"I teach them. I have no choice": experiences of primary care among transgender people in Aotearoa New Zealand

Kyle K H Tan, Rona Carroll, Gareth J Treharne, Jack L Byrne, Jaimie F Veale

ABSTRACT

AIM: This study aims to report primary care experiences among transgender people in Aotearoa New Zealand based on quantitative and qualitative data from a nationwide community-based survey of transgender people.

METHODS: Subsamples with a usual general practitioner were employed from the 2018 *Counting Ourselves* Survey (n=871) and the 2018/19 New Zealand Health Survey to assess inequities between these samples in primary care experiences and barriers. Guided by Andersen's Behavioural Model of healthcare access, we conducted a content analysis on comments from *Counting Ourselves* participants (n=153) to identify themes about issues of concern for transgender people when accessing primary care.

RESULTS: Transgender participants had greater risk of feeling no confidence in their GPs ($M_{difference}$=0.22; Cohen's d=0.39), reporting barriers accessing primary care due to cost (38.4% vs 17.4%; RR=2.21), and transport issues (13.5% vs 3.0%; RR=4.58) compared to the general population. Content analysis uncovered how transgender people's primary care experiences are shaped by healthcare environments, predisposing characteristics, and enabling resources.

CONCLUSION: Our findings indicate ways to ensure primary care services are inclusive so that all transgender people feel welcome. This requires all primary healthcare professionals to demonstrate core trans-specific cultural safety when providing healthcare to transgender patients.

The term "transgender" commonly refers to people who identify their gender as different from their sex assigned at birth, and can be shortened to trans as an inclusive abbreviation.[1] We use the term transgender to include trans men, trans women, and people with non-binary genders, which includes those who identify as neither a man nor a woman, both a man and a woman, or as moving between genders in a fluid way.[1] In Aotearoa New Zealand, transgender populations also include people who identify with non-Western gender diverse identities such as whakawāhine or tangata ira tāne (Māori), fa'afafine (Samoan), and akava'ine (Cook Islands Māori).[1]

With a growing literature documenting mental health inequities among transgender people,[2,3] researchers are describing the unmet mental health needs of transgender people as a "public health crisis".[4] In recent years, the World Health Organization has updated its International Classification of Diseases, affirming that being transgender is not an illness.[5] From a health equity perspective,[6] the unequal distribution of social determinants—which include access to primary health services and gender-affirming care—are responsible for the heightened level of mental health concerns affecting transgender people. Studies have found higher unmet needs for health services among transgender people when compared to cisgender people,[7] and that transgender people who are unable to access desired health services have a higher likelihood of reporting suicidality.[8]

Andersen's Behavioural Model of healthcare access[9] outlines a framework of enablers and barriers to accessing health services, and it has been applied to theorise the particular barriers and facilitators faced by transgender people.[10] The model suggests that both contextual and individual attributes can influence health service utilisation. These include the health service environment (e.g., providers' knowledge on gender diversity and previous experiences with transgender people), enabling resources that need to be present for people to consider healthcare (e.g., sufficient income, relatively low travel and wait times), and predisposing characteristics that comprise demographic factors (e.g., age and gender) and beliefs about health services.[12]

Most healthcare in Aotearoa New Zealand is provided in the community in general practice primary care facilities, with general practitioners (GPs) being the first point of contact to the health system for most people. GPs' services are free to children aged 13 or under, heavily subsidised for adults with low incomes and operate on public subsidy with variable scales for other adults. As well as providing care for routine health issues for transgender people, GPs sometimes initiate and routinely manage their patients' ongoing gender-affirming hormones needs. GPs also refer transgender people to specialist medical, surgical, and allied gender-affirming healthcare when needed. While secondary care in Aotearoa New Zealand is fully publicly subsidised and available through public hospitals, many forms of gender-affirming care are either not provided at all, are only provided in some regions of the country, or are capped at levels well below demand due to insufficient funding or lack of specialists.[11] In addition, private health insurance in Aotearoa New Zealand explicitly excludes pre-existing gender-affirming healthcare needs, leaving paying privately as the only remaining option. There is work underway in some regions to expand gender-affirming care through primary care, including through GP training.

Existing studies in Aotearoa New Zealand on primary care for transgender people are limited to those who were young adults[2,12] or were accessing health services at one tertiary education setting in Wellington.[13,14] The Youth'19 survey reported a higher rate of foregone healthcare access among transgender high school students compared to their cisgender counterparts (54.7% vs 19.9%).[2] Common themes uncovered from qualitative studies in Aotearoa New Zealand were barriers to accessing care (e.g., cost and lengthy waiting times), a need to resist pathologising narratives when seeking gender-affirming care, and pressure to conform to requirements of readiness assessments in order to obtain access to the healthcare they needed.[12–14]

