

**Access Barriers Among Transgender and Gender Diverse Youth Seeking Gender-Affirming Care in Canada: A Literature Review**

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## TABLE OF CONTENTS

<b>ABSTRACT .....</b>	<b>3</b>
<b>INTRODUCTION .....</b>	<b>4</b>
<i>Gender-affirming care and terminology .....</i>	4
<i>Gender-affirming care for children and adolescents .....</i>	6
<i>Barriers to gender-affirming care for youth.....</i>	9
<b>PURPOSE OF STUDY.....</b>	<b>11</b>
<b>METHODS.....</b>	<b>11</b>
<i>Inclusion criteria.....</i>	11
<i>Search strategy.....</i>	11
<b>RESULTS .....</b>	<b>9</b>
<i>Search results.....</i>	12
<i>Barriers to gender-affirming care for youth .....</i>	12
<i>Modifications towards improving youth access to gender-affirming care.....</i>	19
<i>Use of Physician Assistants to improve youth access to gender-affirming care .....</i>	22
<b>DISCUSSION.....</b>	<b>22</b>
<i>Barriers to receiving gender-affirming care for Canadian youth .....</i>	23
<i>Modifications towards improving youth access to gender-affirming care .....</i>	24
<i>Utilizing Physician Assistants to improve healthcare for TGD youth.....</i>	27
<b>STUDY LIMITATIONS AND FURTHER RESEARCH.....</b>	<b>28</b>
<b>CONCLUSION .....</b>	<b>29</b>
<b>ACKNOWLEDGMENTS .....</b>	<b>31</b>
<b>REFERENCES .....</b>	<b>32</b>
<b>APPENDIX .....</b>	<b>34</b>

## **ABSTRACT**

**Introduction:** There are increasing numbers of Canadian youth who identify as genders different from their assigned sex at birth. As a result, healthcare providers are encountering more transgender and gender diverse (TGD) youth seeking gender-affirming healthcare.

Unfortunately, due to the effects of gender identity-related stigma, as well as distress related to the development of secondary sex characteristics during puberty, TGD youth often have complex medical, psychological, and social needs, and face high levels of social adversity, adverse mental health outcomes, substance use, and suicidal ideation. Research provides increasing evidence that access to gender-affirming care (GAC) is crucial in improving the health and social functioning of TGD youth. Unfortunately, many Canadian TGD youth are unable to access the GAC that they need, due to numerous provider, patient and systemic barriers.

**Objectives:** The purpose of this literature review is to identify the barriers that Canadian TGD youth face when accessing GAC, and to investigate possible solutions that can be implemented within the healthcare system to improve access to GAC for this population. Additionally, this literature review will investigate how Physician Assistants (PAs) may have a role in improving this population's access to GAC.

**Methods:** A literature search using PubMed and Scopus databases was performed using key terms pertaining to access barriers to gender-affirming care among TGD youth in Canada. Seven articles were found to meet the inclusion criteria and were analyzed in this literature review.

**Results:** Seven studies explored the challenges that TGD youth in Canada experience when accessing gender-affirming care. Six studies investigated potential modifications that may be implemented to improve accessibility of GAC for TGD youth in Canada. No research was found concerning how PAs may assist in the provision of GAC for TGD youth in Canada.

**Conclusion:** The barriers to GAC for TGD youth in Canada identified in this literature review concern delayed access to care, challenges related to systemic health system issues, lack of provider knowledge or sensitivity, and financial constraints. Strategies to improve access to GAC for TGD youth include increasing training and knowledge of all providers in GAC; advocating for policy changes to make GAC more accessible; and requiring staff of medical facilities to undergo gender-sensitivity training.

## **INTRODUCTION**

### ***Gender-affirming care and terminology:***

Gender-affirming care (GAC) is a comprehensive approach to healthcare which encompasses various medical, social, and psychological interventions provided to transgender and gender-diverse (TGD) individuals across their lifespan (1). The ultimate goal of GAC is to affirm and validate an individual's gender identity, rather than their assigned sex at birth (2). GAC recognizes that each person's experience is unique and that there is no 'one-size-fits-all' solution, instead advocating for care that is individualized to each patient and collaborative in nature. Care may be reversible or irreversible, and may include, but is not limited to, mental health care, hormonal and surgical interventions, voice and communication therapy, hair removal, and social support.

Gender-affirming interventions considerably improve the physical and mental health of TGD individuals, by aligning individuals' physical bodies with their lived gender realities, improving their overall quality of life and well-being (1). These interventions help to relieve feelings of gender incongruence and/or gender dysphoria, which have been closely associated with increased rates of adverse health conditions such as depression, anxiety, self-harm, and suicide (1, 3). Gender dysphoria, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), is a psychological condition characterized by the distress experienced by individuals whose gender identity differs from their sex assigned at birth (1). It is often a required diagnosis for youth who wish to pursue affirmative medical interventions. Alternatively, gender incongruence is a more neutral term from the International Classification of Diseases Eleventh Edition (ICD-11) that characterizes the misalignment between an individual's gender identity and their assigned sex at birth without pathologizing the gender identity of the patient

(3). The latest edition of the World Professional Association for Transgender Health Standards of Care 8 (WPATH SOC-8), published in 2022, advocates that if a diagnosis is required to access GAC, “gender incongruence” is preferred over "gender dysphoria", due to the association of patients with gender dysphoria as having a “pathologic” gender identity (1). Despite this, however, “gender dysphoria” continues to be frequently used throughout Canada (3).

Throughout this literature review, the phrase “transgender and gender diverse” (TGD) is used to be as inclusive as possible to describe the various gender identities and expressions that exist which may differ from a person’s assigned sex at birth. Further terminology frequently used in gender health care, as well as throughout this literature review, is found in Table 1 below (4).

**Table 1.** Key terminology in gender healthcare, adapted from the Government of Canada (2022).

Term	Definition
2SLGBTQI+	The current acronym used by the Government of Canada. 2S: Two-Spirit; L: Lesbian; G: Gay; B: Bisexual; T: Transgender; Q: Queer; I: Intersex; +: Inclusive of people who identify as part of sexual and gender diverse communities.
Cisgender	A person who identifies with the gender they were assigned at birth.
Gender-diverse	Refer to individuals who do not identify as exclusively male or exclusively female (for example, individuals who are non-binary or two-spirit).
Gender-fluid	A person whose gender identity varies over time and may include male, female, and non-binary gender identities.
Heterosexual	A person who is sexually and/or romantically attracted to people of a different gender than themselves.
Homophobia	The fear, hatred, or aversion of people who experience same-sex attraction.
Homosexual	<i>No longer in common use.</i> See “gay” and “lesbian”. The term homosexual has fallen out of favour as it is associated with the historic medical understanding of same-sex attraction as a mental illness. However, equivalents of “homosexual” are commonly used in French and other languages.
Non-binary	Referring to a person whose gender identity does not align with a binary understanding of gender such as man or woman.
Queer	Historically a derogatory term used as a slur against 2SLGBTQI+ people, now reclaimed by many as a positive self-description.
Questioning	A person who is uncertain about their sexual orientation and/or gender identity; this can be a transitory or a lasting identity.
Gender dysphoria	A medical diagnosis in the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-V), often required by health providers and/or health insurance plans before prescriptions for hormones or gender-affirming surgeries will be provided. It can be understood as discomfort or distress experienced by a person who feels their sense of their gender identity differs from their body, based on societal expectations.

