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<https://doi.org/10.1136/archdischild-2023-326348>

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# Gender services for children and adolescents across the EU-15+ countries: an online survey

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► Additional supplemental material is published online only. To view, please visit the journal online (<https://doi.org/10.1136/archdischild-2023-326348>).

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Received 22 September 2023

Accepted 25 November 2023



- <http://dx.doi.org/10.1136/archdischild-2023-326347>
- <http://dx.doi.org/10.1136/archdischild-2023-326112>
- <http://dx.doi.org/10.1136/archdischild-2023-326500>
- <http://dx.doi.org/10.1136/archdischild-2023-326499>
- <http://dx.doi.org/10.1136/archdischild-2023-326760>
- <http://dx.doi.org/10.1136/archdischild-2023-326670>
- <http://dx.doi.org/10.1136/archdischild-2023-326681>
- <http://dx.doi.org/10.1136/archdischild-2023-326669>



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**To cite:** Hall R, Taylor J, Heathcote C, *et al.* *Arch Dis Child* Epub ahead of print: [please include Day Month Year]. doi:10.1136/archdischild-2023-326348

## ABSTRACT

**Background** Over the last 10-15 years, there has been an increase in the number of children and adolescents referred to gender services, particularly among adolescent birth-registered females. This population shows a higher prevalence of co-occurring mental health difficulties and neurodevelopmental conditions. Some countries have recently restricted access to medical treatments in recognition of the uncertain evidence base.

**Aim** To understand the current provision of gender services for children and adolescents across the EU-15+ countries that have comparable high-income healthcare systems, to inform service development in the UK.

**Methods** An e-survey of paediatric gender services was conducted between September 2022 and April 2023. It covered service structure, care pathways, interventions and data collection. Data were described and compared to identify similarities and differences among participating services.

**Results** 15 services in eight countries (Australia, Belgium, Denmark, Norway, Northern Ireland, The Netherlands, Spain and Finland) responded. While a multidisciplinary team was present in all services, its composition and organisation varied. Clinical practice was informed by international guidelines, with four countries following their own national guidelines. Differences were observed in referral criteria, care pathways for prepubertal children and those with co-occurring conditions. Eligibility criteria for medical interventions also varied. Psychosocial support and interventions were limited, and outcome data collection was scarce.

**Conclusions** This survey revealed both similarities and key variations in the clinical practice of paediatric gender services across eight different countries. The study emphasises the need for service development that both considers the management of co-occurring conditions and embeds routine data collection in practice.

## INTRODUCTION

Over the last 10-15 years, there has been an increase internationally in the numbers of children and adolescents referred to gender services and a relative increase in referrals for adolescent birth-registered females.<sup>1-7</sup> An over-representation of those with neurodevelopmental conditions, and high rates of co-occurring mental health difficulties have also been reported.<sup>8-10</sup> Addressing the needs of this growing population is a concern for clinicians and policymakers.<sup>11 12</sup>

International clinical practice and guidelines<sup>13 14</sup> have until recently largely been informed by the

## WHAT IS ALREADY KNOWN ON THIS TOPIC

- ⇒ The number of children and adolescents identifying as a gender different to the sex they were registered at birth have increased markedly over the last 10-15 years.
- ⇒ Some countries have updated their guidelines and changed gender service provision for children and adolescents.

## WHAT THIS STUDY ADDS

- ⇒ This survey found areas of common practice across gender services for children and adolescents in eight countries, with most using Diagnostic and Statistical Manual fifth edition diagnostic criteria and a multidisciplinary team approach.
- ⇒ The survey revealed key differences in the composition of teams, the management of co-occurring conditions, prepubertal children and those with a non-binary gender identity, and in the criteria for accessing medical interventions.
- ⇒ Referral pathways into gender services for children and adolescents varied, and services reported limited provision of psychological care and a reliance on local mental health services.

## HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

- ⇒ Gender services needs to consider the provision of psychological care. High-quality standardised data collection should be routinely collected to enable comparison in outcomes for children and adolescents accessing these different services.

‘Dutch protocol’<sup>15</sup> entailing psychosocial care and then staged medical interventions. While the main international guideline produced by the World Professional Association for Transgender Health (WPATH) has, over time, relaxed some of the original eligibility criteria for medical interventions,<sup>13</sup> some countries have recently moved away from WPATH. In particular, Sweden<sup>16</sup> and Finland<sup>17</sup> have reviewed the evidence and in response updated their national guidelines, recommending a more cautious approach to providing medical interventions, which in Sweden will only be provided under a research framework and in exceptional cases until this is established. Norway is also considering a review of guidelines.<sup>18 19</sup> In the UK, an independent review<sup>20</sup> has led to the recommendation of a new model of care and the current development of new gender services.<sup>21</sup> Additionally, some professional bodies in

France and Australia have adopted a more cautious approach regarding the medical treatment of adolescents.<sup>22 23</sup>

There has been no recent systematic collection of data on the provision of gender services for children and adolescents in countries with similar healthcare systems. A previous survey of the provision of services internationally focused on North America and Europe and is likely already out of date as this was published in 2018 prior to some countries raising concerns.<sup>24</sup>

This study aimed to understand and describe the current provision of gender services for children and adolescents in the EU-15+ countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, Australia, Canada, Norway and the UK) which have comparable high-income healthcare systems used in other benchmarking studies,<sup>25</sup> to inform future service development.

## METHODS

This was an e-survey of gender services for children and adolescents, reported according to the Checklist for Reporting Results of Internet E-Surveys guidelines.<sup>26</sup> It was confirmed with the University of York Department of Health Sciences Research Governance Committee that ethical approval was not required as this was a service evaluation. The survey was administered according to University of York's data protection and reporting requirements.