Transgender people's experiences of accessing primary care have been well-documented in overseas transgender surveys. These include the Australian Trans Pathways study of 463 transgender young people[15] that reported 19.7% were dissatisfied with primary care services and the Canadian Trans PULSE study[16] of 356 transgender adults that found 47.7% of trans men and 54.5% of trans women were not comfortable discussing trans issues with their primary care doctor. The present study expands on previous studies by involving a large sample of transgender people in Aotearoa New Zealand. The objective was to illustrate the primary care experience among transgender people across all age groups. To do this, we conducted analysis of both quantitative and qualitative data on healthcare access and satisfaction from a nationwide community-based survey of transgender people, *Counting Ourselves*. The specific aims were: 1) to investigate differences in primary care experiences between transgender people and a general population sample; and 2) uncover the primary care experiences of transgender people in Aotearoa New Zealand as framed by Andersen's Behavioural Model of healthcare access.[9,10]

Method

Procedure

Counting Ourselves: the Aotearoa New Zealand Trans and Non-Binary Health Survey received ethical approval from the New Zealand Health and Disability Ethics Committee (18/NTB/66/AM01) and was open for participation from June to September 2018 for transgender people living in Aotearoa New Zealand aged 14 or older. Recruitment strategies included social media posts fronted by transgender community leaders, particularly those from harder-to-reach groups including Māori, Pasifika, Asian, older and disabled transgender people, and those living in rural areas. We worked closely with transgender networks, broader rainbow/queer community groups, and health professionals interested in transgender health to promote the survey.

There were 1,178 valid responses to *Counting Ourselves*. Most participants (99%) responded to the online survey through Qualtrics, and the remainder filled out a paper survey. More details about the survey methods can be read in the summary project report.[17]

Participants

A total of 941 participants responded to the general healthcare section of the survey. In this study, we excluded participants who responded "no" (n=63) or "don't know" (n=7) to the question about having a GP clinic or medical centre that they usually visit; this left a final sample of 871 participants. The demographic characteristics of this sample are detailed in Table 1. The largest demographic groups were younger, NZ European/Pākehā, and from urban regions, Auckland and Wellington. There was a high proportion of non-binary participants and similar proportions of trans men and trans women.

Population comparisons

To date, no population-based health surveys in Aotearoa New Zealand have collected data on healthcare accessibility specifically among transgender people. We therefore drew data from the 2018/19 New Zealand Health Survey (NZHS) to identify the differences in experiences of accessing primary care between transgender participants (from *Counting Ourselves*) and the general population (from the NZHS). The 2018/19 NZHS utilised a stratified probability sampling design and applied weighting to yield a sample that is representative of demographic distribution across Aotearoa New Zealand.[19] For the purpose of this analysis, we applied weightings to the 2018/19 NZHS dataset so that the age and ethnicity distribution of the general population matched the *Counting Ourselves* sample. See Appendix 1 for the weightings applied to each age and ethnic group.

Measures

Gender

Participants' gender was requested based on a two-step approach that compared self-defined gender and sex assigned at birth. Trans men included those who selected man, trans man, transsexual, and/or tangata ira tāne as their current gender identity and who were assigned female at birth. Trans women were participants who selected woman, trans woman, transsexual, tangata ira wāhine, and/or whakawāhine as their current gender identity and who were assigned male at birth. Participants who did not meet these criteria but had confirmed before starting the survey that they were "trans or non-binary" were categorised as non-binary.

Primary care experiences

In this study, we assess the same questions as the 2018/19 NZHS[19] to compare the primary care experiences between transgender participants and the general population. We have presented the full questions for these experiences in Table 2. An option of "don't know" was provided for each of these questions and participants who selected this were treated as missing.

To identify additional issues that were not covered by the closed-ended questions, participants were asked an open-text question: "Is there anything else about your experiences with primary healthcare providers that you would like to share with us?". Participants who responded "no" were treated as non-responses, leaving qualitative comments from 153 (18%) of participants.

Analysis

Descriptive analyses of the quantitative data were carried out in IBM SPSS Statistics version 27. Using VassarStats,[20] we conducted Chi-squared goodness-of-fit tests to compare the observed proportion for dichotomous primary care experiences (unmet cost and unmet transport) of transgender participants in *Counting Ourselves* with the expected value of the general population from the NZHS. We also carried out independent sample t-tests to assess the differences in mean scores for no confidence, poor explanation, and poor decision between the two samples. Cohen's d and risk ratio estimates were used to determine the effect size differences of the negatively framed primary care experiences. General population estimates from the NZHS were for those aged 15 or older so we removed data of *Counting Ourselves* participants aged 14 years old (n=17) in these analyses. We also performed Chi-squared goodness-of-fit tests and computed standardised adjusted residuals in SPSS to identify demographic differences among participants who left qualitative comments. Residual values that exceed ±1.96 suggest the proportion of participants who responded to the open-text question versus those who did not differs significantly for the demographic group in question.