Gender expression	The various ways in which people choose to express their gender identity; this may not align with societal expectations of gender and therefore is not a reliable indicator of a person’s gender identity.
Gender identity	Internal and deeply felt sense of being a man, woman, both, or neither. A person’s gender identity may or may not align with the gender typically associated with their sex. It may change over the course of one’s lifetime.
Sex assigned at birth	A person’s biological status as male, female, or intersex based on their primary sexual characteristics at birth.
Sexual orientation	Romantic and sexual attraction for people of the same or another sex or gender.
Transgender	A person whose gender identity differs from what is typically associated with the sex they were assigned at birth.
Transphobia	The fear, hatred, or aversion of people whose gender identities differ from the sex they were assigned at birth.
Transsexual	<i>No longer in common use.</i> A person whose gender identity differs from their sex assigned at birth, who has undertaken gender-affirming medical and/or surgical interventions. The term has fallen out of favour as it implies that physical transition is necessary in order to claim a trans identity.
Two-spirit	An English term used to broadly capture concepts traditional to many Indigenous cultures; a culturally specific identity used by some Indigenous people to indicate a person whose gender identity, spiritual identity, and/or sexual orientation comprises both male and female spirits.

***Gender-affirming care for children and adolescents:***

In recent decades, there has been growing demand for gender-affirming interventions amongst Canadian youth (3). This is attributed to rising visibility and social acceptance of diverse gender identities, as well as shifts in sociocultural norms and advancements in 2SLGBTQI+ rights, which allow this demographic to feel less pressured than previous generations to hide their identities. The 2021 Canadian census revealed a significant increase in individuals identifying as a gender apart from their assigned sex at birth (5). This was especially relevant for individuals in younger generations; the percentages of TGD-identifying individuals were highest in Generation Z at 0.79% (born between 1997 and 2006), and then millennials at 0.51% (born between 1981 and 1996, 0.51%) when compared to older generations. Additional population-based studies out of the U.S. estimate that between 0.7% to 9.2% of high-school aged students identify as TGD, compared to 0.04% to 0.6% of adults (2) These surveys also noted a significant increase over time in the quantities of youth identifying as TGD, rising from 0.7% in 2017 to 1.4% in 2022.

TGD youth face increased risk of adverse health outcomes, including mood disorders, substance abuse, self-harm, and suicide (3). This may be, in part, attributable to “minority stress”, which refers to the chronic stressors experienced by minorities or marginalized people, including victimization, prejudice, and discrimination (1, 3). These stressors can have significant effects on both physical and mental health, leading to higher rates of adverse health outcomes, including the ones previously mentioned. The findings of a 2019 study of Canadian TGD youth are consistent with this theory, finding that 88% of participants reported having a chronic mental health condition such as depression or anxiety, and 64% had considered suicide in the previous year (6). Minority stress and its associated risk of adverse health outcomes may be decreased by affirming care and environments, including supportive families, early social transition, and inclusive, positive experiences with providers and the healthcare system (3).

Childhood and adolescence are critical time periods for youth to explore and develop their gender identities, and it is important that they have environments supportive of this (3). GAC provides youth with the appropriate resources, support, and interventions for youth to explore and develop their gender identities (1). GAC considers the developmental stage the patient is in, as well as their unique individual needs. GAC may involve a broad range of interventions, such as assistance with social and legal transitions, medical and/or surgical interventions, and psychosocial support.

Gender identity exploration is a normal part of childhood development that all children go through (7). Research show that some children may recognize discourse between their gender identity and assigned sex at birth as early two to three years of age (3). Some children challenge gender expectations through role-playing, or by their preference of toys and clothing. Not all of these children are TGD and may just express their genders in ways outside of sociocultural

norms (7). However, some may experience significant distress, or insist that they are a gender apart from their assigned sex at birth. Regardless, a diagnosis of gender dysphoria or incongruence in prepubescent children is controversial, as many youth may not continue to experience gender-diversity into adolescence (3). Prepubescent TGD children are not eligible for medical or surgical interventions, so GAC for this population typically involves support of patients' social transitions, through validating their gender expressions, listening to the child and supporting their gender experience, consistently using preferred names and pronouns, and supportive family counselling (1). Social transitions are generally reversible and allow the youth to live in line with their gender identity (2). Research demonstrates that parental displays of gender acceptance, such as supporting their child's gender expression and having open conversations about their gender identity, can significantly improve their child's future mental health compared to youth who experience parental rejection or avoidance (7).

While many youth who experience gender diversity in childhood will not continue to have this experience into adolescence, research has indicated that adolescents who continue to experience gender diversity are highly likely to continue to experience this into adulthood (7). For example, longitudinal studies from Amsterdam found that out of 812 TGD patients, only 0.5% had regrets thirty years later about accessing GAC services. Considering this, TGD youth who are in early stages of puberty but have not developed secondary sex characteristics, or 'Tanner stage II' of development, may be eligible for gonadotropin-releasing hormone analogues (GnRHa), or "puberty blockers" (2). GnRHa function as reversible mimics of endogenous gonadotropin-releasing hormone, temporarily preventing or delaying the development of distressing secondary sex characteristics during puberty. This allows patients extra time to explore their gender identities and to consider more permanent medical or surgical interventions

in the future. GnRHa have been well-studied for other medical conditions, including precocious puberty, and are known to have no long-term side effects or effects on long-term development. (7). Concerning their use in TGD youth, research has found that patients treated with GnRHa have improved psychological well-being, less emotional and behavioural problems, and lower lifetime suicidal ideation.

In mid- to late-adolescence, patients and providers may consider administration of gender-affirming hormone therapy (GAHT), such as exogenous testosterone or estradiol (1). Multiple longitudinal studies have demonstrated that young patients who underwent GAHT have overall reduced incidence of mood disorders, stress, dysphoria, and psychopathology (7). The ideal age to initiate GAHT is often decided on a case-by-case basis; while the Endocrine Society suggests starting at age 16, even earlier may be appropriate if the patient is determined to be capable of providing informed consent. It is important that patients understand that GAHT is a partially irreversible intervention, as some physical changes, such as breast development, voice deepening and certain fertility implications may not be reversed if therapy is stopped (2).

