

Children and young people seeking and obtaining treatment for gender dysphoria in Australia: Trends by state over time (2014-2019): Update

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Introduction

This paper is an update of the paper *Children and young people seeking and obtaining treatment for gender dysphoria in Australia: Trends by state over time (2014-2019)* (Kenny, 2019) presented to the Forum at the NSW Parliament in 2019 covering the years 2014-2018. This current paper includes data from 2019 from the same four clinics in NSW, Queensland, Victoria, and Western Australia. It also includes, for the first time, data from South Australia, although the only information available was for numbers of children seeking treatment and receiving puberty blockers in the years 2015-2018.

Attempts to provide accurate information regarding the true numbers of young people presenting to GD clinics and the proportion of those undergoing stage 1 and stage 2 treatment remains challenging. We are dependent on the information provided to us by the gender clinics themselves under freedom of information. The form in which the data are presented is often incomplete and ambiguous. Accordingly, the figures presented herein need to be treated with caution although it is hoped that they represent a reasonably true reflection of actual practice in Australia. As previously, it is most difficult to estimate the number of young people proceeding to stage 2 cross hormone treatment because after treatment provided by the GD clinics, many young people are referred to private endocrinologists to undertake stage 2 treatment. The Children's Hospital Westmead Gender Clinic, Sydney refers all young people seeking stage 2 treatment to private endocrinologists so the figures presented on this portion of the population will represent a significant underestimation of the total numbers commencing stage 2 treatment.

The aim of this update is to include all available data from the clinics for the year 2019 and to analyse whether the addition of the 2019 data resulted in static or changing trends in the numbers presenting and seeking treatment for gender dysphoria.

METHOD

The data forming the basis for this study were obtained through Freedom of Information applications made in the four jurisdictions providing gender services to children in Australia by Greg Donnelly MLC, Parliament of New South Wales. As there were virtually no treatment facilities for children with gender dysphoria in Australia prior to 2014, the study period was identified as the six years between 2014 and 2019. Currently, there are five medical institutions offering services and these are listed below, together with their eligibility criteria.

1. The Lady Cilento Children's Hospital Gender Clinic and State-wide Service, Queensland

Eligibility: Children aged under 18 years, living in Queensland, seeking support with their gender identity, referred by local doctor/general practitioner.

2. The Children's Hospital Westmead Gender Clinic, Sydney

Eligibility: Children >9 years and/or displaying signs of puberty can be referred to Westmead Children's Hospital for gender dysphoria review; referred by GP, paediatrician, psychologist, or psychiatrist to the Adolescent Mental Health unit at Westmead Children's Hospital.

3. The Royal Children's Hospital Gender Service, Melbourne

Eligibility: Children and adolescents aged between three and 17 years of age with concerns about gender identity. Referral from GP required. Young people over the age of 17 years may access adult services (i.e., Monash Medical Centre Gender Clinic).

4. Perth Children's Hospital Gender Diversity Service, Western Australia

Eligibility: Any child or young person up to the age of 18, who resides in Western Australia, with concerns regarding their gender, gender non-conforming behaviour or gender dysphoria, can be referred to the Gender Diversity Service for consultation.

5. CAMHS, Women and Children's Health Network, Women and Children's Hospital, South Australia

Eligibility: According to their fact sheet,¹ CAMHS provides children and young people up to the age of 16 (up to 18 in some regions) with services for complex mental health issues including gender dysphoria.

Three outcome measures were assessed, as follows:

- (i) Number of children and young people seeking treatment from gender clinics
- (ii) Number of children and young people receiving stage 1 treatment i.e., puberty blockers (PB)² [[gonadotropin-releasing hormone analogues](#) (GnRHa)]
- (iii) Number of children and young people receiving stage 2 treatment (cross-sex hormones) in each of the four gender clinics by year.

For each measure total numbers, percent total per state, and increase in incidence by year and state were calculated. Percentages of children seeking treatment for gender dysphoria and the proportion of children from the general population aged 5-19 years in WA, Qld, Vic and 10-19 in NSW were compared to ascertain possible over- and under-representation of children in each state seeking treatment or receiving stage 1 or stage 2 treatment were calculated using the chi-square test of proportions³.