To analyse transgender people's qualitative comments to the open-text question in *Counting Ourselves*, we undertook a content analysis to identify patterned codes and group them as categories.[21] The first author was responsible for familiarising himself with the data and generating a coding schema, which involved revisiting the data multiple times. The coding schema and results were discussed among authors and any disagreements on the selected exemplars for each code and category were reviewed by the first author until a consensus was achieved. Andersen's Behavioural Model[9] for transgender people by Lerner and Robles[10] was adapted as a conceptual framework for the organisation of themes. In order to contextualise each exemplar, we note the participant's ethnicity, gender, and age group (Youth: 14–24; Adult: 25–54; Older adults: 55 and above).

Table 1: Demographic details of *Counting Ourselves* participants who have a regular GP clinic that they visit.

Age groups	**n (%)**
14–18	133 (15.3)
19–24	248 (28.1)
25–39	301 (34.6)
40–54	117 (13.4)
55+	72 (8.3)
Gender groups	
Trans women	253 (29.1)
Trans men	252 (29.0)
Non-binary AFAB	284 (32.7)
Non-binary AMAB	80 (9.2)
Ethnic groups[a]	
New Zealand European/Pākehā	734 (84.3)
Māori	112 (12.9)
Samoan	13 (1.5)
Chinese	12 (1.4)
Regions[b]	
Auckland	258 (30.1)
Wellington	245 (28.6)
Other North Island region	165 (19.3)
South Island	203 (23.7)

Note. AFAB, assigned female at birth; AMAB, assigned male at birth; GP, general practitioner.

[a] Only included ethnic groups with more than 1%. Percentage was derived using the concept of total response ethnicity where participants can be counted towards to the statistics for more than one ethnic group.[18]

Table 2: Primary care experiences of *Counting Ourselves* participants and comparisons with New Zealand Health Survey 2018/9 (age 15+).

	***Counting Ourselves* 2018 (mean/SD; %)**	**NZHS 2018/19 (mean/SD; %)**	**t-test/Chi-squared statistics**	**Effect size differences**
No confidence: Did you have confidence and trust in the GP you saw?[a]	1.48 (0.60)	1.26 (0.52)	t(843)=12.29, p<0.001	Cohen's d=0.39 [0.32–0.46]
Poor explanation: Thinking about your last visit to a GP, how good was the doctor at explaining your health conditions and treatments in a way that you could understand?[b]	1.75 (0.87)	1.57 (0.86)	t(825)=6.01, p<0.001	Cohen's d=0.21 [0.14–0.28]
Poor decision: How good was the doctor at involving you in decisions about your care, such as discussing different treatment options?[b]	1.86 (0.96)	1.63 (0.89)	t(825)=6.01, p<0.001	Cohen's d=0.25 [0.18–0.32] [1.03–2.22]
Unmet cost: Was there a time when you had a medical problem but did not visit a GP because of cost?[c]	38.44	17.38	χ2 (1)=11.06, p<0.001	Risk ratio=2.21 [2.11–2.32]
Unmet transport: Was there a time when you had a medical problem but did not visit a GP because you had no transport to get there?[c]	13.51	2.95	χ2 (1)=7.78, p=0.005	Risk ratio=4.58 [4.05–5.18]

Note: Weightings were applied to the 2018/19 NZHS dataset to approximate the age and ethnicity distribution of the *Counting Ourselves* participants (see Appendix 1). Among participants who responded having a GP clinic or medical centre that they usually visit (N = 871). GP = general practitioner. SD = standard deviation.

[a] = Response options were "Yes, definitely" (1), "Yes, to some extent" (2), and "No, not at all" (3).

[b] = Response options ranged from "Very good" (1) to "Very poor" (5).

[c] = Response options were "Yes" and "No" and participants were classified as having unmet need for cost or transport in the past 12 months when they responded "yes".

Table 3: Themes, subthemes, and supporting quotes from the content analysis of qualitative data.