Some TGD adolescents may desire gender-affirming surgeries (GAS), including “top” surgeries, such as breast feminization or chest masculinization; “bottom” surgeries, such as those to remove unwanted reproductive organs or construct desired genital anatomy; and other interventions, such as facial feminization (2). Surgical interventions have historically been available to adults only; but in more recent years, older TGD youth have become increasingly eligible candidates for top surgery (7). Policies for GAS in young patients vary by jurisdiction, and patients are typically assessed on a case-by-case basis (3). “Bottom” surgeries are not accessible for youth patients, as they are more complex and may have irreversible consequences for fertility and sexual function.

### ***Barriers to gender-affirming care for youth:***

Understanding the barriers that Canadian TGD youth face when attempting to access GAC is becoming increasingly relevant. Changing social and political landscapes have led to increased recognition, visibility and acceptance of gender diversity, leading to a rise in its incidence along with increased demand for accessible, affirming healthcare (2, 3, 6). Despite this, however, some TGD youth continue to encounter barriers in their attempts to access GAC. Political, ethical, and legal controversies are prevalent surrounding GAC for youth, often concerning issues such as the patient's abilities to provide informed consent, parental disagreement, and concerns of future detransition (8–10). Various media cases highlight situations where TGD youth have faced delays in accessing GAC for various reasons, further exacerbating dysphoria and distress (8,11–13). Controversies and misinformation can further limit access to care, delay treatment and worsen distress (14). Without GAC, TGD youth are highly vulnerable to feelings of social isolation, loneliness, shame, and low self-esteem (1, 2, 15). In response to this, many turn to maladaptive, high-risk coping mechanisms including self-harm, substance abuse, or unsafe sexual practices, creating significant threats to their physical and mental health.

Identifying these barriers is crucial for multiple reasons. By doing so, changes can be implemented to make GAC more accessible for this demographic, therefore improving their quality of life and overall health outcomes (1–3, 7). Addressing barriers and gaps in accessibility challenges stigma and discrimination, helping to promote healthcare and societal equity and facilitating the establishment of more inclusive care environments. Additionally, identifying barriers can help to inform future policies and practices, facilitating obstacle removal and better resource allocation to meet the unique needs of this population.

## **PURPOSE OF STUDY**

The purpose of this literature review is to identify the barriers encountered by Canadian TGD youth attempting to access GAC, and to investigate possible solutions that may be implemented within Canada's healthcare system to mitigate these barriers and improve access to care for this demographic. Additionally, this literature review will investigate how Physician Assistants (PAs) may have a role in improving youth access to GAC.

## **METHODS**

### ***Inclusion criteria:***

Inclusion criteria used to determine paper suitability comprised of primary and secondary research relevant to the research question, including studies investigating various aspects of GAC for Canadian youth and their families. Studies had to be published in English, allow full-text access to articles, and be conducted within the last twenty years (from 2004 - 2024). Studies had to involve Canadian transgender and/or gender-diverse youth, including participants that were currently youth (under age 19, the most common age of majority in Canada), or concerned barriers to GAC experienced in their youth.

### ***Search strategy:***

An article search was conducted on December 8<sup>th</sup>, 2023, using PubMed, the main database for health sciences research, and Scopus, a database for health and social sciences. The time frame was restricted to studies published between 2004 to present. Due to the minimal amount of research concerning GAC for Canadian youth, articles considered for this literature review included reviews, systematic reviews, clinical trials, meta-analyses, and randomized

control trials. Successful searches were designed and built as follows: (“Transgender Health” [Mesh] OR "transgender health services" OR "gender-affirming care" OR "gender-affirming treatment" OR "gender-affirming services" OR "transgender care" OR "gender-diverse care") AND ("Adolescent" [Mesh] OR "Teenager"[Mesh] OR "Young Adult"[Mesh] OR youth OR teen) AND (“Canada” OR “Canadian”). An additional search was conducted on both databases for research concerning the role of Physician Assistants in GAC in Canada; however, no suitable resources were found.

This search strategy generated 20 results on PubMed, and 18 results on Scopus, producing a combined 38 results. Results were screened for duplicates through the reference manager Mendeley, resulting in 27 potential studies. Abstracts were further screened based on relevance to inclusion criteria, resulting in 25 articles. The full texts of these remaining articles were thoroughly assessed and narrowed down to include seven articles within this literature review (Figure 1).

## **RESULTS**

### ***Search results:***

The findings from the searches on PubMed and Scopus concerning access barriers that TGD youth experience while seeking GAC resulted in seven articles meeting the study objectives of this literature review (Table 2). Table 2 includes a summary of each study, as well as the design, objectives, study population and sample size, outcomes, conclusion, and limitations of each. Seven studies explored the first study objective regarding barriers that TGD youth face when accessing GAC. Six studies targeted the second study objective, investigating potential modifications to improve access to GAC for TGD youth. No studies were found

concerning the third study objective, which was exploring how PAs may help improve access to GAC for Canadian TGD youth.

***Barriers to gender-affirming care for Canadian youth:***

Pullen Sansfaçon et al. (2019) conducted a qualitative study titled "The Experiences of Gender Diverse and Trans Children and Youth Considering and Initiating Medical Interventions in Canadian Gender-Affirming Specialty Clinics," to explore the experiences of Canadian TGD youth as they considered and initiated gender-affirming interventions (16). Researchers used an approach that integrated grounded theory with thematic analysis. Information was gathered by interviewing patients and families attending three specialty gender-affirming clinics in Canada. Several broad categories of barriers were identified as impeding access to GAC for TGD youth. Family-related barriers were significant challenges for many patients, leading to delays in accessing care. These delays were secondary to challenges such as the necessity for patients to disclose their gender identity to their families before seeking care, the need to allow parents adequate time to process their decisions, and the fear that transition would be burdensome to families. Additional challenges concerned clinic-related barriers, such as long wait times for initial appointments ranging from several months to over one year. Concerns were also raised about unnecessary delays occurring during the care process due to restrictive clinic policies, limitations of healthcare resources, or disagreement among patients, providers and families. Financial barriers concerned the affordability of aspects of treatment that may not be covered by provincial healthcare systems, including medication costs and mental health services. Gender identity-related barriers included failure of providers and medical staff to use preferred names and pronouns and perceived pressure to conform to binary gender norms if care was felt to be not inclusive or accommodating for non-binary patients.

In the study titled "Conditions for Shared Decision Making in the Care of Transgender Youth in Canada" (2021), Clark et al used a constructivist grounded theory approach to explore how TGD youth and their families make decisions surrounding medical transition, while also exploring experiences of barriers to care (14). Twenty-one TGD youth participants, along with their parents/caregivers, were recruited to participate through organizations such as health clinics and support groups in British Columbia.