## Sample

The target sample was gender services for children and adolescents in the EU15+ countries. Contact details for the services were obtained from publicly available data, expert contacts and via snowball sampling.

## Recruitment

An email was sent to identified clinicians or managers, explaining the survey aims, confidentiality, data protection and expected completion time. In terms of confidentiality, we stated that data would be reported at country level rather than by naming services or respondents. One reminder email was sent after 3 weeks.

## Survey design and administration

An e-survey was created in Qualtrics.<sup>27</sup> It contained 34 questions over five pages on service structure, care pathways, interventions and data collection (see online supplemental file 1). An additional four questions on staffing and waiting lists were optional. The questions were informed by a review of published papers describing service provision (see online supplemental file 2) and the content of clinical guidelines. Items were categorical or free text responses. Adaptive questioning was applied; certain items were conditionally displayed based on responses to other items. Respondents were able to review and change their answers.

The draft survey was reviewed by an advisory committee, which included expert gender clinicians from three European countries in order to check the applicability of the questions to different settings. It was also piloted by one gender clinician, with revisions to the wording and flow of questions made following feedback.

The survey was open between September 2022 and April 2023.

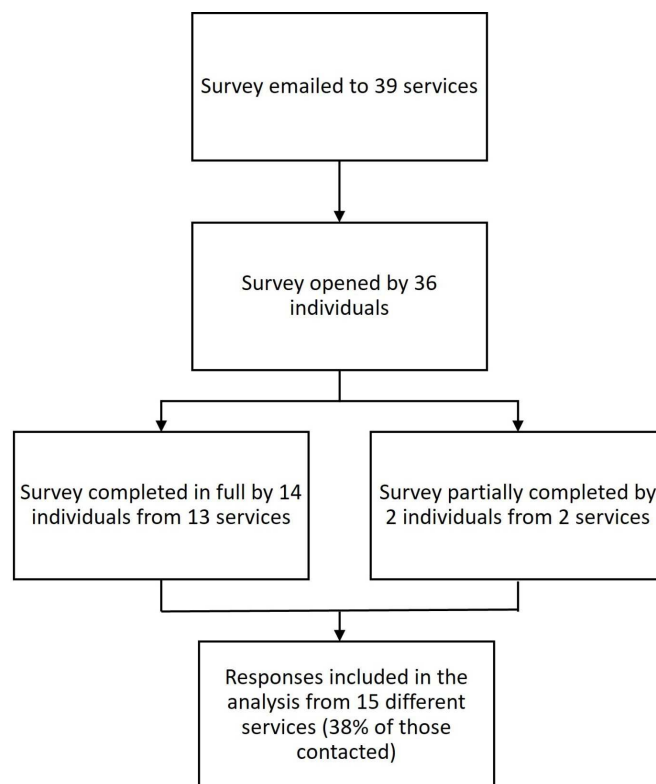


Figure 1 Study flow chart.

## Data analysis

Consistency and completeness checks were performed after responses were received; more detail was sought from some services where responses were unclear. As this was a 'closed' survey, it was possible to identify and remove duplicate entries from the same user or service.

All responses were downloaded into Microsoft Excel and descriptively analysed, including those not fully completed. Responses were described, tabulated and compared to assess similarity and variation among the services.