Themes (framed by Andersen's Behavioural Model)	**Subtheme**	**Exemplar quotes as typed by *Counting Ourselves* participants (noting ethnicity, gender, and age)**
Healthcare environment (condition of primary care settings)	Gaps in knowledge or confidence about providing gender-affirming care	I think they're genuinely trying their best but underfunding, understaffing, and a general lack of training and information around gender diversity can make their jobs a lot harder. There are a few bad apples who will give me a hard time for being trans, but most people are nice and just trying to do their job. (*Other ethnicity, Trans man, Youth)*
		Although my pronouns and name are respected, there's a definite disconnect between the healthcare I receive at my GP and the healthcare I receive in my transition through other doctors (plastic surgeon and endocrinologist.) My GP simply does not know enough about trans* people to be of any help except ask others with more experience what to do, and recommend me options based off of that. It doesn't help that I am their first trans* patient. *(N Z European/Pākehā, Non-binary, Youth)*
		I teach them. I have no choice. Now, they are happy to be educated. 10 years ago, I was treated like s**t! *(NZ European/Pākehā, Non-binary, Adult)*
		If a primary health care provider lacks knowledge that is fine if they take responsibility for their own awareness raising and have an open accepting attitude with no underlying transphobia. I would rather see a less knowledgeable practitioner who is not transphobic than a practitioner who professes to have knowledge and uses this to exert power over you based on underlying transphobia i.e., has knowledge and uses this to discredit you. *(Māori, Trans man, Older Adult)*
	GPs as gatekeepers of gender-affirming care	It is expensive to see a GP (gatekeeper of NZ health system) who often dont make the referral you need. *(NZ European/Pākehā, Non-binary, Adult)*
		There have been one or two times when I've found it hard to have a conversation about my gender-affirming transition…when I try to push getting a referral somewhere my GP would brush it off. There was once or twice when she said we would talk about it at the next appointment. I did keep pushing it and now she is in the process of getting me a referral, or at least, that'd what she said to me. *(NZ European/Pākehā, Trans man, Youth)*
		I find I have to be very carefully and politely assertive to acquire medical care. My current GP is the best I've had, but I have to do the work of presenting options and convincing him of permitting medicines I need. I don't believe I would receive adequate treatment if I wasn't extremely careful with diplomacy. *(NZ European/Pākeha, Trans woman, Adult)*
	Positive experiences with primary care	I have been with my GP my entire life, so we have a good relationship. Even though my GP also sees other members of my family, at no time was I worried that they would break patient-doctor confidentiality. My GP also has other trans patients, so is able to navigate these systems quite well. *(NZ European/Pākeha, Non-binary, Adult)*
		[My healthcare providers] are wonderful, helpful, empathetic and incredibly trans friendly. They do the best they can with limited resources. They have never been unkind or transphobic to me or my partner. *(Other ethnicity Trans man, Youth)*
		My primary health care provider is very good with most of my health concerns, and respects me as a patient who is well informed and educated and involved with my treatment. *(NZ European/Pākehā, Non-binary, Youth)*
	Experiences with other staff members	Felt that there was no awareness towards the changes happening physically/mentally and that continued to treat me as 'male' - including being called by my dead name by the receptionist and nurse staff. *(NZ European/Pākehā, Trans woman, Adult)*
		Just that receptionists can really make a practice feel like an okay place to go. Or not. *(Māori, Trans man, Older Adult)*
		Receptionists can impact my experience at the GP. E.g., the GP can be great but the if the admin staff get it wrong (name/pronoun) it doesn't matter how good the Dr is. *(NZ European/Pākehā, Trans man, Adult)*

Table 3 (continued): Themes, subthemes, and supporting quotes from the content analysis of qualitative data.

Themes (framed by Andersen's Behavioural Model)	**Subtheme**	**Exemplar quotes as typed by *Counting Ourselves* participants (noting ethnicity, gender, and age)**
Predisposing characteristics (Beliefs and attitudes about primary care)	Disclosure of transgender identities	I tend not to see my GP as I feel his knowledge is too generic…I have been HIV positive for 20 years and have had the same GP for 15 years. He still knows little about HIV and hasn't taken the time to find out. For this reason I feel he'd be apathetic about gender issues. *(Māori, Non-binary, Adult)*
		I've been made to feel less by GPs without even bringing gender identity into the equation. So why would I want to share? *(NZ European/Pākehā, Non-binary, Adult)*
	Distrust towards GPs	I have had a severely traumatic experience with my previous GP who had been lying about referrals, tests, and specialist letters. It has left me unable to trust doctors as a whole, and left me terrified to speak to my current GP about gender related things. As a disabled autistic person, I have found the system to be ineffective, which then makes us push trans stuff, or gender conversations on to the back burner. *(NZ European/Pākehā, Non-binary, Youth)*
		There are certain matters I don't trust them with, both in terms of their behaviour and because I don't trust them not to record details (e.g., about my sex life or the fact that I am a sex worker) that I wish to keep private. *(NZ European/Pākehā, Non-binary, Adult)*
Enabling resources (Resources that must be present for transgender people to access care)	Affordability of care	Cost is a real barrier to care. I have been off hormones for six months because I couldn't afford to see my GP and the cost of injection at that time. I am now in the process of starting treatment again but need to save up money to see my GP. While my centre is good in terms of their experience treating trans people, their costs are very high. *(Māori, Trans man, Adult)*
		I don't go to the doctor unless I really really need to because it's too expensive. *(NZ European/Pākehā, Non-binary, Youth)*
		I currently have access to free healthcare through the university. Without this I would go to the doctors much less. *(NZ European/Pākehā, Non-binary, Adult)*
	Region and travel time	There are quite a few good trans* doctors in central Auckland, so I am very fortunate. But in outer suburban and rural areas, finding ok doctors is hard for other trans people. *(NZ European/Pākehā, Non-binary, Adult)*
		I travel 50km to see my GP and pay significantly more than I would if I had a local GP. I have this GP because I trust him completely and he is always trying to educate himself in regards to best practice. *(Māori, Trans man, Adult)*
		Because I moved to a rural area I am continuing to see my old GP over an hour's drive away as I have no faith in the local GP's knowledge and professionalism regarding trans and non-binary people. *(NZ European/Pākehā, Trans man, Adult)*

Note: Others include participants not identifying as Māori, Pasifika, Asian, and European/Pākehā, such as those identifying as Middle Eastern, Latin American and African.