A significant barrier study participants faced was delayed access to GAC, which stemmed from various factors (14). For example, some patients experienced delays in starting GAHT due to lack of parental support. Consequently, some providers refused to assist these participants in accessing GAC, or acted as “gatekeepers” of GAC by imposing requirements for parental involvement and/or approval. Despite legislation in British Columbia not specifying a minimum age for consent, this prevented several patients from accessing GAC. While having strong parental support is generally preferred and associated with overall better health outcomes, the delays in care associated with gaining this support may not always be in the best interest of patients, particularly for those experiencing high levels of distress resulting in self-harm and/or suicidality. Participants who sought care without the support of their families emphasized their urgent need to begin GAHT, prioritizing it over continued attempts to involve their parents in their care.

Additional barriers identified in this study included systemic barriers, such as long travel times to see a provider capable of prescribing hormonal therapy, or challenges finding suitable professionals for the psychological assessments frequently required prior to initiating GAHT (14). This was especially problematic for youth who lacked parental support, many of whom had to attempt to navigate the healthcare system on their own. Finally, non-binary youth reported

greater barriers and less support for medical therapy than those with binary genders - four out of five participants who identified as non-binary experienced lower levels of parental support for medical therapy, resulting in higher barriers to care.

In the study “Gender Dysphoria Assessment and Action for Youth: Review of Health Care Services and Experiences of Trans Youth in Manitoba,” (2018), Heard et al. used a mixed methods approach to explore the experiences of TGD youth in Manitoba who accessed gender-affirming healthcare through the Gender Dysphoria Assessment and Action for Youth (GDAAY) program (17). They also assessed the range of gender-affirming services accessible to these patients and identified the barriers preventing patients from accessing these services. Provider-related barriers were commonly encountered, particularly due to the lack of provider knowledge in TGD healthcare, as 70% (n = 14) of participants reported having to educate providers about TGD needs, and 65% (n = 13) were informed that their provider lacked enough knowledge in GAC to provide it. Other participants reported problematic language (25%) from providers, and instances where providers did not use their preferred names (15%) or pronouns (84%). Other challenges included systemic barriers, such as the lack of gender-inclusive methods for collecting and documenting medical information (68%), lack of visible gender diversity support in clinics (68%), and fear of answering embarrassing questions about sexual orientation or gender identity (74% and 32%). A final category of barriers identified concerned access to affirmative healthcare itself. With an average waiting period of 114 days after referral before having an initial visit with a GDAAY provider, lengthy wait times were a significant issue for many patients. This delay in care can worsen distress, especially for those waiting for medical therapy or to change legal documents.

In the study titled “Pathways to Care for Adolescents Attending a First Hormone Appointment at Canadian Gender Affirming Medical Clinics: A Cross-Sectional Analysis From the Trans Youth CAN! Study” (2022), Lawson et al. analyzed Trans Youth CAN!, a prospective cohort study of youth referred to specialty gender clinics, to explore the routes TGD adolescents take to access GAC in Canada (18). They used a multifaceted approach in their analysis, which integrated adolescent and parent surveys with clinical records.

Many participants in this study reported experiences with structural and systemic barriers, including difficulty finding providers educated in GAC, and extensive wait times (18). On average, participants spent 13.5 months seeking GAHT, saw at least two providers about their gender identity prior to referral to specialty clinics, and waited 269 days after that referral for their first appointments at the clinic. Interestingly, participants of Indigenous background reported spending five months longer seeking GAC than those of non-Indigenous background, although researchers did not theorize why. For participants in general, longer wait times for care were correlated with heightened suicidality, self-harm, and increased experiences of day-to-day discrimination.

Furthermore, limited availability of gender-affirming clinics resulted in some patients having to travel long distances to access them, with some participants reporting up to 735km of travel distance (18). Patients also cited requirements for assessment by psychologists or psychiatrists as a barrier, as the associated wait times could lead to delays in care or create financial obstacles if done in private practice. Other barriers were sociocultural or interpersonal in nature, such as perceived and/or actual hostility, exclusion, and transphobia in care environments.

In the study “Primary Care Access and Foregone Care: A Survey of Transgender Adolescents and Young Adults,” (2018), Clark et al. examined challenges in accessing primary care, and foregone, or sacrificed, healthcare needs of Canadian TGD youth (19). They conducted a cross-sectional analysis of data from the Canadian Trans Youth Health Survey to explore the relationship between healthcare access, health status, and comfort levels with providers. While this study concerned primary care access, rather than GAC, it remained relevant, as accessing primary care is the first step for most in accessing GAC in Canada.

A significant barrier identified in this study was patient discomfort with their providers and a general lack of confidence in providers' abilities to address their gender needs (19). Only 52.6% of participants reported that their providers knew about their gender identity, demonstrating a lack of provider awareness. Other participants described previous negative encounters with providers who lacked knowledge or understanding of TGD issues, leading to skepticism from providers of patients' urgent needs, or refusal to provide care. This was particularly relevant for mental health needs, as 68.4% of participants reported sacrificing mental health care in the twelve months prior to the study for these reasons. Additionally, comfort with providers was negatively correlated with sacrificed mental health care among adolescents, suggesting that lack of comfort with providers may contribute to avoidance of mental health services.

An additional barrier identified concerned the accessibility of care (19). For example, rural and remote participants often faced transportation and associated financial barriers in accessing specialty gender-affirming services, given that GAC is often only available in large urban centers. Other participants faced financial barriers related to costs not covered by Canada's healthcare system, such as costs of prescription medication, or fees associated with required

psychological assessment prior to initiating GAHT. Other participants reported challenges concerning long wait times for desired interventions, such as affirmative chest surgeries, expressing concerns that these delays could escalate their psychological distress to potentially life-threatening levels.

In “Non-Binary Youth: Access to Gender-Affirming Primary Health Care,” (2018), Clark et al. explored issues of healthcare access and overall experiences of Canadian non-binary (NB) youth, in comparison to their binary peers (20). Researchers used a quantitative, survey-based approach, gathering data from the Canadian Trans Youth Health Survey on the various health outcomes and healthcare experiences of NB and binary transgender youth.

A significant challenge highlighted by the study involved provider-related barriers (20). NB youth reported being less likely to have a provider compared to binary youth, and even if they had one, their provider was less likely to be aware of their gender identity. Many participants reported that their providers were not trained or comfortable in providing them with GAC, resulting in participants feeling less comfortable discussing their gender identity or needs.

An additional barrier identified by this study concerned accessibility of GAHT for NB youth (20). While researchers found that NB participants were less motivated to pursue GAHT than binary youth as many patients found their needs fulfilled through other means such as preferred pronouns, names, and clothing, accessing GAHT was a significant challenge for NB youth who did desire it. Researchers found that NB youth who sought GAHT were twice as likely to experience barriers in accessing it, including difficulty finding a provider to prescribe GAHT, lack of support from family and/or friends, financial concerns about the costs of care, and lack of information on NB patients to assist with informed decision-making.