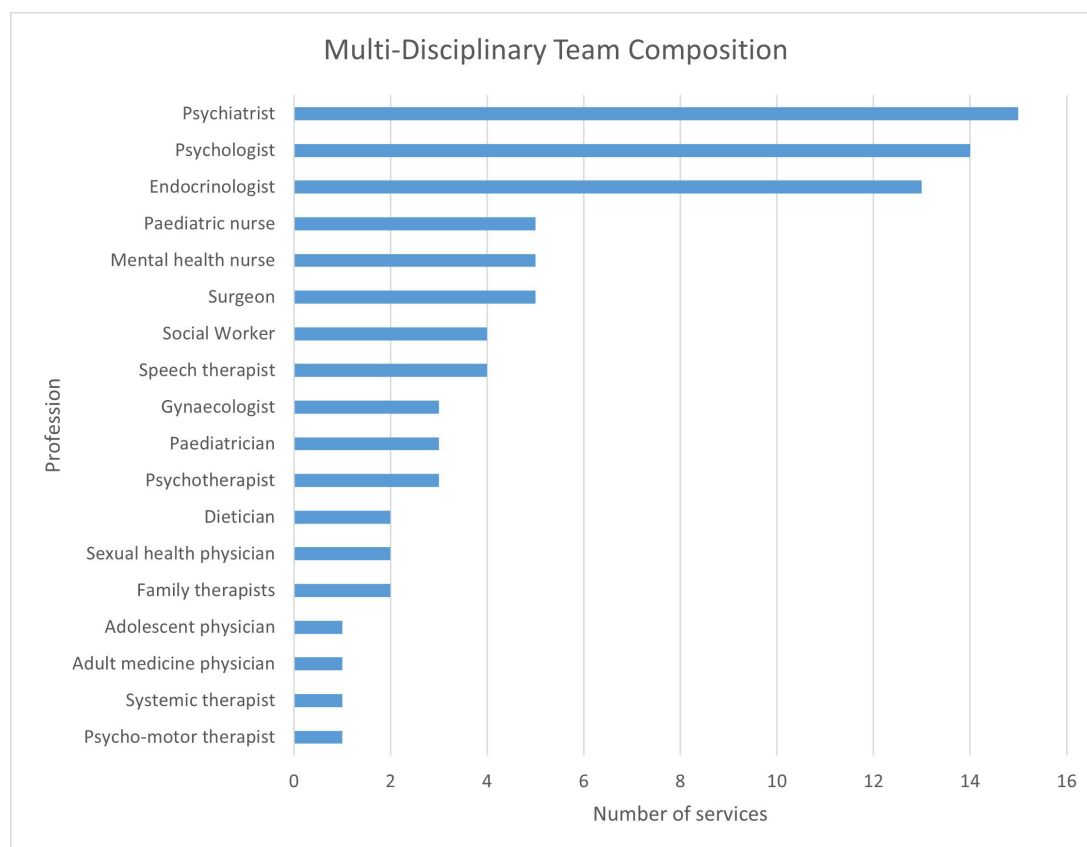
## RESULTS

### Participation

No services were located in Greece or Luxembourg and Ireland does not have a paediatric provider.<sup>28</sup> Services were identified in Northern Ireland, Scotland and England within the UK. A total of 39 services from 16 countries were contacted. The survey was accessed by 36 individuals from the 39 services and completed in full by 14 individuals. Two respondents partially completed the survey (figure 1). One service was described by two individuals. Responses from 15 different services were submitted, located in eight countries (Australia, Belgium, Denmark, Norway, Northern Ireland, The Netherlands, Spain, Finland), a response rate of 38%.

### Structure of services

Countries showed variations in how they structured services for children and adolescents. Most countries had either national gender services (Norway, Denmark, Finland) or regional services (Australia, Northern Ireland, Spain). The Netherlands had a network of both regional and national services with referral pathways between them. All services were publicly funded and mainly located within tertiary or



**Figure 2** Multi-disciplinary team composition.

secondary care mental health, endocrinology, or paediatric departments.

A minimum age for accessing services existed in three services, ranging from 8 years in Belgium, 9 years in a Netherlands service and 14 years in Spain. Other services did not have a minimum age. Spain reported that their minimum age reflects the legal context in which 14 years is the legal minimum age to access masculinising or feminising hormone interventions. Most ( $n=9$ ) offered services up to young adulthood (age 17/18). The remainder offered services beyond this age, up to the age of 25 ( $n=1$ ) or throughout adulthood ( $n=5$ ).

All services described a multidisciplinary team (MDT) of health professionals, but its composition and organisation varied. Child and adolescent psychologists and/or psychiatrists were present in all services, while most also included paediatricians or endocrinologists. Other professionals were involved in different frequencies (figure 2).

In some services (Finland, Northern Ireland and Denmark), the core MDT consisted of mental health professionals who conducted assessments and facilitated access to other specialties, for example, endocrinology. Conversely, some Australian services described greater integration of disciplines within the MDT, involving different specialties in the assessment phase, and often co-located within the gender clinic instead of separate departments.

Clinical practice was reported as most commonly informed by international guidelines; the WPATH V.7<sup>29</sup> or 8,<sup>13</sup> and Endocrine Society guidelines.<sup>14</sup> Country-specific guidelines were used in Australia<sup>30</sup> and The Netherlands.<sup>31</sup> In Denmark and Finland, national guidelines alone were used.<sup>17 32</sup>

### Care pathways

#### Referral criteria

Referral routes into services varied: some services (Finland, Northern Ireland, Norway) required referrals from child and adolescent mental health services (CAMHS) after assessment, while many others (The Netherlands, Denmark, Belgium, Spain, Australia) had no such requirement. Finland was unique in also having specific referral criteria related to co-occurring conditions; referrals not accepted for children or adolescents with significant mental health, or social concerns. Several services specified that a referral must come from a clinician (Australia). It was unclear if any services accepted self-referrals. Age and residency status were the other main referral criteria.

#### Assessment processes

Services followed similar assessment pathways with appointments involving psychologists and/or psychiatrists (table 1). Some services with integrated MDT models also included other medical staff (paediatricians and endocrinologists) in the assessment process. The duration and number of appointments varied within and between services and were often described as tailored to individual presentations. Spain was an exception in not routinely offering multiple appointments; a single assessment session was reported and psychologist involvement as being optional.

Core assessment areas were generally aligned among services. Most reported that they evaluate developmental and mental health history as well as gender development (identity, expression, dysphoria/incongruence). Many services conducted a broad psychosocial assessment (Australia, Belgium, Finland,