¹ https://www.wch.sa.gov.au/services/az/divisions/mentalhealth/documents/About_CAMHS_Fact_Sheet_09-Jul-2020.pdf

² [[gonadotropin-releasing hormone analogues](#) (GnRHa)]

³ https://www.medcalc.org/calc/comparison_of_proportions.php

RESULTS

(i) Number of children and young people seeking treatment

Over the six-year period 2014-2019, 3,756 children and young people were enrolled in one of these four gender clinics in Australia. Adding in the known cases enrolled in South Australia, the figure comes to 3.913. Except for 2014, these numbers may not represent unique cases, because some children remain enrolled over consecutive years. Therefore, these figures are indicative only of the increase in numbers over the study period. These data are presented graphically by year and state (Figure 1).

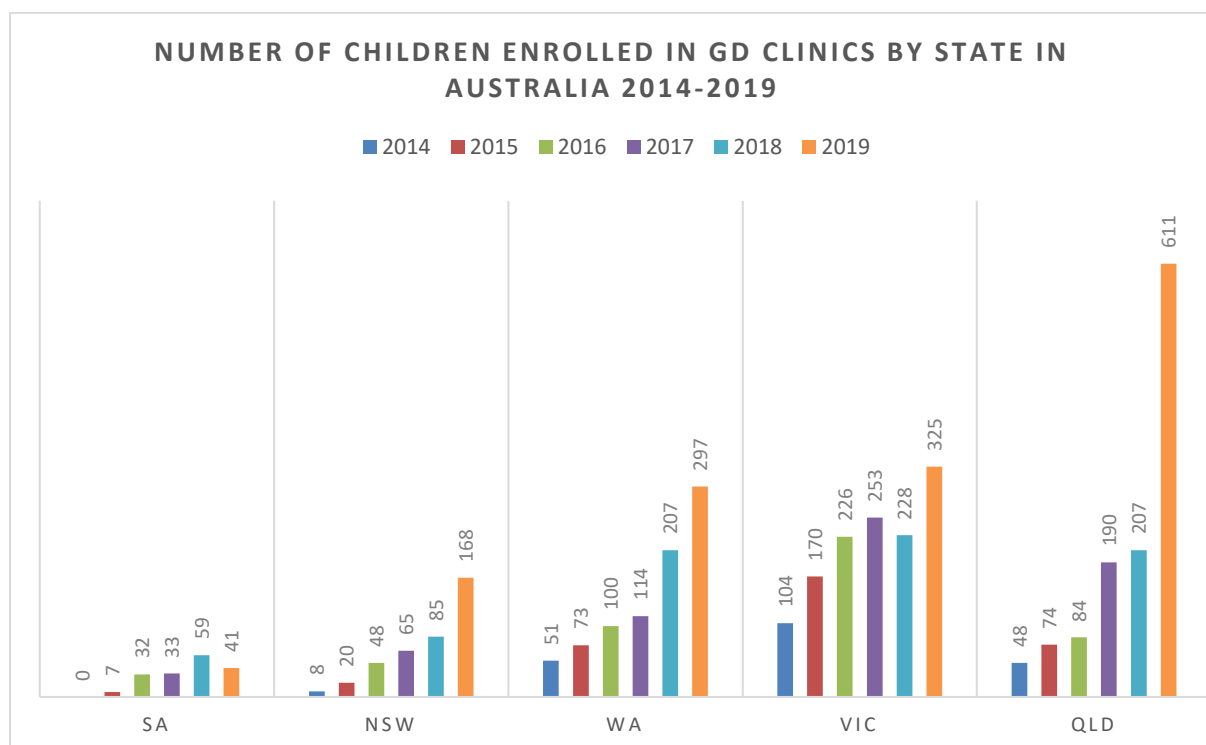
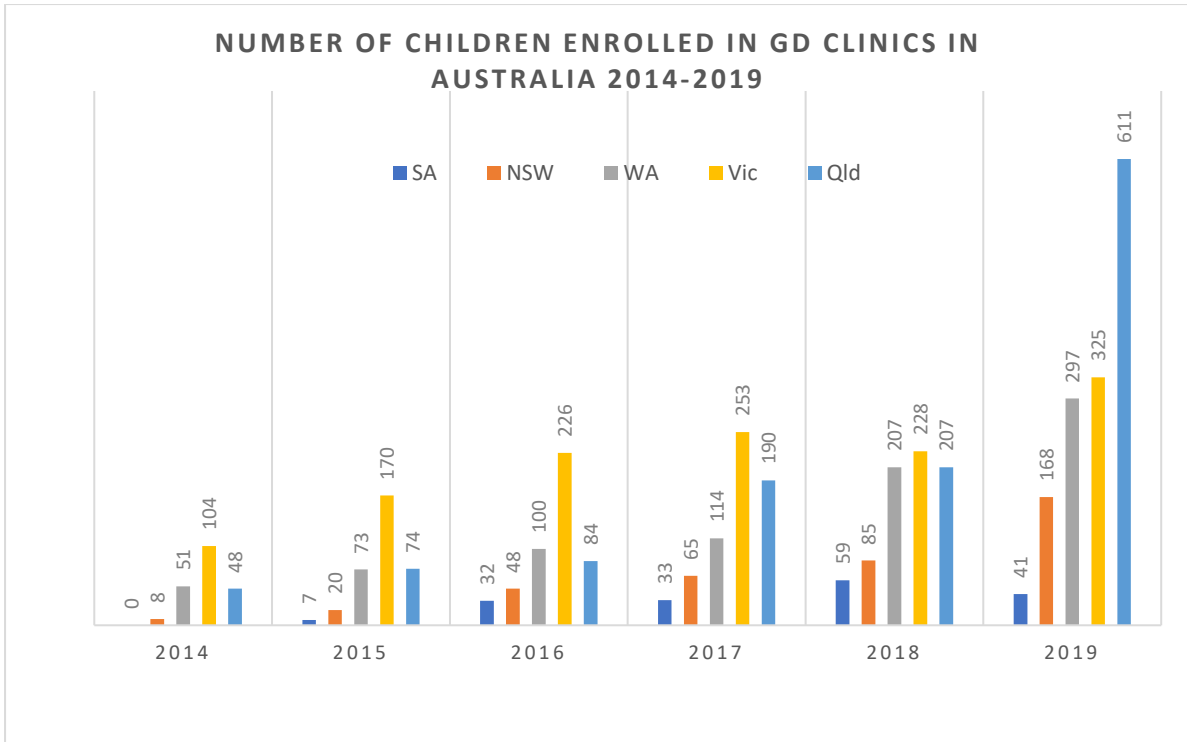