In the study titled “Growing Up Trans in Canada, Switzerland, England, and Australia: Access to and Impacts of Gender-Affirming Medical Care” (2023), Pullen Sansfaçon et al. used a combination of grounded theory and thematic analysis to understand the experiences of TGD youth accessing GAC in Canada, Switzerland, England and Australia (21). The study explored various barriers in accessing care, impacts of care, and regional differences in gender-affirming interventions. Initially started in Canada as the 'Stories of Gender-Affirming Care' project, researchers from England, Australia, and Switzerland were invited to develop and conduct similar studies in their countries. In Canada, participants were recruited from specialty gender-affirming clinics in Manitoba, Ontario and Quebec. While GAC was found to be more readily available in Canada than other countries, barriers were still present for patients. Delays in accessing care was a significant challenge for some participants, resulting from factors such as long waiting lists for specialty clinics, and clinic-specific protocols, such as requirements for multiple assessments by various providers and specialists. Youth also faced barriers secondary to parental conflict, with the absence of parental consent contributing to delays in care for some participants. Financial barriers were also a significant concern, as some medications, surgical interventions, and mental health appointments may not be covered by provincial or national health programs. Other barriers concerned inadequate provider and staff training outside of specialty clinics, such as in emergency and psychiatric departments, where staff often lacked knowledge and sensitivity to support TGD youth or caused distress from mistakes in name or gender.

### ***Modifications towards improving youth access to gender-affirming care***

This section details the findings of the literature review of potential modifications which may be implemented to reduce the various barriers facing TGD youth accessing GAC in Canada.

While no specific literature was found which implemented specific interventions to reduce experiences of barriers, six of the studies suggested possible solutions to address these barriers.

Heard et al. (2018) provided several recommendations to improve accessibility of GAC in Manitoba, based off of insights from study results, and supplemented by patient input and a thorough analysis of the GDAAY program's evolution and demographic trends (17). Their recommendations included integration of GAC into course curricula for all medical professions, required gender sensitivity training for all staff of medical facilities, increased resource allocation for GAC for youth, and accommodation of preferred names and pronouns in methods of collection of patient information. Additionally, they suggested that medical facilities enhance visible support for gender diversity and 2SLGBTQIA+ through methods such as having gender-neutral bathrooms and information posters relevant to all gender identities. Furthermore, they suggested providers advocate for improved clinic protocols, professional guidelines, and government policies that more effectively address the rights of TGD patients, improve resource allocation for GAC, and address discrimination.

In the 2019 study by Pullen Sansfaçon et al, several recommendations were made to improve access to GAC for TGD youth (16). They stressed the need for providers to address the delays that many youth encounter in GAC, and suggested providers have open conversations with patients about wait times and reasons for delays in care. They recommend systematic training of all providers in GAC, to better address the needs of rural and remote youth more quickly, effectively, and within their own communities. Additionally, it is important that providers recognize and address the unique challenges that NB youth face by acknowledging patients' diverse experiences and goals and adjusting clinic protocols as necessary to meet their specific needs.

Clark et al. (2021) provided several recommendations to reduce access barriers to GAC for youth by promoting shared decision-making for patients considering GAC (14). They suggested that providers prioritize the urgent needs of their patients, and work on developing supportive relationships and open communication with patients. When determining who participates in shared decision-making, providers should consider existing relationships within the youth's family, ensure transparency, and honour patient preferences in decision-making.

In another study by Clark et al. (2018), additional recommendations were made to improve accessibility of both primary care and GAC for TGD youth (19). Researchers emphasized that GAC falls within the scope of general practitioners (GPs); however, GPs often lack the necessary medical knowledge in addressing the unique health needs of this population. Researchers suggested that this can be effectively addressed, and GAC made more readily accessible by enhancing clinical training through various means, such as Continuing Medical Education opportunities. They also recommend incorporating affirmative measures in care practices, such as with gender-inclusive forms, or by advocating for policy changes to address gaps in affordability for affirming treatments. Additionally, integrating telehealth technology into healthcare practices may further improve the availability and affordability of GAC for rural and remote youth.

In an additional article by Clark et al (2018), several recommendations were made to improve support for NB youth seeking GAC (20). The authors suggested that GPs are well-positioned to offer GAC, as their practice settings prioritize family and youth. To enhance access to care and overall well-being of NB patients, the authors recommended increasing formal education of GAC for all providers, as well as education about how societal stigma may shape the lives and healthcare experiences of these patients. Additionally, the authors recommend that

providers establish safer environments for NB youth through use of gender-neutral language, avoidance of binary assumptions, and providing patients with information about the full range of available GAC options.

The recommendations outlined in the 2023 study by Pullen Sansfaçon et al emphasized the importance of applying a multifaceted approach to improving access to GAC for youth (21). For example, they recommended that all providers who encounters patients seeking GAC should, at minimum, apply standards of care into treatment plans, but also incorporate flexibility into treatment protocols to accommodate unique individual needs. They also suggested that, if possible, providers should engage in collaborative decision-making with youth and their families to determine appropriate treatments and to encourage familial support. The researchers also encouraged providers who may encounter TGD youth to participate in further medical training on the needs and realities of these patients. Finally, they urged providers to advocate against legal restrictions on GAC care for youth, while making efforts to promote increased social acceptance of gender diversity.

#### ***Use of Physician Assistants to improve youth access to gender-affirming care***

Despite using comprehensive search strategies, no published literature was found discussing how PAs may improve access to GAC for Canadian youth. However, it is interesting to note that in the seven articles examined for this literature review, providers were often referred to as the non-specific term 'healthcare provider', rather than official titles. This broad, non-specific term may include PAs amongst other providers. Specific provider roles mentioned in articles in this literature review varied widely, and included physicians from many different specialties, nurses and nurse practitioners, mental health professionals, social workers, and Indigenous elders.

## **DISCUSSION**

The purpose of this literature review was to identify barriers that Canadian TGD youth face when attempting to access GAC. Additionally, this literature review aimed to investigate solutions that may be implemented within Canada's healthcare system to improve access to GAC for youth. Furthermore, this literature review aimed to investigate if PAs have been effective in improving youth access to GAC.

### ***Barriers to receiving gender-affirming care for Canadian youth***

This literature review identified several common themes as barriers to GAC for youth. One important theme was delayed access to care, secondary to issues such as parental conflict, long wait times for appointments, and strict clinic protocols (13 – 17, 19) . Another significant theme was lack of provider knowledge and sensitivity in TGD care, leading to situations where providers refused to use preferred names or pronouns, or were insensitive to the unique needs of TGD youth (15 – 19). Financial challenges concerned treatment affordability and included difficulties with private or provincial coverage of medications, surgical interventions and mental health services (14, 17 – 19). Systemic barriers were also significant and included long travel times to gender-affirming clinics, limited availability of specialized care, and requirements for psychological assessments (13, 14, 16, 17, 19). These themes highlight the complex barriers that TGD youth encounter when seeking GAC and emphasize the need for interventions to improve patient health outcomes and access to inclusive and affirming healthcare services.