Table 1 Assessment process

| Country   | Clinician undertaking assessment  | Number of appointments/duration  | Areas of assessment   | Assessment tools for gender dysphoria*   | Assessment tools for other co-occurring conditions*  |
|-----------|---|--|---|--|--|
| Australia | Psychologist or Psychiatrist  | Multiple appointments depending on clinical need   | Gender exploration (history, identity, body)<br>Capacity<br>Mental health<br>Fertility  | None used  | No screening   |
| Australia | Mental health nurse<br>Psychiatrist<br>Psychologist<br>Endocrinologist<br><i>Patient sees all as MDT consensus required</i> | Minimum 9 appointments of 1–2 hours.<br>'Fast' pathway 6–7 months.   | Mental health<br>Developmental history<br>Family history<br>Drug and alcohol<br>Gender identity development<br>Treatment wishes<br>Fertility<br>Capacity assessment   | Perth Gender Picture<br><b>Gender Preoccupation and Stability Questionnaire (GPSQ)</b>   | <b>Social Responsiveness Scale-2</b><br><b>Child Behaviour Checklist Youth Self Report</b><br><b>Beck Youth Inventory (BYI)</b><br>SCOFF: Eating Disorder Screen<br>ESQ quality of life<br>Youth Quality of Life Instrument-short form   |
| Australia | Psychiatrist for diagnosis of Gender Dysphoria<br>Paediatricians or gynaecologists for other assessments                    | 4 appointments over 4–6 months   | Gender identity history<br>Developmental history<br>Mental health history<br>Current mental health<br>Aims for gender treatment<br>Medical history<br>Fertility counselling<br>Consent  | Gender Diversity Questionnaire   | <b>Spence Children's Anxiety Scale</b><br>Mood and Feelings Questionnaire (MFQ)<br><b>Columbia Suicide Severity Rating Scale (C-SSRS)</b>  |
| Australia | Psychiatrists<br>Psychologists<br>Social workers<br>Mental health nurses  | Varies depending on age, social support, mental health concerns, social transition status. Ranges from 2 to 3 sessions over 2–3 months to approximately 6 sessions over 6 months.                              | Developmental history<br>Mental health assessment<br>Bio-psycho-social assessment<br>Gender identity<br>Gender expression<br>Resilience<br>Systemic strengths and challenges  | <b>Gender Preoccupation and Stability Questionnaire</b><br>Sometimes also:<br><b>Body Image Scale</b>  | Strengths and Difficulties Questionnaire (SDQ)<br>Index of Family Functioning and Change—SCORE-15<br><b>Beck Youth Inventory (BYI)</b><br>Sometimes also:<br>Child and Adolescent Trauma Screen (CATS)<br><b>Child Behaviour Checklist The Wechsler Intelligence Scale for Children (WISC)</b><br>No tools for autism spectrum condition assessment used as not accurate in trans population   |
| Australia | Nurse assessment for triage<br>Psychologist or Psychiatrist and Paediatrician   | All children over 8 years allocated three initial mental health sessions then a joint paediatric+mental health session. From there; individualised plan devised for ongoing assessment/care/referral elsewhere | Developmental history<br>Mental health assessment<br>Gender identity development<br>Capacity assessment if pursuing medical treatments<br>Assessment of co-occurring mental health conditions or autism<br>Family functioning<br>School functioning | About your gender—gender slider<br>About socially transitioning<br>About your voice<br><b>Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults</b><br>Single item measuring recent gender distress<br><b>Gender Preoccupation and Stability Questionnaire</b><br><b>Body Image Scale</b><br>Chest Dysphoria Scale | <b>Youth Self Report</b><br><b>Child Behaviour Checklist</b><br><b>Spence Children's Anxiety Scale</b><br>Branched Eating Disorders test<br>Short mood and feelings questionnaire<br>Depression Anxiety and Stress Scale<br>Social Phobia Scale<br>Gender Minority Stress and Resilience Scale<br>The Brief Resilience Scale<br><b>Columbia-Suicide Severity Rating Scale</b><br><b>Social Responsiveness Scale</b><br>About School<br>Psychological Sense of School Membership Survey Gatehouse<br>Bullying Scale<br>Family Assessment Device<br>Child Health Utility 9D<br>Assessment of Quality of Life (AQoL-4D) |
| Belgium   | Psychologist<br>Psychiatrist<br>(in MDT approach)   | Average once a month for 6 months  | Developmental history<br>Emotional history<br>Social<br>Cognitive<br>Gender resilience<br>Comorbidities<br>Sexual orientation<br>Fertility<br>Peer support  | The Genderbread Person<br><b>Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults</b><br><b>Utrecht Gender Dysphoria Scale</b><br><b>Recalled Childhood Gender Identity scale (RCGI)</b><br><b>Body Image Scale</b>   | <b>Child Behaviour Checklist</b><br><b>Youth Self Report</b><br><b>Teacher's Report Form</b><br><b>The Children's Global Assessment Scale</b>  |