Results

Differences in primary care experiences for transgender participants from the *Counting Ourselves* survey compared to the general population estimates for Aotearoa New Zealand are outlined in Table 2. We found transgender participants consistently reported higher mean scores than the general population for low confidence in GPs, poor explanations of health conditions by GPs, or poor involvement from GPs in decision-making processes. The differences in mean scores for the two samples were statistically significant. The small effect size differences (ranging from 0.21 to 0.39 standard deviation) for healthcare experiences with GPs may be encouraging findings. However, transgender participants were twice as likely to report difficulty accessing GP clinics due to cost and four times more likely to report transport barriers.

Demographics of participants who responded to the open-text question are presented in Appendix 2. We found that older participants were more likely to leave a comment, but there were no significant differences across genders, ethnicities and regions. The results of our analysis of comments about primary care reported by transgender participants are detailed in Table 3, along with supporting quotes from participants. The organisation of three themes followed the framework outlined in Andersen's Behavioural Model. Each of these themes comprises subthemes that were identified through a conventional content analysis (i.e., data-driven).[21] The first theme is the healthcare environment and includes issues relating to gaps in provision of care to transgender people, GPs as gatekeepers of gender-affirming care, experiences with other staff, and positive primary care experiences. The second theme is the predisposing characteristics that relate to transgender people's distrust towards GPs or their willingness to disclose their transgender identity. The third theme is enabling resources for access to primary care and includes affordability and travelling time.

Discussion

The analyses present in this article demonstrate that transgender participants in the *Counting Ourselves* survey are more likely to report negative experiences of primary care and barriers to accessing care compared to the Aotearoa New Zealand general population. Our accompanying qualitative analyses were framed using Andersen's Behavioural Model[9] to guide the classification of enablers and barriers to accessing primary care based on three themes, namely health search environment, predisposing characteristics and enabling resources.[10] By utilising a combination of quantitative and qualitative analyses, this paper provides new insights into individual and contextual understanding of healthcare experiences of transgender people in Aotearoa New Zealand.

Health service environment

The overall rate of negative experiences was relatively low among our transgender participants (Table 2), which expands on an earlier analysis of *Counting Ourselves* data that demonstrated participants had a mixture of supportive and unsupportive healthcare experiences.[22] However, it is notable that *Counting Ourselves* participants had significantly greater risk of not feeling confident in their GPs and greater risk of reporting that GPs were poor at explaining health conditions, when compared to general population estimates from the NZHS. Similar findings were noted in the 2018 US TransPop survey, where transgender people had a higher likelihood of reporting dissatisfaction with their healthcare relative to cisgender people.[23]

In our qualitative findings, transgender participants raised a range of issues that impact on healthcare experiences. In particular, the *Counting Ourselves* participants commented about gaps in knowledge or confidence about providing gender-affirming care among GPs and suggested that training for GPs should include clinically and culturally competent care for transgender patients. Taken together, quantitative and qualitative findings add weight to previous research demonstrating that existing curricula in Aotearoa New Zealand medical schools contain minimal content relating to gender diversity,[24] and our findings point to an urgency to address this educational gap for primary care providers.

Moreover, care for transgender people ought to reflect GPs' commitments to professionalism including awareness of cultural safety as a vital framework for their work.[25] Notably, our participants stressed the importance of having a respectful GP–patient relationship and GPs who had an openminded attitude towards learning about the health needs of transgender people. The concept of cultural safety was originally recommended by scholars to address indigenous and ethnic health inequities in healthcare settings within Aotearoa New Zealand.[26] Cultural safety requires health professionals to reflect on power structures related to their own culture, prejudice, and privilege that may affect quality of care, and to dismantle barriers to clinical effectiveness arising from inherent power imbalances. The Medical Council of New Zealand's statement on cultural safety recognises that this extends beyond Indigenous status or ethnicity,[27] to include gender and sexual orientation as well as other population groups. The framework of cultural safety has been applied to the healthcare inequities faced by transgender people in the US,[28] to urge health professionals to recognise the context of social marginalisation among transgender people, and monitor for discrimination including microaggressions (e.g., misgendering or refusing to use language that affirms a transgender patient's gender) that may be perpetrated by providers and staff.