Many of the barriers identified in this literature review are connected by the underlying presence of stigma and discrimination. Stigma and discrimination are present in many aspects of TGD individuals' lives, including within healthcare settings. Stigma may lead to delays in accessing care, lack of understanding or sensitivity from providers, financial concerns, systemic

challenges, and family conflict. Regardless if stigma and discrimination are subtle or blatantly obvious, their presence creates a hostile environment for patients, and affects their experiences with providers. Stigma and discrimination may influence health policies and practice, as well as the views of society and providers, resulting in systemic inequalities in accessing care.

Lack of provider knowledge and training in the healthcare needs of TGD individuals was another significant barrier contributing to barriers in care. In initial searches for GAC, patients frequently encountered providers who were inexperienced with best practices or standards of care, resulting in delays while waiting to see more knowledgeable or specialized providers. These delays frequently exacerbated gender dysphoria or other mental health challenges experienced by TGD youth. Lack of provider knowledge frequently appeared as insensitivity in interactions, such as failure to use appropriate pronouns or chosen names, or unintentional perpetuation of harmful stereotypes or biases, causing a breakdown in patient trust in their providers. Lack of provider training may also increase systemic barriers. For example, it may result in lack of development of appropriate policies for GAC, or insufficient resource allocation for gender-affirming initiatives. Addressing lack of provider knowledge and training is important to overcome barriers to care faced by TGD youth, and to ensure that this population receives the affirming and competent care they require.

### ***Modifications towards improving youth access to gender-affirming care***

The findings of this literature review provide a broad understanding of the barriers and challenges encountered by TGD youth when accessing GAC in Canada. Although the literature search did not find any research that examined the implementation of targeted interventions aimed at reducing barriers to GAC for young patients, it provided valuable insights and

recommendations to reduce barriers and enhance accessibility within Canadian healthcare systems to better meet these patients' needs.

An important theme that emerged from the literature review is the need for increased medical education and provider training on TGD healthcare. Heard et al. (2018) emphasized the importance of increasing the amount of education in Canadian medical schools on GAC and advocated that all staff in medical environments should participate in mandatory gender sensitivity training (17). Clark et al. (2018) also stressed the importance of increasing medical training, especially for GPs, who are often contact points for many TGD youth in search of GAC, and who may lack necessary knowledge to address their gender needs (19). TGD patients would experience multiple benefits if GPs were more well-trained in providing GAC. Increased training would allow GPs to offer more TGD patients timely and comprehensive care and reduce barriers such as long wait times and requirements for multiple referrals. This would be especially beneficial for young TGD patients living in rural and remote areas, who have limited access to specialized gender clinics. Providing patients with essential services such as hormone therapy and mental health support closer to home would also help to address issues such as gender dysphoria, improving patients' overall well-being. This can help to increase patient comfort and trust with their providers and empower them to start discussions with their providers regarding their gender identities and associated needs. Additionally, it would reinforce strong patient-provider relationships and reduce stigma and discrimination in healthcare settings. Overall, GPs who are more appropriately trained in providing GAC can contribute to creating safer, more inclusive environments for TGD patients and improve their overall well-being.

Increasing provider education in TGD care can be accomplished in various ways. For example, dedicating more time to teaching GAC in medical curricula ensures that future

providers have the necessary knowledge and skills from the start of their careers. For practicing providers, participating in Continuing Medical Education opportunities, shadowing providers more experienced in GAC, and attending workshops and conferences are ways to engage in hands-on learning and to stay updated on latest research and guidelines.

This literature review also demonstrates the importance of incorporating affirmative measures into healthcare practices, including efforts to use gender-inclusive medical forms and language, respecting patient's preferred names and pronouns, and avoiding binary assumptions. Required participation in gender sensitivity training for staff in all medical facilities may help to decrease stigma and discrimination within medical settings, facilitating trust and establishing rapport between staff and patients. Additionally, visibly promoting and validating gender diversity in medical settings can help establish an environment where patients can feel respected in their gender identity. By incorporating these gender-affirming measures and training protocols, healthcare settings can become safer, more inclusive spaces for TGD patients, ultimately improving their overall healthcare experiences and health outcomes.

Another theme that emerged from this literature review concerned the geographic disparities which surround GAC in Canada. The concentration of gender-affirming specialty clinics in large urban centres, combined with the shortage of rural and remote providers educated in GAC, creates unique challenges for TGD patients in these locations. These patients must deal with long wait times in order to access knowledgeable providers close to their communities or navigate long travel distances and associated financial burdens to access care in distant urban centres. The financial burden of traveling to distant urban centres for GAC may be unaffordable for TGD patients who may already face socioeconomic challenges, further increasing disparities between urban and rural patient populations. To address these disparities, strategies are needed to

expand access to GAC in underserved regions to ensure equitable healthcare all TGD individuals, regardless of geographic location. For example, integrating modern technology such as telehealth can be beneficial to improve the availability and affordability of GAC for rural and remote TGD youth (19). Additionally, as previously discussed, increasing provider training and knowledge, particularly for GPs, may help to bring increased gender services to patients within their own communities.

This literature review also emphasized advocacy as an important tool for providers to address the healthcare disparities encountered by young TGD patients. It is crucial that providers advocate for TGD patients by actively addressing disparities in healthcare. This includes advocating for provincial and clinical policy changes to better align with patients' needs, such as developing methods to improve treatment affordability, and addressing challenges surrounding consent processes. Additionally, providers should challenge legal, societal and political opposition to GAC, and call out discriminatory healthcare practices to create safer, more inclusive environments for their patients. Through advocacy, providers can improve the experiences TGD patients have with care, create safer and more inclusive care environments, and reduce their experiences of stigma and discrimination.

Notably, this literature review exposed a gap in research examining implementation of targeted interventions to improve access to GAC for Canadian youth. Future research should prioritize exploring interventions that address the unique needs of TGD youth and help to improve their access to and experiences with GAC.

### ***Utilizing Physician Assistants to improve healthcare for TGD youth***

This literature review identified a gap in research concerning how PAs may be utilized to improve access to GAC for TGD youth in Canada. PAs may be an important solution in reducing

barriers to care for several reasons. PAs work as collaborators on healthcare teams, enabling them to provide care in multiple settings, including both primary care settings and specialty clinics (22). PA practice is intrinsically flexible and highly adaptive, allowing them to adapt quickly and easily to meet the continuously evolving requirements of Canada's population of TGD youth. Furthermore, PAs are frequently employed in medically underserved rural and remote communities that may have restricted access to services such as GAC, placing them in a fitting position to address gaps in GAC in these areas. Finally, by providing continuity of care throughout patients' gender journeys, PAs can build close relationships with their patients and provide them with continuous support, guidance and knowledge. In summary, PAs may have a significant role in reducing disparities in access to GAC and improving the overall health and well-being of TGD youth across Canada. Further investigating the potential role for PAs in providing GAC is essential to determine appropriate strategies to reduce barriers to care for this vulnerable population and improve healthcare delivery and health outcomes of TGD individuals.