Continued



Table 1 Continued

| Country          | Clinician undertaking assessment   | Number of appointments/duration  | Areas of assessment  | Assessment tools for gender dysphoria*   | Assessment tools for other co-occurring conditions*   |
|------------------|--|--|--|--|---|
| Denmark          | Psychologist and Psychiatrist  | For adolescents with long standing gender incongruence, stable social and mental health: at least five appointments plus psychiatric assessment. | Gender identity development<br>Gender dysphoria<br>Social support<br>Family relations<br>Sexuality<br>Fertility<br>Cognitive assessment<br>Psychiatric assessment  | None   | Kiddie-SADS<br><b>Social Responsiveness Scale</b><br>Behavior Rating Inventory of Executive Function<br>ADHD-Rating Scale<br><b>The Wechsler Intelligence Scale for Children (WISC) 4/5</b><br><b>Autism Diagnostic Observation Schedule</b><br>Assessment of Depression Inventory<br>Measures of parental self-efficacy<br>Test of Variables of Attention<br>Rorschach Test<br><b>Children's Global Assessment Scale</b> |
| Finland          | Psychologist and Psychiatrist<br>Information from full MDT team also used<br>Diagnosis always made by Psychiatrist | Approximately 10 appointments over 12 months   | Developmental history<br>Mental health history<br>Family history<br>Trauma history<br>Functioning (with peers, at school, in family, leisure time)<br>Gender identity development as situated within broader identity development<br>Current psychiatric or welfare needs<br>Readiness for change<br>Expectations<br>Support needed if proceeding to medical interventions | <b>Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults</b><br><b>Recalled Childhood Gender Identity scale (RCGI)</b><br><b>Utrecht Gender Dysphoria Scale</b><br><b>Body Image Scale</b> | <b>Autism Diagnostic Observation Schedule</b>   |
| Netherlands      | Psychologist<br>Psychiatrist   | 3–6 appointments   | Gender identity<br>Gender dysphoria<br>Social transition<br>Treatment wishes<br>Family history<br>Comorbidities<br>Developmental history<br>Medical history  | Gender Unicorn   | <b>Child Behaviour Checklist Teacher Report Form</b><br>IQ tests if indicated<br><b>Autism Diagnostic Observation Schedule</b><br>The Anxiety and Related Disorders Interview Schedule  |
| Netherlands      | Psychiatrist<br>Psychologist<br>Family therapist   | Tailor made but usually starts with three sessions for child, three for parents, one psychiatric evaluation.                                     | Gender feelings<br>Bio-psycho-social assessment of child and family<br>Relation between gender incongruence and other concerns (eg, Autism)<br>Psychiatric evaluation  | Yes but not specified  | No tools reported   |
| Netherlands      | Psychologist<br>Psychiatrist   | N/R  | N/R  | N/R  | N/R   |
| Netherlands      | Psychologist<br>Psychiatrist   | N/R  | Broad functioning  | Yes but not specified  | N/R   |
| Northern Ireland | Psychiatrist and Psychologist and Mental Health nurse in MDT approach  | Range 4–20 appointments, average 8. Usually 6 weekly   | History of gender identity development<br>Family relations<br>Mental health concerns<br>Neurodevelopmental   | <b>Body Image Scale</b><br><b>Recalled Childhood Gender Identity scale</b><br><b>Utrecht Gender Dysphoria Scale</b>  | No tools reported   |
| Norway           | Psychiatrist and Psychologist (always meets two clinicians and always team decision)                               | Prior to gender clinic referral; 4–5 appointments in mental health team over 1–2 years. Within gender clinic; 'several' appointments             | Gender incongruence<br>Mental health<br>Somatic health   | No tools reported  | The Mini-International Neuropsychiatric Interview for Children and Adolescents (MINI-KID)<br><b>Social Responsiveness Scale</b>   |
| Spain            | Not a diagnostic assessment: Endocrinologist<br>Psychologist only involved if parent or child requests             | One day  | N/R  | N/R  | N/R   |

\*Tools in bold used by more than one service.  
N/R, not reported.

Netherlands, Northern Ireland). Fewer services discussed fertility preferences (n=5) or sexuality (n=2). In Australia, capacity to consent to treatment was assessed. Finland was the only country to report routinely assessing for any history of trauma.

Services used a variety of measures for assessing gender-related distress and co-occurring conditions. Fourteen tools were used across 10 services to measure gender dysphoria/incongruence. Only five were used by more than one service; Gender

Preoccupation and Stability Questionnaire (n=3), Gender Identity Questionnaire (GIDYQ-AA; n=3), Body Image Scale (n=5), Recalled Childhood Gender Identity Scale (n=3), Utrecht Gender Dysphoria Scale (n=3). Thirty-six different measures were used to assess co-occurring conditions; only 10 were used by more than a single service (see table 1).

The DSM-V Gender Dysphoria diagnosis was the most widely used diagnostic criteria (n=13). Three services (Australia,

Netherlands and Norway) also used the International Classification of Diseases 11th revision Gender Incongruence code. Denmark only used the ICD-10 DZ76.8 code ('Persons encountering health services in other specified circumstances').

### Pathways for prepubertal children

Prepubertal children usually had a separate care pathway with one-off consultations and local management if needed. Three Australian services offered a unique pathway for those described as 'peri-pubertal' (aged 8–9), prioritised for fast-track entry. They received both psychological support and access to puberty suppression when eligible.

### Pathways for those with co-occurring conditions

Most services (n=10) reported that they relied on other providers such as CAMHS for the management of co-occurring mental health concerns or neurodevelopmental conditions. Additionally, nine services reported that they adjusted their assessment processes for these individuals using longer assessment phases, pausing assessments or making additional referrals. Denmark and Finland reported a different pathway for young people with significant psychosocial concerns or short history of gender distress. In Denmark, children and adolescents receive 1–3 reflective sessions instead of a full assessment and are advised to return in adulthood if needed. In Finland, significant mental health concerns must be managed by local teams before assessment by the gender service.

### Pathways for children and adolescents with non-binary identities

Only three countries mentioned a different approach for this group. Denmark implemented a delay in assessment and treatment until adulthood, while in Finland and Norway, medical treatments were delayed until adulthood.

Two services in Australia were cautious about the use of interventions to suppress puberty in non-binary adolescents who were unlikely to later want masculinising/feminising hormones, on the basis that these are time-limited treatments.