Figure 1

Figure 1 one shows that numbers of children and young people enrolled/seeking treatment for gender dysphoria over the six-year period 2014-2019 in each of the four states of Australia with gender clinics increased for each state but not uniformly. The absolute numbers for NSW were significantly lower compared with the other three states.

Figure 2 shows the numbers enrolled by year for each state over the six year study period.



(ii) Number of children and young people receiving stage 1 treatment i.e., puberty blockers (PB)

Figure 2 shows numbers of children and young people receiving puberty-blockers in these four gender clinics over the six-year period 2014-2019 in each of the three states of Australia. Figures rose sharply for Queensland but not for the other three states for which figures were available.

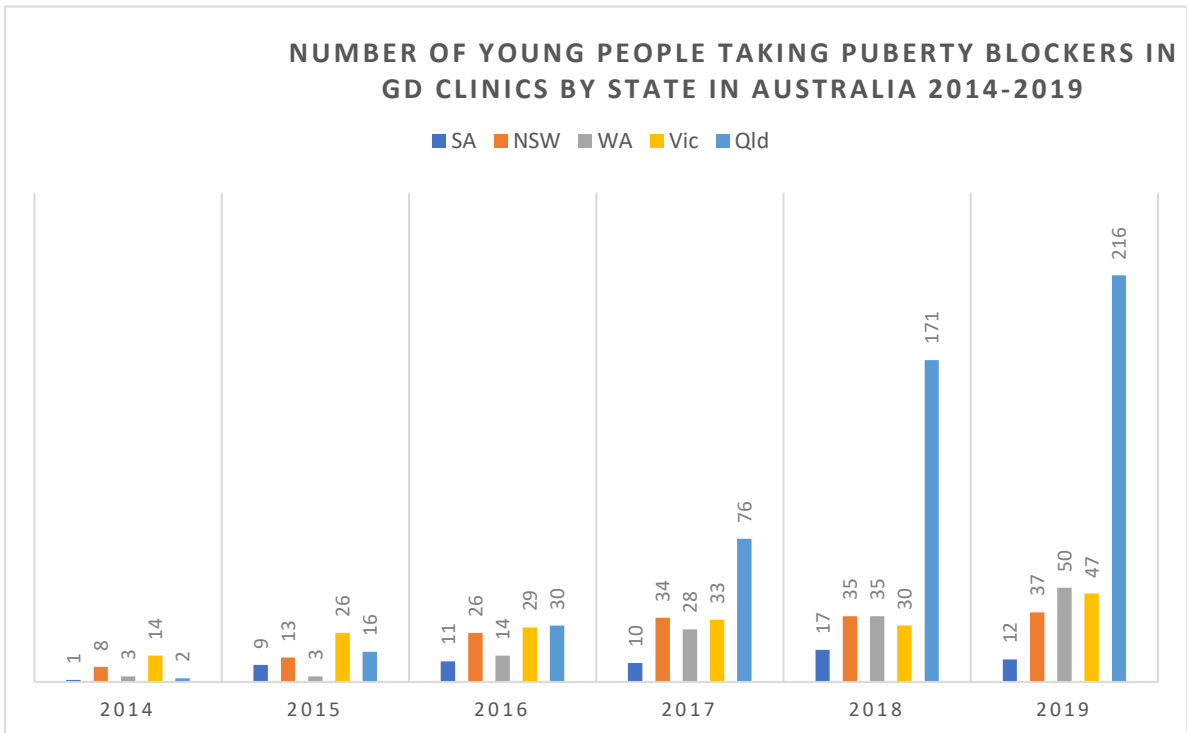


Figure 2

Note 1: Figures for Queensland are based on Queensland Children’s Hospital (QCH) pharmacy reports only. They do not include young people accessing medication outside the QCH pharmacy. Hence, these figures are an under-representation of the true number receiving cross-sex hormones. This may also be the case in other states; they do not include children receiving GD treatments through the private health system.

Some figures on enrolments in their gender clinic, established in 2014 were supplied by the South Australian Child and Adolescent Mental Service (CAMHS) in 2019 for the years 2015-2018. In 2015, there were seven enrolments, in 2016, 32, in 2017, 33 and in 2018, 59.

(iii) Number of young people receiving cross sex hormones in each of the four gender clinics by year

Over the six-year period 2014-2019, 487 young people were commenced on cross-sex hormone (stage 2) treatment at one of these four gender clinics in Australia. Figure 3 shows the number of young people in each of the four gender clinics who were receiving cross-sex hormones (stage 2) over the study period in each state. For the three-year period 2017-2019, there were increases in WA and Queensland and decreases in Victoria.