## **STUDY LIMITATIONS AND FURTHER RESEARCH**

A limitation of several studies included in this literature review was small sample size. Considering the wide diversity of TGD youth, and the possibility of regional variations, generalizing findings to the rest of Canada may be limited. Additionally, most of the reviewed literature had relatively low incidence of ethnic diversity, with predominately Caucasian participants. Due to this lack of diversity, the findings likely do not entirely appreciate the unique experiences and barriers encountered by Indigenous populations and ethnic minorities, or account for their unique needs.

Additionally, the majority of the literature focused on barriers solely from the perspectives of patients and their families. Future studies exploring providers' perspectives are crucial to minimize potential bias, and to gain further knowledge on barriers to delivery of GAC.

Furthermore, several articles relied on large-scale, but aging, surveys. Considering the continuously evolving, dynamic nature of GAC and Canada's TGD population, aging data may quickly become irrelevant. To truly appreciate the evolving demographics, gender identities, and needs of this population, as well as to ensure the relevance and accuracy of findings, conducting current, up-to-date research is vital.

## **CONCLUSION**

In summary, this literature review provides a guide to improve access to GAC for Canadian TGD youth. Access to GAC for Canadian youth remains a significant issue within Canada's healthcare system. This review identified various barriers encountered by this population when seeking GAC in Canada, including inadequate education of healthcare providers on GAC and TGD healthcare, factors contributing to healthcare delays, familial conflicts, financial constraints, and systemic barriers within the healthcare system.

Several solutions to improve access to GAC for TGD youth were proposed, including increasing provider education on TGD healthcare, requiring gender sensitivity training for all staff in medical facilities, advocating for policy changes within clinics and provincial healthcare systems to better meet patient needs, and challenging legal and political opposition to GAC and discriminatory healthcare practices.

The literature review also identified gaps in research, particularly on implementation of targeted interventions to improve access to GAC for TGD youth, as well as the potential roles

that PAs may have in decreasing barriers to GAC for this population. Future studies should be conducted to explore these topics more thoroughly, to further improve our understanding of barriers to GAC and to inform effective strategies to mitigate these barriers.

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## APPENDIX

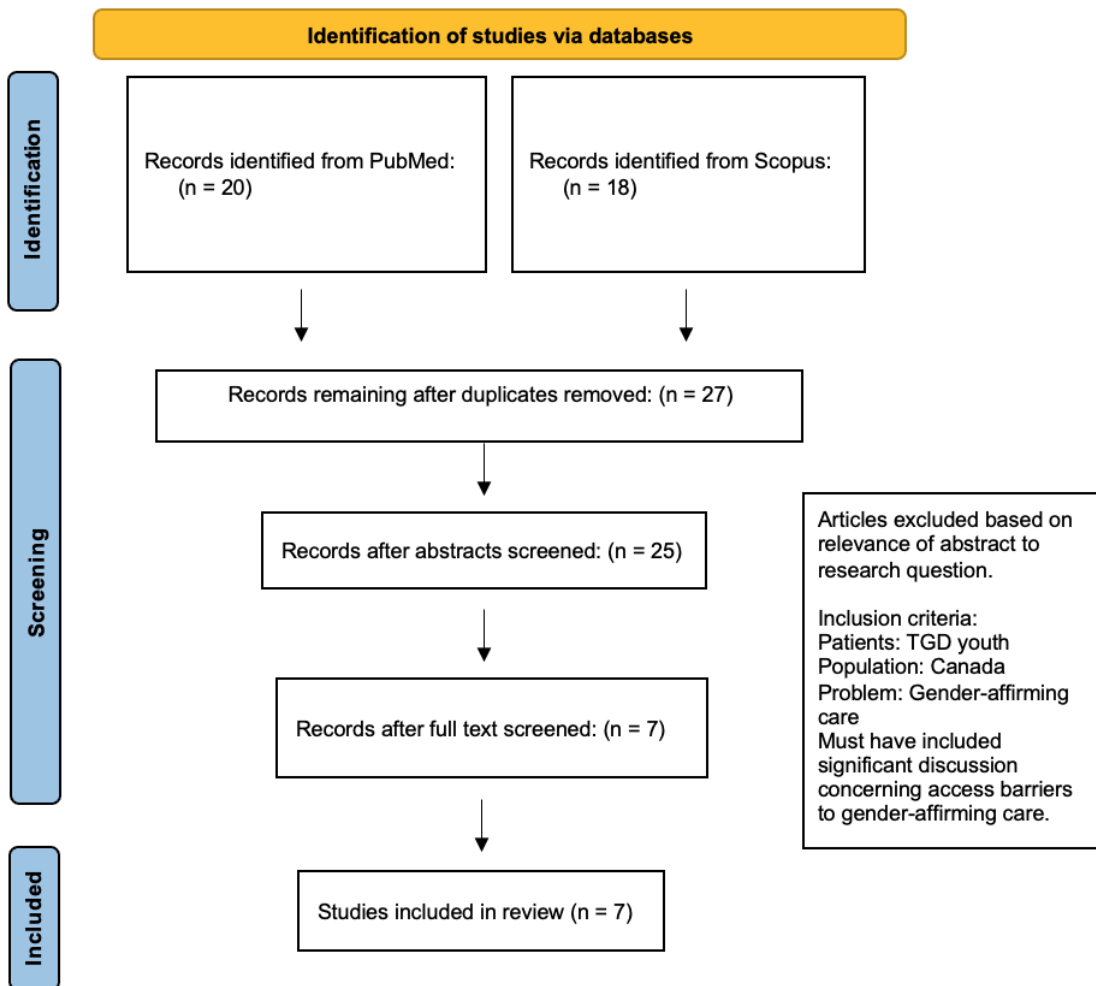
**Table 1.** Key terminology commonly used in gender health care, adapted from the Government of Canada (2022).