### Interventions

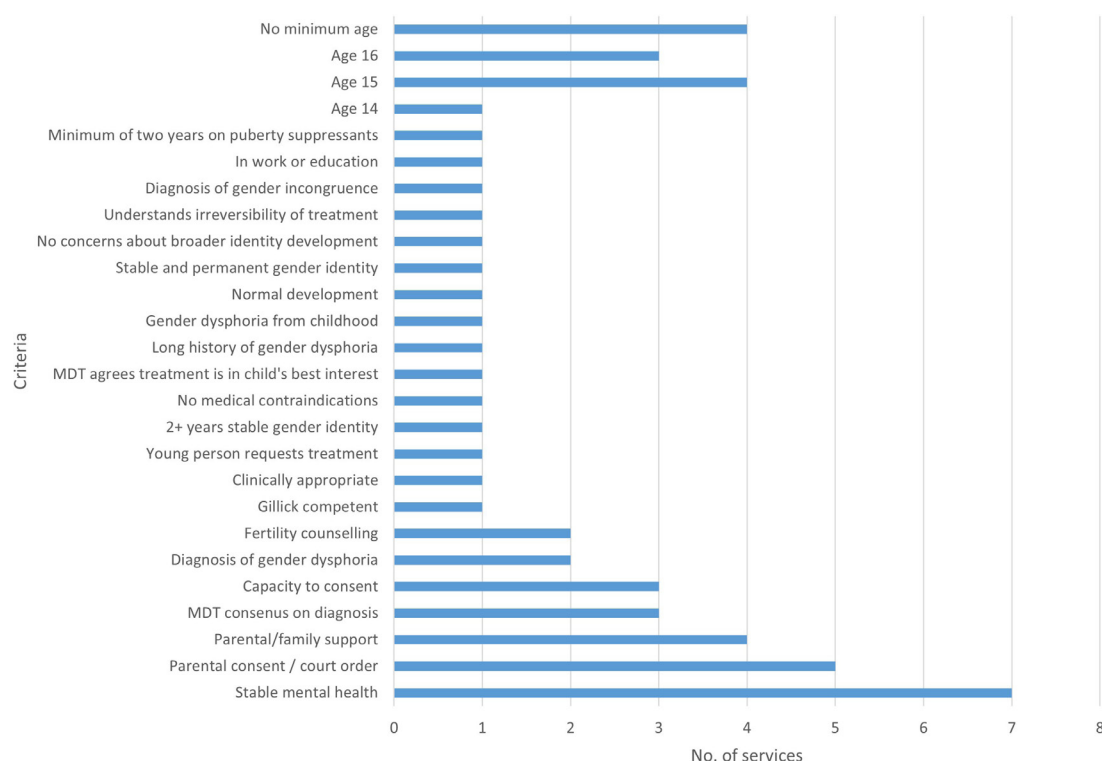
#### Psychosocial interventions

In-house psychosocial interventions were reported as limited in services. Three services offered psychoeducation support for gender dysphoria/incongruence (Belgium, Australia, Spain). Specific psychosocial interventions offered were family therapy (n=2), psychotherapy (n=2), cognitive behavioural therapy (n=2) and dialectical behavioural therapy (n=1). Five services reported that they did not offer any in-house provision.