Transgender participants in this study expressed a preference for GPs who could demonstrate respect in understanding their health needs and provide referrals for other gender-affirming care through secondary services (Table 3). However, the presence of gatekeeping practices that compel transgender people to fulfil certain criteria prior to being granted access to gender-affirming care deterred many from accessing needed care.[1,12,13] This contrasts with current Aotearoa New Zealand guidance recommending that GPs follow an informed consent model that is culturally safe, recognises gender diversity, and working alongside patients in a flexible and responsive way that acknowledges transgender people as the experts of their own lives.[1,28] In an informed consent model, GPs may explore a transgender person's gender experience and history to clarify the person's goals, but the primary objective is to provide sufficient information to guide patients' decision-making about any desired aspects of gender-affirming care.[1]

Predisposing characteristics

Transgender participants described negative experiences with not only GPs but also other staff at a GP clinic such as receptionists and nurses. Transgender people's beliefs and attitudes about using primary care are influenced by their previous interactions with primary care providers.[10] Our findings uncovered higher levels of transgender participants rating GPs as poor at explaining health conditions and involving them in decision about care; international research has found evidence that these negative experiences can lead to avoidance of the health care system.[10] Many participants expressed distrust and decreased motivation to disclose their transgender identities when they encountered GPs who demonstrated low levels of cultural safety about transgender people. This has implications when transgender people are reliant on GPs for referrals to gender-affirming care, or if transgender patients do not feel comfortable disclosing information about previous gender-affirming healthcare interventions that may be relevant to their ongoing health.

Enabling resources

Our qualitative findings showed enabling resources such as affordable cost and low travelling time were not always readily available for transgender participants. Likewise, our quantitative findings revealed cost and transport as notable barriers to accessing primary care, with transgender participants having about three to five times greater risk than the general population of reporting an unmet need for GP visits due to these barriers. A recent study with transgender people at a primary care clinic in Wellington found that improving the accessibility of primary care (e.g., low cost and close-to-home services) allowed transgender people to focus on making healthcare decisions and not to worry about resource issues.[14] While some of our participants chose to incur the cost of travelling long distances to access a GP with greater transgender cultural safety, this was not a financial option for others. This reinforces that affordability and accessibility are necessary but not sufficient if GPs are not competent in delivering gender-affirming care. Our evidence speaks to the need for more resources and training for all staff working in primary healthcare settings, including receptionists, administrative staff, nurses and GPs, to improve their confidence and competence in delivering culturally safe care to their transgender patients.[10]

Overall, Andersen's Behavioural Model for transgender people[10] served as a useful conceptual framework to explain how healthcare use among transgender people in Aotearoa New Zealand is affected by contextual factors that create barriers or are enablers of care. However, as access to equitable healthcare is also influenced by other predisposing characteristics such as age, ethnicity, region, and disability status,[10,11] future research should examine if there are additional barriers preventing some transgender people from accessing healthcare and building a culturally safe relationship with healthcare providers here. While the model also assesses clinical need of care (i.e., whether people feel they have a need for care) as an individual-level factor predicting healthcare use,[10] this was not a prominent theme for our transgender participants. It may be that the framing of our open-text question meant that participants who had not utilised GP services refrained from leaving a comment or that participants identified contextual barriers as more concerning factors for healthcare use.

There are some limitations that need to be borne in mind when considering the generalisability of our cross-sectional findings to the wider transgender population in Aotearoa New Zealand and beyond. The convenience sampling design of the *Counting Ourselves* survey meant that the study may have been less accessible to transgender people without reliable internet access and those without connections to transgender communities. There was presence of a response bias for open-text responses by age group: older participants were more likely to provide a comment. A higher proportion of younger participants responded to the *Counting Ourselves* survey (i.e., 65% aged between 14–29) so their particular barriers and enablers to accessing relevant aspects of healthcare have been measured well in the quantitative data.[17]

Conclusion

Like many countries, the majority of health care in Aotearoa New Zealand is provided in primary care settings and these settings are the first point of contact for most healthcare outside of emergency situations. It is crucial to create primary care services which are culturally safe so that all transgender people feel welcome.[26,28] This requires all primary healthcare professionals to have basic knowledge about providing appropriate gender-affirming care, to counter power differentials in provider–patient interactions including by avoiding gatekeeping, and to promote acceptance of gender diversity in every healthcare setting. Improvements could include training all clinic staff, including reception staff, using people's correct names and pronouns, and understanding local pathways for gender-affirming healthcare.

A small but increasing number of GPs in Aotearoa New Zealand are gaining the knowledge and experience to prescribe gender-affirming hormone therapy under an informed consent model in primary care.[1,29] This is a positive move for gender-affirming healthcare, which we hope to see expanding further in the future. For this to become more widespread, support for GPs is needed in the form of adequate funding, time provision and education. Future research exploring GPs' provision of gender-affirming care could explore transgender people's experiences with GPs who have trained to directly provide different aspects of care such as initiation of gender-affirming hormones in addition to continuation of prescriptions started by specialists. We recognise that not all GPs will want to initiate gender-affirming hormones, but it is expected that all GPs are competent to provide ongoing repeat hormone prescriptions and need adequate information to provide this safely. Our results show that transgender people's experiences of primary care would be improved even with a more foundational upskilling for GPs about transgender people's health care needs. Central to Aotearoa New Zealand's Health Strategy is ensuring the health system works for every person living in Aotearoa New Zealand, and that barriers to equity can be removed.[30] The current health system is not working equally for transgender people, and primary care has a key role to play to reduce these inequities.