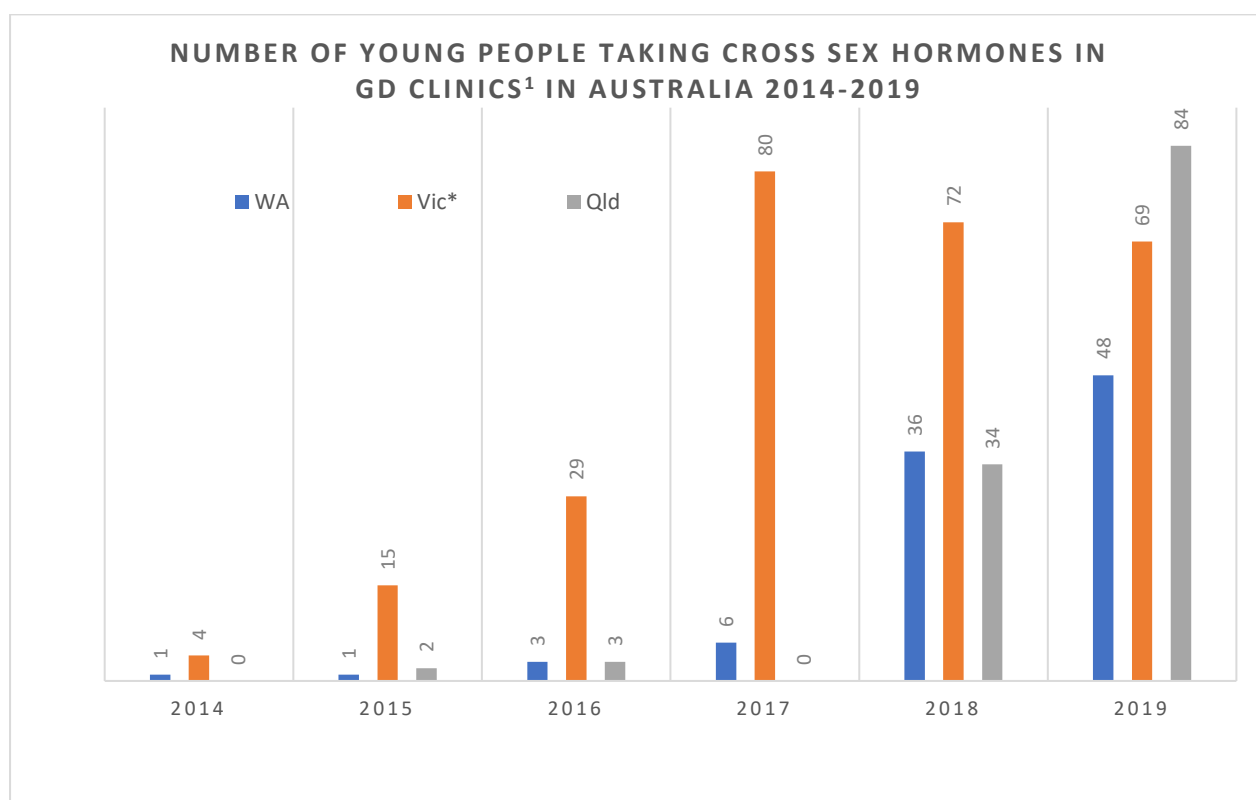


Figure 4

Note 1: NSW supplied “0” in each data cell for each of the six years. A follow-up inquiry to Sydney Children’s Hospital Network (Ref No: SCHN18/7854, 6/8/19) indicated “Sydney Children’s Hospitals Network (SCHN) does not and has not initiated stage 2 Gender Dysphoria treatment at The Children’s Hospital at Westmead. [O]ccasionally SCHN sees a patient in a cross-over transition phase who has had stage two treatment initiated by an adult physician, as The Children’s Hospital at Westmead pharmacy is still providing the patient’s treatment in that cross-over phase. However, their primary care at this stage is

under the adult physician who prescribes the stage two therapy. I can confirm that the zero response provided in the GIPA Notice of Decision is correct but that there may be instances in which children are receiving active stage 2 treatment elsewhere while still attending The Children's Hospital at Westmead clinic”.

Note 2: Figures for Queensland are based on Queensland Children’s Hospital (QCH) pharmacy reports only. They do not include young people accessing medication outside the QCH pharmacy. Hence, these figures are an under-presentation of the true number receiving cross-sex hormones from QCH.

Note 3: Figures for Victoria 2018 extrapolated from Victoria 2017 figures

Note 3: South Australia supplied data on the number of hormone treatments were provided but did not separate puberty blockers from cross-sex hormones.

Note 4: South Australia did not supply figures for CSH.

The gender clinic in NSW did not count any young person proceeding to stage 2 treatment, explaining that those who did progress to stage 2 (cross-sex hormones) treatment were referred to adult services or private endocrinologists. These numbers are needed to further our understanding about the paths taken by young people exiting children’s services following stage 1 treatments.

Figure 5 shows the proportionate relationship between enrolments, puberty blockers and cross sex hormones for the six-year period 2014-2019.