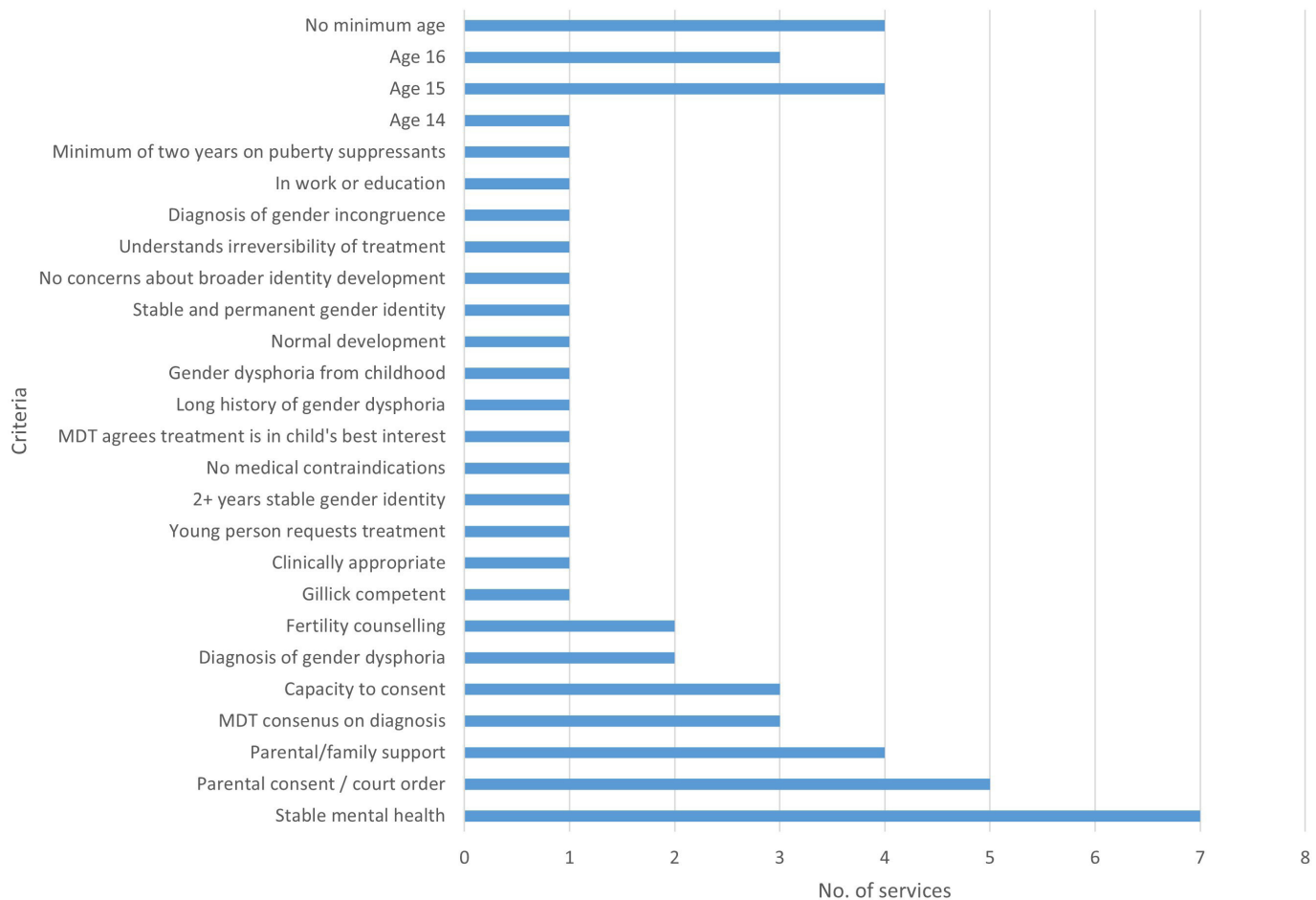
#### Medical interventions

All services routinely offer interventions to suppress puberty and masculinising/feminising hormone interventions except for one regional service (The Netherlands), which referred to a national gender service. Northern Ireland reported halting hormone interventions for new referrals in 2020 due to the length of the corresponding adult service waiting list but continued care for existing patients. Menstrual suppression with progestogens was routine in four services, and one also provided anti-androgens.

Services reported a range of eligibility criteria for medical interventions (figures 3 and 4). There was most consistency across services on requiring a diagnosis of gender dysphoria or incongruence (n=9), reaching Tanner stage 2 (n=8) and stable mental health (n=6) for interventions to suppress puberty. Key differences in criteria were the duration of gender dysphoria/incongruence; while some services did not refer to duration, Belgium, Finland, Norway and Denmark required 'long lasting' or 'since childhood', and Finland specified puberty-intensified distress. Only two services had a minimum age; Finland stated



**Figure 3** Eligibility criteria for accessing puberty suppressants. MDT, multidisciplinary team.



**Figure 4** Eligibility criteria for accessing masculinising or feminising hormones. MDT, multidisciplinary team.

age 13, Spain age 12. Five services excluded those in later stages of puberty from puberty suppression (three Australian services, Denmark, Finland).

Criteria for masculinising/feminising hormone interventions also varied with stable mental health mentioned by the majority of services (n=8). However, thresholds differed; some services excluded those in 'acute mental health crisis' and others requiring 'no more than mild mental health problems likely secondary to gender dysphoria'. Variations in clinical practice existed in minimum age requirements for masculinising/feminising hormones; four services had no minimum age, while others specified age 14 (Spain), age 15 (two Australian services, Denmark, one Netherlands service) or age 16 (Finland, Northern Ireland, Norway). The persistence of gender dysphoria/incongruence as criteria for masculinising/feminising hormones also varied; Finland required a 'permanent and stable' identity, Belgium 'long-lasting', Denmark 'since childhood' and one Australian service 'a stable identity for over 2 years'.

Child consent or assent requirements and capacity were infrequently mentioned for both interventions to suppress puberty and masculinising/feminising hormones. Uniquely, the consent of both parents or a court order was legally required in Australia.

#### *Fertility preservation*

Access to fertility preservation was offered in nine services across seven countries. Two additional services provided fertility counselling, but access to fertility preservation was via private services.

#### *Surgical treatment*

Genital reconstructive surgery was universally reported as accessible only from age 18. Masculinising chest surgery (mastectomy) was accessible at not only different ages in different countries but also different regions within countries. Age 16 was the youngest age reported. Some countries reported limited availability of surgical providers.

#### *Follow-up and outcomes*

The 10 gender services exclusively catering for children and adolescents typically provided care until patients reached age 17–18. Afterwards, these services transferred the patients to adult gender services, sexual health services or General Practitioners, depending on the availability of local services. One service provided longer follow-up until age 25 for those expressing regret or discontinuing treatments (Finland).

Six services routinely collected some outcome data; one gave no further details, one recorded the number discontinuing treatment, one used two measures of quality of life, one repeated some baseline assessments and two were involved in cohort studies. The other nine services reported not routinely collecting outcome data.

#### *Operational concerns*

##### *Waiting lists*

Six services reported both their current caseloads and past 12-month referral numbers; two services (one Australian and



Northern Ireland) reported past 12-month referral numbers greater than their current caseloads. Waiting lists were reported by 11 services (Finland and Denmark had no waiting list). The shortest waiting time reported was 2–3 months for those ‘fast-tracked’ in an Australian service and the longest 3–4 years (in another Australian service). The majority of services ( $n=10$ ) had no criteria for triaging waiting lists and prioritising patients according to wait time. Three services in Australia triage according to pubertal stage; one additionally prioritises vulnerable groups.

## DISCUSSION

This survey found some similarities across paediatric gender services in eight countries and also some key points of divergence in the management of co-occurring conditions, prepubertal care and criteria for accessing medical interventions. We also found a paucity of in-house psychosocial interventions available and limited routine follow-up data collection across services. These variations in clinical practice could lead to important clinical and demographic differences in the cohorts of children/adolescents accessing treatments and, potentially, in their outcomes in different countries. The local context and guidelines followed likely explain some variation; while some countries to respond are adopting more cautious treatment policies,<sup>17 18 33</sup> others have moved away from psychological assessment in response to the passing of regional laws.<sup>34</sup>

Most services who completed the survey were specialised MDTs serving national or regional populations, providing diagnostic assessments and access to medical interventions for children and adolescents experiencing gender dysphoria/incongruence. Psychologists and/or psychiatrists played central roles in nearly all services. Most but not all gender services showed some similarities to the original Amsterdam gender service,<sup>35</sup> which has influenced international guidelines and practice for many years.<sup>36</sup> The observed differences in service structure mainly centred around the membership and roles of the MDT, and whether an interdisciplinary or a predominantly mental health model underpinned the services. Guidelines typically recommend an interdisciplinary approach though evidence underpinning this is lacking.<sup>37</sup>