Term	Definition
2SLGBTQI+	The current acronym used by the Government of Canada. 2S: Two-Spirit; L: Lesbian; G: Gay; B: Bisexual; T: Transgender; Q: Queer; I: Intersex; +: Inclusive of people who identify as part of sexual and gender diverse communities.
Cisgender	A person who identifies with the gender they were assigned at birth.
Gender-diverse	Refer to individuals who do not identify as exclusively male or exclusively female (for example, individuals who are non-binary or two-spirit).
Gender-fluid	A person whose gender identity varies over time and may include male, female, and non-binary gender identities.
Heterosexual	A person who is sexually and/or romantically attracted to people of a different gender than themselves.
Homophobia	The fear, hatred, or aversion of people who experience same-sex attraction.
Homosexual	<i>No longer in common use.</i> See “gay” and “lesbian”. The term homosexual has fallen out of favour as it is associated with the historic medical understanding of same-sex attraction as a mental illness. However, equivalents of “homosexual” are commonly used in French and other languages.
Non-binary	Referring to a person whose gender identity does not align with a binary understanding of gender such as man or woman.
Queer	Historically a derogatory term used as a slur against 2SLGBTQI+ people, now reclaimed by many as a positive self-description.
Questioning	A person who is uncertain about their sexual orientation and/or gender identity; this can be a transitory or a lasting identity.
Gender dysphoria	A medical diagnosis in the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-V), often required by health providers and/or health insurance plans before prescriptions for hormones or gender-affirming surgeries will be provided. It can be understood as discomfort or distress experienced by a person who feels their sense of their gender identity differs from their body, based on societal expectations.
Gender expression	The various ways in which people choose to express their gender identity; this may not align with societal expectations of gender and therefore is not a reliable indicator of a person’s gender identity.

Term	Definition
Gender identity	Internal and deeply felt sense of being a man, woman, both, or neither. A person's gender identity may or may not align with the gender typically associated with their sex. It may change over the course of one's lifetime.
Sex assigned at birth	A person's biological status as male, female, or intersex based on their primary sexual characteristics at birth.
Sexual orientation	Romantic and sexual attraction for people of the same or another sex or gender.
Transgender	A person whose gender identity differs from what is typically associated with the sex they were assigned at birth.
Transphobia	The fear, hatred, or aversion of people whose gender identities differ from the sex they were assigned at birth.
Transsexual	<i>No longer in common use.</i> A person whose gender identity differs from their sex assigned at birth, who has undertaken gender-affirming medical and/or surgical interventions. The term has fallen out of favour as it implies that physical transition is necessary in order to claim a trans identity.
Two-spirit	An English term used to broadly capture concepts traditional to many Indigenous cultures; a culturally specific identity used by some Indigenous people to indicate a person whose gender identity, spiritual identity, and/or sexual orientation comprises both male and female spirits.

**Table 2.** Summary of the seven articles analyzed in this literature review, including the study, design, objective, population and sample size, outcomes, conclusion, and limitations.

Study	Study Design	Objective	Study Population & Sample Size	Outcomes	Conclusions	Limitations
Pullen Sansfacon et al., 2019	Qualitative: Grounded Theory & Thematic Analysis	Explore experiences of Canadian TGD youth seeking & receiving GAC, their goals in accessing care & feelings about their care and interventions they have undergone	Sample size: 35 TGD youth & parents. Recruited from three Canadian gender-affirming clinics located in Montreal, Winnipeg and Ottawa	Identified barriers: family-related, clinic-related delays & protocols, financial concerns TGD youth felt generally positive about their experiences with GAC.	TGD youth benefit from GAC. Providers should consider adjusting certain treatment protocols (age restrictions, puberty stage, mental health assessments) or using a more flexible, case-by-case basis to reduce barriers to access	Limited to patients of specialty clinics in Winnipeg, Montreal, Ottawa; small sample size; largely Caucasian study population
Clark et al., 2021	Constructivist Grounded Theory	Investigate shared decision making for TGD youth medical transition in Canada	Study participants: trans youth (n = 21), parents of trans youth (n = 15) and health care providers (n = 11). Recruited through fliers, at community events, support groups, clinics & partner organizations.	Identified barriers: delayed access to care, parental barriers, healthcare provider barriers, systemic barriers, disparities for non-binary youth.	When 5 conditions conducive to a shared-decision making approach are met, a gender-affirming and culturally safer shared decision-making approach may be used to support decision making about gender-affirming care.	Limited to British Columbia; small sample size.
Heard et al., 2018	Mixed-Methods	To describe the paediatric TGD population accessing health care through the Manitoba GDAAY program and explore their experiences accessing health care in Manitoba.	25 TGD youth referred to the GDAAY program in Manitoba. Recruited through medical records.	All patients had negative interactions with providers at some point, many having experienced lack of engagement with the medical system due to lack of knowledge by the provider on trans-related health services.	Increase providers' education on GAC, providing gender sensitivity training for health care providers, gathering preferred names & pronouns during triage, increasing visibility of support for LGBT+ in clinics, increasing resource allocation to this field; creating policies so health care settings are safe places	Limited to Manitoba; small sample size.
Lawson et al., 2022	Multifaceted Approach	Investigate pathways to GAC for adolescents in Canada	74 adolescents and 160 parents at 10 gender-affirming medical clinics across Canada.	Most participants were referred by GPs or pediatricians, saw multiple providers about their gender prior to referral. Adolescents experienced significant wait times. Indigenous adolescents had longer times seeking care.	More timely access to gender-affirming medical care for trans adolescents and their families is required across Canada.	Limited to urban regions in Canada; limited to TGD who had been referred to GAC.
Clark et al., 2017	Cross-Sectional Analysis	Examine primary care access and foregone care in TGD youth in Canada	Data from the Canadian Trans Youth Health Survey, conducted online during 2013–2014. Participants included 923 youth aged 14–25 (323 adolescents aged 14–18 and 600 young adults aged 19–25)	Barriers: discomfort with providers, lack of awareness, availability/affordability of care.	GPs can play a key role in improving the health of TGD youth by demonstrating understanding of their health care needs and competence in GAC, and by ensuring that their practices are accessible to all transgender youth in need of care.	Data from Canadian Trans Youth Health Survey may not represent all TGD youth in Canada.
Clark et al., 2018	Quantitative: Survey-Based	Investigate healthcare access for non-binary youth in Canada	Data from the Canadian Trans Youth Health Survey. Participants: 923 youth aged 14–25 (323 adolescents aged 14–18 and 600 young adults aged 19–25)	Non-binary youth face increased barriers accessing GAC, less likely to have family doctors aware of gender identity.	GPs can play a key role in improving the health of TGD youth by incorporating GAC into their practices, to address unique needs of non-binary youth.	Data from Canadian Trans Youth Health Survey may not represent all non-binary youth experiences.
Pullen Sansfacon et al., 2023	Qualitative: Grounded Theory	Explore TGD youth experiences accessing GAC in Canada, Switzerland, England, Australia	36 Canadian TGD youth and their parent/caregiver, recruited from gender-affirming clinics.	Delays in accessing care, parental conflict/consent, financial barriers, provider training gaps.	Prompt access to GAC was crucial to ensuring and improving the well-being of the young people who sought it, especially in terms of mental health	Limited to specific regions/countries; small sample sizes. Most participants were Caucasian.



**Figure 1.** PRISMA diagram displaying results of initial literature search, screening methods and included articles for studies discussing gender-affirming care for transgender and gender-diverse Canadian youth.