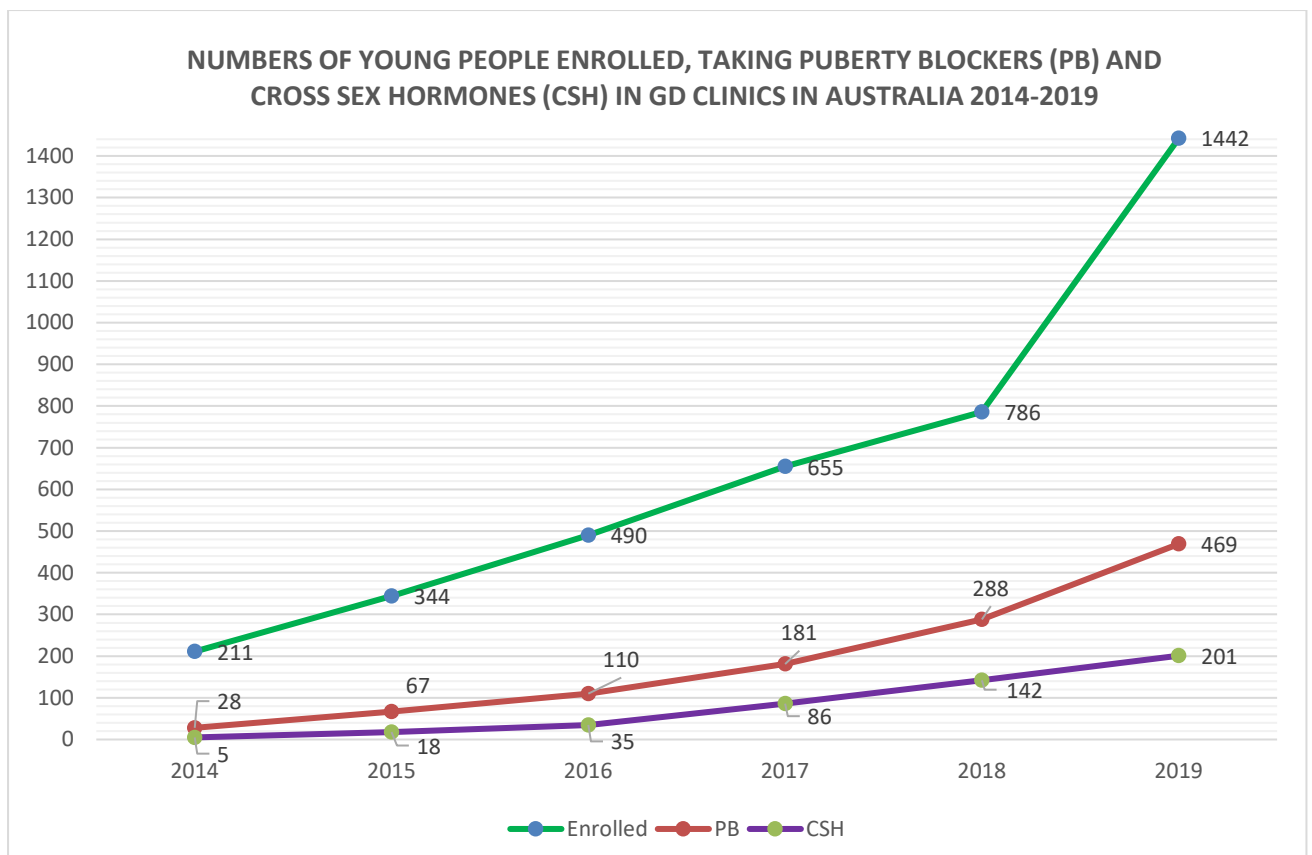


Figure 5

Below are the proportions by year of young people who are enrolled, commence puberty blockers and proceed to cross sex hormones.

2014

13.2% of referred young people received PB (puberty blockers)

2.4% referred young people received CSH (cross sex hormones)

17.9% who received PBA received CSH (NB underestimate because WCH, NSW refers all those wishing to start CSH to private endocrinologists)

2015

19.5% of referred young people receive PB

5.2% referred young people receive CSH

26.8% who received PBA receive CSH (NB this is an underestimate because WCH, NSW refers all those wishing to start CSH to private endocrinologists)

2016

22.4% of referred young people receive PB

7.1% referred young people receive CSH

31.8% who received PBA received CSH (NB underestimate because WCH, NSW refers all those wishing to start CSH to private endocrinologists)

2017

27.6% of referred young people receive PB

13.1% referred young people received CSH

47.5% who received PBA receive CSH (NB underestimate because WCH, NSW refers all those wishing to start CSH to private endocrinologists)

2018

36.6% of referred young people receive PB

18.1% referred receive CSH

49.3% who received PBA receive CSH (NB underestimate because WCH, NSW refers all those wishing to start CSH to private endocrinologists)

2019

32.5% of referred young people received PB

13.9% referred young people received CSH

42.9% who received PBA received CSH (NB underestimate because WCH, NSW refers all those wishing to start CSH to private endocrinologists)

These figures indicate that although the number of referrals to GD clinics has increased sharply over the six-year study period, with a very steep increase between 2018 and 2019, only a small proportion are prescribed puberty blocker (PB). Of those prescribed PB, between 2% (2014) and 50% (2018) proceed to cross-sex hormones. Proportions proceeding to CSH have steadily increased over the course of the study up to 2018, with a decrease observed in 2019. These data present a somewhat different picture to published data that claim that most of those commencing PB will proceed to CSH. For example, in one study of 44 children, most who commenced puberty blockers proceed to cross sex hormones.⁴

Butler provides evidence that intervention with a gonadotrophin-releasing hormone analogue (GnRHa) promotes a continued desire to identify with the non-birth sex — over 90% of young people attending endocrinology clinics for puberty-blocking intervention proceed to cross sex hormone therapy. In contrast, 73%–88% of prepubertal GD clinic attenders, who receive no intervention, eventually lose their desire to identify with the non-birth sex. Our concern is that the use of puberty blockers may prevent some young people with GD from finally becoming comfortable with their birth sex.⁵

In the De Vries, Steensma, Doreleijers, & Cohen-Kettenis⁶ study, 70 young people were assessed, all of whom proceeded to CSH.

