered female).^{84–88} The sex ratio of individuals receiving treatment has changed little despite the shift in referrals; Cass fails to appreciate this fact.

Poor understanding of the therapeutic role of puberty suppression

The Review appeared to misunderstand the young person’s primary goal of puberty blocker treatment, which is to prevent progressive irreversible incongruent pubertal changes. It did not acknowledge the benefits of prevention of breast development for trans males, and prevention of facial masculinisation for trans females. Instead, the Review focused on secondary mental health outcomes. GnRHa pauses puberty but does not reverse most changes of puberty that have already occurred, and does not induce the desired congruent puberty. Its anatomical benefits decrease if commenced in more advanced puberty. Hence, some studies observe unchanged gender dysphoria and stable mental health while receiving GnRHa.⁸⁹ The Review erroneously interpreted this lack of change as if it were evidence of no benefit. Higher quality studies suggesting benefit from puberty suppression^{21,40} were mentioned in the Review, but their size and significance appeared to be disregarded. Reassuring longer term safety data regarding bone health⁹⁰ and cognitive development⁹¹ were dismissed. The decision to restrict GnRHa access appears at least partly based on the Review’s underestimation of its benefits and exaggeration of potential harms.

They talked with trans young people, but did not listen to them

The Reviewers met with some trans adolescents. The consultation documents record their distress about difficulty in accessing GAMT,⁹² but little of this is represented in the Review’s report.¹ Young people

were not asked whether they experienced GAMT as beneficial.⁹² In contrast, voices of doubt and speculative concern from non-trans adults are extensively quoted.

Fear of regret

The Review's recommendations appear to prioritise the goal of preventing treatment-related regret. It is essential to appreciate that some people regret GAMT.¹³ Young people and families must consider this thoroughly when weighing short and long term risks, benefits, and unknowns.¹³ This issue is not specific to trans health; regret is a potential consequence of many treatments. International data suggest a low rate of regret; even in persons who decide to cease GAMT, regret appears uncommon.^{42-45,47} There is no evidence that restrictions on GAMT reduce regret.⁹³ Instead, the predictable consequence of restricting GAMT is to increase self-treatment without medical supervision.⁹⁴

Limitations of the Cass Review's seven commissioned systematic reviews

Scientific criticisms of the Review-associated systematic reviews are presented elsewhere.⁸ Their flaws, including their subjective rating of international guideline quality,⁹⁵ undermine confidence in the Review. They are out of date, as their literature search was conducted only up to April 2022. Newer observational studies have reported high treatment satisfaction, and associations of GAMT with better mental health and wellbeing.^{20,39,44,45,56}

Notwithstanding their limitations, the Cass-commissioned systematic reviews found moderate quality evidence of mental health benefits from masculinising and feminising GAMT.⁹⁶ They found that GnRHa is effective in suppressing puberty,⁹⁷ and oestrogen and testosterone are effective in producing feminisation and masculinisation⁹⁶ — the patient's primary goals. These systematic reviews found no evidence of serious harm from GAMT or social transition sufficient to justify withholding either,⁹⁶⁻⁹⁸ and they did not evaluate the harms of withholding GAMT. The Cass Review's restrictive recommendations are not supported by its own systematic reviews.

Failure of evidence-based medicine

Evidence-based medicine has three pillars: (i) appraisal of research evidence, (ii) real-world clinical expertise, and (iii) individual patient values and preferences.⁹⁹ The Review's failures across all three are evident.

Clinician and researcher self-awareness of personal values is essential for evidence-based medicine practice. Non-financial conflicts of interest should be disclosed; for example, religious, cultural, and so-called "gender-critical" beliefs.¹⁰⁰ The Review acknowledges no such considerations, and does not disclose the positionality of authors.

Conclusions

Good medicine is guided by the values of the patient, not those of a clinician, politician or commentator.⁹⁹

A patient's goal of achieving optimal quality of life as a trans person requires respect.³⁸

A body of short and medium term observational quantitative and qualitative evidence informs paediatric gender-affirming care and GAMT.²² Further research in paediatric trans populations must be co-designed and ethically conducted.^{68,78}

The Cass Review, lacking expertise and compromised by implicit stigma and misinformation, does not give credible evidence-based guidance. We are gravely concerned about its impact on the wellbeing of trans and gender-diverse people.

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Positionality statement: We acknowledge the positionality of the authors and the other acknowledged contributors as an important consideration in shaping our approach to this topic. Some authors and acknowledged contributors are health professionals working in gender-affirming health care for transgender (trans) young people, and in other fields. Some authors and acknowledged contributors are research professionals in the area of trans health, and in other fields. Their professional backgrounds include adolescent medicine, clinical ethics, endocrinology, epidemiology, general practice, infant mental health, medical genetics, paediatrics, population health, psychiatry, psychology, sexual health, and speech pathology. Many of the authors and other acknowledged contributors are investigators of the Australian Research Consortium for Trans Youth and Children. In relation to identities and experiences, some are trans, gender-diverse and non-binary, and some are cisgender (not trans); some are queer and some are straight. The authors and acknowledged contributors are from a range of cultural and language backgrounds; some are early career and some are senior. This project is motivated by the research team's commitment to promoting respectful, person-centred and evidence-informed health care for trans and gender-diverse people of all ages.

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