COMPETING INTERESTS

This research was funded by the Health Research Council of New Zealand (17/587) and the Rule Foundation. We have no conflicts of interest to disclose.

ACKNOWLEDGEMENTS

The authors would like to acknowledge the work of *Counting Ourselves* research team, and offer special thanks to the community advisory group members and to the survey participants. Our access to population-based data (i.e., New Zealand Health Survey 2018/19) was granted by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. The results presented in this study are the work of the authors and not Statistics New Zealand.

AUTHOR INFORMATION

Kyle K H Tan: Trans Health Research Lab, School of Psychology, University of Waikato, Hamilton, New Zealand; Faculty of Māori and Indigenous Studies, University of Waikato, Hamilton, New Zealand.

Rona Carroll: Department of Primary Health Care and General Practice, University of Otago, Wellington, New Zealand.

Gareth J Treharne: Department of Psychology, University of Otago, Dunedin, New Zealand.

Jack L Byrne: Trans Health Research Lab, School of Psychology, University of Waikato, Hamilton, New Zealand.

Jaimie F Veale: Trans Health Research Lab, School of Psychology, University of Waikato, Hamilton, New Zealand.

CORRESPONDING AUTHOR

Jaimie F Veale: School of Psychology, University of Waikato, Private Bag 3105. E: jveale@waikato.ac.nz

REFERENCES

1. Oliphant J, Veale JF, Macdonald J, et al. Guidelines for gender affirming healthcare for gender diverse and transgender children, young people and adults in Aotearoa New Zealand. 2018. [Available at: https://hdl.handle.net/10289/12160].
2. Fenaughty J, Sutcliffe K, Fleming T, et al. A Youth19 brief: Transgender and diverse gender students. 2021. [Available at: https://www.youth19.ac.nz/publications].
3. James SE, Herman JL, Rankin S, et al. The report of the 2015 U.S. Transgender Survey. 2016. [Available at: https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf].
4. dickey lm, Budge SL. Suicide and the transgender experience: A public health crisis. Am Psychol. 2020;75(3):380-90.
5. Thomas R, Pega F, Khosla R, et al. Ensuring an inclusive global health agenda for transgender people. Bull World Health Organ. 2017;95(2):154-6.
6. Pega F, Veale JF. The case for the World Health Organization's commission on social determinants of health to address gender identity. Am J Public Health. 2015;105(3):58-62.
7. Giblon R, Bauer GR. Health care availability, quality, and unmet need: a comparison of transgender and cisgender residents of Ontario, Canada. BMC Health Serv Res. 2017;17(1):283.
8. Bockting W, Miner M, Romine R, et al. Stigma, mental health, and resilience in an online sample of the US transgender population. Am J Public Health. 2013;103(5):943-51.
9. Andersen RM. Revisiting the behavioral model and access to medical care: does it matter? J Health Soc Behav. 1995;36(1):1-10.
10. Lerner JE, Robles G. Perceived barriers and facilitators to health care utilization in the United States for transgender people: A review of recent literature. J Health Care Poor Underserved. 2017;28(1):127-52.
11. Fraser G, Shields JK, Brady A, Wilson MS. The postcode lottery: Gender-affirming healthcare provision across New Zealand's district health boards. 2019. [Available at: doi:10.31219/osf.io/f2qkr].
12. Fraser G, Brady A, Wilson MS. "What if I'm not trans enough? What if I'm not man enough?": Transgender young adults' experiences of gender-affirming healthcare readiness assessments in Aotearoa New Zealand. Int J Transgend Health. 2021;22(4):454-67.
13. Ker A, Fraser G, Fleming T, et al. 'A little bubble of utopia': Constructions of a primary care-based pilot clinic providing gender affirming hormone therapy. Health Sociol Rev. 2021;30(1):25-40.
14. Ker A, Fraser G, Lyons A, et al. Providing gender-affirming hormone therapy through primary care: service users' and health professionals' experiences of a pilot clinic. J Prim Health Care. 2020;12(1):72-8.
15. Strauss P, Winter S, Waters Z, et al. Perspectives of trans and gender diverse young people accessing primary care and gender-affirming medical services: Findings from Trans Pathways. Int J Transgend Health. 2022;23(3):295-307.
16. Bauer GR, Zong X, Scheim AI, et al. Factors impacting transgender patients' discomfort with their family physicians: A respondent-driven sampling survey. PLOS One. 2015;10(12):e0145046.
17. Veale JF, Byrne J, Tan KKH, et al. Counting Ourselves: The health and wellbeing of trans and non-binary people in Aotearoa New Zealand. 2019.

[Available at: https://countingourselves.nz/index.php/community-report/].