The trend in Queensland of placing large numbers of young people on puberty-blockers and the relatively small number documented as proceeding to cross-sex hormones has continued into 2019. The question arises as to whether the majority of these children desist from progression to cross-sex hormones or are referred elsewhere for stage 2 treatments, which is the case for NSW and may be the case for Victoria. If the latter pertains, obtaining accurate numbers of those referred elsewhere for stage 2 treatments need to be recorded and made available to the research community and the public.

⁴ Biggs, M. (2019). The Tavistock's experiment with puberty blockers. Retrieved March 18, 2020.

⁵ Richards C, Maxwell J, McCune N, (2019). Use of puberty blockers for gender dysphoria: a momentous step in the dark. *Archives of Disease in Childhood* Published Online First: 17 January. https://www.transgendertrend.com/wp-content/uploads/2019/07/archdischild-2018-315881.full_.pdf

⁶ De Vries, A. L., Steensma, T. D., Doreleijers, T. A., & Cohen-Kettenis, P. T. (2011). Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *Journal of Sexual Medicine*, 8(8), 2276-2283.

International trends

Figure 6 shows the treatment seeking patterns of young people in the UK and Australia for the years 2014 to 2019. Data for the UK was available from 2009. UK data showed a slow increment up to 2014 then a steep increase between 2015 and 2018 with evidence of slowing in 2019. In contrast, Australia shows a steady rise to 2018 and then a sharp increase between 2018 to 2019, indicating a similar trend but a 'lag' behind the UK. Trend lines show parallel trajectories (linear test of trends $p < .001$).

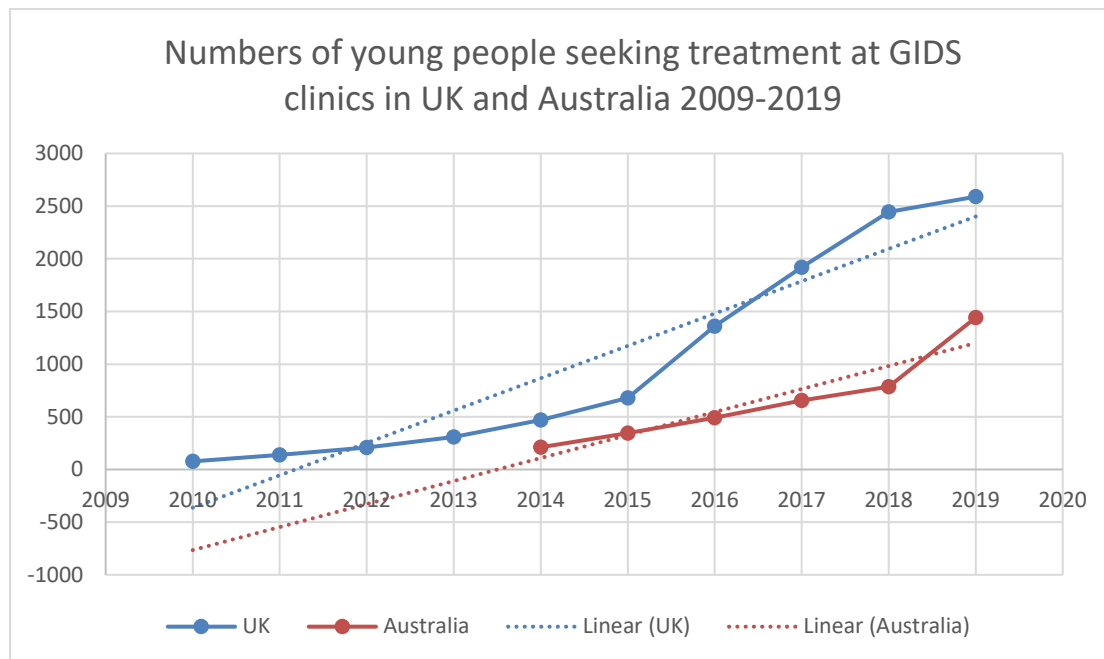


Figure 6

Source for UK data: NHS⁷

Figure 7 presents data from 2015 to 2018 from a transgender clinic in North Carolina (population 10.5 million), USA showing the same trends as UK and Australia but with much smaller numbers that are due to the fact that the facility was private (Kaiser Permanente Northern California) and served only 4.2 million members.