The assessment processes shared common elements across services; most offered multiple appointments and covered similar core domains. The use of different tools to assess gender or co-occurring conditions was much less consistent and of the 14 gender-related tools reportedly used, only three are validated for this population<sup>38</sup>: Gender Preoccupation and Stability Questionnaire-2,<sup>39</sup> Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults,<sup>40</sup> and Recalled Childhood Gender Identity Scale.<sup>41</sup>

High rates of co-occurring mental health need and neurodevelopmental conditions in this population are well documented and poses a challenge for gender services.<sup>8 10 42</sup> Participating services reported relying on separate teams, such as CAMHS, for the management of co-occurring mental health concerns. Additionally, some services (Finland, Denmark, Northern Ireland, Norway) either do not accept referrals for those with additional mental health concerns or require a prior CAMHS assessment. Whether this selective approach to who enters the service will, over time, change the outcomes for these children and adolescents is as yet unknown. It may in part, however, explain why Finland and Denmark had no waiting list.

Another notable difference among services is the management of prepubertal children. Traditionally, ‘watchful waiting’ has been recommended to observe how gender feelings and any distress develops, as the evidence suggests that many children’s gender questions or concerns may not persist into adolescence.<sup>15 43 44</sup> Most services still followed this approach for younger children and distinguished between prepubertal and pubertal children in terms of pathways. However, some services described a distinct pathway for ‘peripubertal’ children. These children are prioritised on the waiting list, so that those who are assessed as likely to benefit, are commenced on interventions to suppress puberty once eligible. The Australian guidelines<sup>30</sup> support this approach in stating that puberty suppression is most effective from Tanner stage 2, however, the impact of this, which might entail longer use of interventions to suppress puberty or earlier commencement of masculinising/feminising hormones, remains unknown as early studies of outcomes of interventions to suppress puberty mandated a minimum age of 12.<sup>45</sup>

The eligibility criteria for medical interventions showed variation across countries, reflecting evolving changes in international and national guidelines over time. The original ‘Dutch Protocol’ which established specific eligibility criteria for interventions to suppress puberty and masculinising/feminising hormones, required (1) life-long gender dysphoria that had increased around puberty, (2) functioning and psychologically stable and (3) supported by their environment. For puberty suppression, additional criteria were age 12+, at least Tanner stage 2–3 and engaging with psychology or psychiatry for at least 6 months during treatment. For masculinising/feminising hormones, additional criteria were age 16+ and having lived socially in their gender identity prior to treatment (‘real-life experience’).<sup>46</sup> These criteria have been adapted over time, for instance, WPATH V7<sup>29</sup> removed age requirements, and ‘life-long’ gender dysphoria became ‘long lasting’. The Australian guidelines,<sup>30</sup> in contrast, only adopted the criteria about Tanner stage 2 while requiring a diagnosis of Gender Dysphoria, fertility counselling and MDT agreement that treatment is in the child’s best interests. In contrast, the Finnish guidelines<sup>17</sup> have used the original Dutch criteria; this was reflected in the survey response with Finland’s criteria most closely resembling the original Dutch protocol.

Data collection practices varied internationally with inconsistency in baseline measures and only a few services routinely collecting follow-up data. Only two services reported systematically collecting data through cohort studies. Similar findings were reported in an earlier survey of gender services where few participated in audits or had a registry.<sup>24</sup> The lack of evidence about short and long-term outcomes, coupled with the evolving demographics of individuals being referred to gender services and the different pathways to accessing psychological care, is particularly concerning in this context. Without high-quality data collection, it is not possible to describe or compare outcomes for children and adolescents seen by gender services internationally.

## Strengths and limitations

The survey was designed with input from a range of experts and informed by published literature describing and evaluating gender services for children and adolescents, and clinical guidelines. Analysis and reporting of all survey data prevent selective reporting of results.

Reliance on publicly available information and known experts may mean some services were not identified and contacted. The low response rate means that certain countries are not

represented and other potential differences in gender services are still unknown. Only a partial response was received from the influential Amsterdam gender service and there was no response from the national service for England and Wales. Given one of the purposes of this survey was to inform the service redesign in England this is an important limitation.

Nuanced differences, for instance, in how MDTs make decisions, or how gender is explored during assessments, could not be examined in any depth due to the nature of the survey responses.

## CONCLUSIONS

This survey provides valuable insights into the assessment and care provision of gender services for children and adolescents in 15 different services across eight countries. The findings highlight not only some similarities but also key variations in clinical practice. High-quality research and routine data collection are urgently required to understand the impact of these differences in access to services and care pathways. The design of new services needs to consider how best to meet the psychological needs of children and adolescents experiencing gender dysphoria/incongruence.

**Contributors** LF, CEH and TL contributed to the conception of this study. LF, CH, TL and JT contributed to the design of the study. Data collection was led by RH. Analyses were undertaken by RH and LF. RH drafted the first version of the manuscript. All authors reviewed the manuscript prior to submission. CEH accepts full responsibility for the finished work and/or the conduct of the study, had access to the data, and controlled the decision to publish.

**Funding** This work was funded by NHS England to inform the Cass Review (Independent review of gender identity services for children and young people). The funder and Cass Review team had a role in commissioning the research programme but no role in the study conduct, interpretation or conclusion.

**Competing interests** None declared.

**Patient consent for publication** Not applicable.

**Ethics approval** This study involves human participants but did not require ethical approval as it was classified as service evaluation. Participants gave informed consent to participate in the survey before taking part.

**Provenance and peer review** Commissioned; externally peer-reviewed.

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