18. Ministry of Health. Ethnicity data protocols. 2017. [Available at: https://www.health.govt.nz/publication/hiso-100012017-ethnicity-data-protocols].
19. Ministry of Health. Methodology report 2018/19: New Zealand Health Survey. 2019. [Available at: https://www.health.govt.nz/publication/methodology-report-2018-19-new-zealand-health-survey].
20. Lowry R. VassarStats: Website for statistical computation. Available at: http://vassarstats.net
21. Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. Qual Health Res. 2005;15(9):1277-88.
22. Treharne GJ, Carroll R, Tan KKH, et al. Supportive interactions with primary care doctors are associated with better mental health among transgender people: Results of a nationwide survey in Aotearoa/New Zealand. Family Practice. [Available at: doi:10.1093/fampra/cmac005].
23. Feldman JL, Luhur WE, Herman JL, et al. Health and health care access in the US transgender population health (TransPop) survey. Andrology. 2021;9(6):1707-18.
24. Taylor O, Rapsey C, Treharne GJ. Sexuality and gender identity teaching within preclinical medical training in New Zealand: Content, attitudes and barriers. N Z Med J. 2018;131(1477):35-44.
25. Treharne GJ, Blakey AG, Graham K, et al. Perspectives on expertise in teaching about transgender healthcare: A focus group study with health professional programme teaching staff and transgender community members. Int J Transgend Health. 2022;23(3):334-54.
26. Curtis E, Jones R, Tipene-Leach D, et al. Why cultural safety rather than cultural competency is required to achieve health equity: A literature review and recommended definition. Int J Equity Health. 2019;18(1):174.
27. Medical Council of New Zealand. Statement on cultural safety. 2019. [Available at: https://www.mcnz.org.nz/assets/standards/b71d139dca/Statement-on-cultural-safety.pdf].
28. Baldwin A, Dodge B, Schick VR, et al. Transgender and genderqueer individual’s experiences with health care providers: What’s working, what’s not, and where do we go from here? J Health Care Poor Underserved. 2018;29(4):1300-1318.
29. Health Quality & Safety Commission New Zealand. Co-design partners in care case study: Gender-affirming care in Canterbury-Simplifying the complexity. 2019. [Available at: https://www.hqsc.govt.nz/assets/Consumer-Engagement/Resources/Co-design-gender-affirming-care-Jun-2019.pdf].
30. Ministry of Health. New Zealand Health Strategy: Future direction. 2016. [Available at: https://www.health.govt.nz/publication/new-zealand-health-strategy-2016].

Appendix 1: Weightings applied to the New Zealand Health Survey 2018/19 to match the age and ethnicity distribution of the *Counting Ourselves* sample.

Age	Pākeha/NZ European	Māori	Pasifika	Asian
15–19	17.6/4.2=4.19	2.9/1.5=1.93	0.3/0.9=0.33	0.6/1.4=0.43
20–24	18.2/4.9=3.71	3.8/1.4=2.71	1.0/0.7=1.43	1.0/1.6=0.63
25–34	21.7/9.8=2.21	3.6/2.5=1.44	1.4/1.2=1.17	1.6/4.0=0.40
35–44	7.9/9.1=0.87	2.1/2.1=1.00	0.5/1.2=0.42	0.5/2.9=0.17
45–54	6.5/11.6=0.56	1.2/2.0=0.60	0.2/0.8=0.25	0/1.9=0
55+	6.3/28.7=0.22	1.0/2.2=0.45	0.1/1.1=0.09	0/2.3=0

Weightings were obtained using the formula.

Appendix 2: Demographic details of participants who provided a response in the open-text box.

	Responding n (%)	Adjusted standard residual
Age groups		
14–18	11(7.5)	-3.1
19–24	27(10.1)	-3.2
25–39	70(21.3)	3.1
40–54	24(19.8)	1.1
55+	21(27.3)	2.7
	χ2 (4)=30.06, p<0.001	
Gender groups		
Trans women	34(12.3)	-2.0
Trans men	54(20.1)	2.1
Non-binary AFAB	47(15.5)	-0.4
Non-binary AMAB	16(17.8)	0.5
	χ2 (3)=6.35, p=0.096	
Prioritised ethnic groupsa		
Māori	22(18.3)	0.7
NZ European/Pākehā	122(16.6)	0.6
Others	9 (10.3)	-1.6
	χ2 (2)=2.69, p=0.261	

Appendix 2 (continued): Demographic details of participants who provided a response in the open-text box.

	Responding n (%)	Adjusted standard residual
Regions		
Auckland	43(15.1)	-0.6
Wellington	46(17.6)	0.7
Other North Island regions	32(19.5)	1.3
South Island	29(13.5)	-1.2
	$\chi2$ (3)=3.11, p=0.376	

AFAB, assigned female at birth; AMAB, assigned male at birth.
Note: [a]We applied a prioritisation of participants into one of the four ethnic groups in a priority order of Māori, Pasifika, Asian, and NZ European/Pākehā or other.[22] Due to low number of responses for Asian, Pasifika, and MELAA participants, we collated these into "Others".
Residual values that exceed ±1.96 suggest the proportion of participants who responded to the open-text question differs significantly for the demographic group in question.