⁷ <https://tavistockandportman.nhs.uk/about-us/news/stories/referrals-gender-identity-development-service-gids-level-2018-19/>

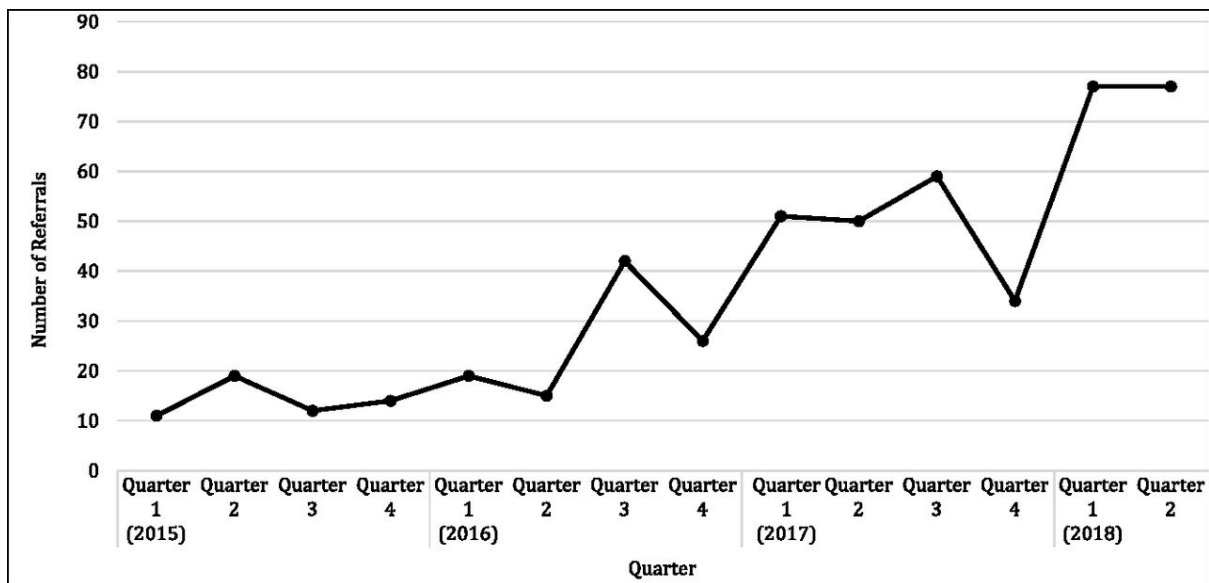


Figure 7 Number of pediatric patients (<18 years) referred to a specialty transgender clinic in Northern California between February 2015 and June 2018. The volume of referrals increased significantly, from 56 in 2015 to 154 in year-to-date 2018 (linear test of trend $p < .001$).

Source: Handler et al. (2019)⁸

DISCUSSION

This paper presents available data on the numbers and patterns of referral to the four gender clinics for children and young people in Australia, and the number of children who were receiving stage 1 or stage 2 gender transition treatments during the study period (2014-2019). The dramatic increases in the number of children seeking services (between two and 11-fold increases over the six-year study period) concur with overseas data that also show sharp increases in referrals.

These data significantly under-represent the actual numbers of children receiving some form of treatment for gender dysphoria, given that only five of seven states have gender clinics and could supply data. In some clinics data were not recorded electronically and in others, not all the available data were supplied, so these data are incomplete. The numbers of children being treated for gender dysphoria in Tasmania, the Northern Territory and Australian Capital Territory could not be ascertained and could not therefore be included. Of particular concern is the inability of these data to correctly identify the true number of young people accessing cross-sex hormones. There is an urgent need to establish a centralised database into which private endocrinologists could be requested to log relevant details of patients receiving stage 2 treatments.

⁸ Handler, T., Hojilla, J., Varghese, R., Wellenstein, W., Satre, D., & Zaritsky, E. (2019). Trends in referrals to a pediatric transgender clinic. *Pediatrics*, 144(5). <https://doi.org/10.1542/peds.2019-1368>