RESEARCH SHOP

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Expanding the Reach of Gender-Affirming Care in Hamilton

Prepared for

Hamilton Trans Health Coalition

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By

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Executive Summary

Over the last five years, the Hamilton Trans Health Coalition (HTHC) has supported primary care practitioners in Hamilton, Ontario with their provision of gender-affirming care. The purpose of this research is to identify the motivators and barriers that influence whether a primary care practitioner working in Hamilton is offering gender-affirming care. In partnership with HTHC, a team of McMaster University Research Shop researchers conducted a literature review on the topic and distributed a survey to primary care practitioners working in Hamilton (N = 43).

Primary care practitioners in Hamilton with little or no experience providing gender-affirming care reported, on average, having:

- Low confidence in their ability to provide respectful and informed gender-affirming care,
- A lack of proper training regarding the provision of gender-affirming care,
- A lack of sufficient knowledge about gender-affirming care, and
- A lack of access to or awareness of training resources regarding gender-affirming care.

These factors constitute potential barriers to the provision of gender-affirming care. Correspondingly, hypothetical motivators to providing gender-affirming care include access to education, training, and resources, along with high comfort, confidence, and positive attitudes and values towards working with transgender, non-binary, or genderqueer patients.

Though the generalizability of our findings is limited by a small sample size and the potential for self-selection bias among respondents, they are in line with previous studies in the medical literature. Synthesizing these insights, we foreground two potentially important intervention areas for HTHC to improve the scope and scale of gender-affirming care in Hamilton: 1) Improving access to appropriate education and training for primary care practitioners, and 2) Developing a community of practice for gender-affirming care in Hamilton.

1. Introduction

Hamilton Trans Health Coalition (HTHC) is “a non-profit coalition of healthcare providers, advocates, and community members working to increase the capacity of health systems in Hamilton, Ontario to meet the needs of trans, gender-diverse, and non-binary people” (HTHC, n.d.).

HTHC has been working for five years to help primary care practitioners (PCPs) in Hamilton locate professional resources and understand gender-affirming care is within the scope of their practice. HTHC defines gender-affirming care as consisting of:

1. care related to medical transition (e.g., puberty suppression, hormone replacement therapy, gender-affirming surgery access), and
2. care related to non-medical aspects of transition (e.g., using correct name and pronouns, education on safe chest binding and genital tucking, providing a letter to support legal gender marker change).

Through their work, HTHC has anecdotally observed that many PCPs in Hamilton do not explicitly offer gender-affirming care. HTHC requested McMaster’s Research Shop’s help in exploring the possible reasons for the perceived low prevalence of gender-affirming primary care practice in Hamilton.

The research question for this project is: *What are the motivators and barriers that influence whether a primary care practitioner working in Hamilton is offering gender-affirming care?*

The results of this report will be used by HTHC to inform the development of strategies to engage local PCPs with the goal of increasing the prevalence of gender-affirming care practice in Hamilton.

2. Methods

2.1. Literature review

The research team started by conducting a literature review to identify previously-studied motivators and barriers influencing PCPs' uptake of gender-affirming care. The literature review findings informed the development of the survey, such as potential responses to closed-ended questions.

The research team first sorted through scholarly and grey literature provided by HTHC. Then, the team searched scholarly databases including Google Scholar and the McMaster library databases. The inclusion criteria included:

- Articles that provided empirical evidence of a motivator and/or barrier to providing gender-affirming care among PCPs,
- Recent research published within the last 15 years (i.e., from 2006 onward).

Exclusion criteria included:

- Articles focused on gender-affirming care among mental health or medical specialists (rather than PCPs),
- Theoretical or conceptual articles discussing the meaning of and need for gender-affirming care,
- Articles reviewing models or prospective approaches to widening the availability of gender-affirming care without discussing the factors influencing primary care physicians' behaviour.

Search terms included "gender-affirming care", "primary care", "transgender" and "gender non-conforming", among others.

The following are some notable limitations of the literature review:

1. **Selection criteria.** Identifying barriers and motivators was challenging because several motivators could also be classified as barriers. Some articles included factors that could not be classified as either a motivator or barrier, but instead were classified as neutral.
2. **Categorizing.** Many of the scanned articles included data obtained from specialised healthcare professionals instead of PCPs.
3. **Relevance.** Several studies focused on examining the number of PCPs who had provided gender-affirming care without discussing the professionals' motivators and barriers.

2.2. Survey with primary care practitioners in Hamilton

The research team targeted primary healthcare professionals in Hamilton to complete an online survey hosted on Google Forms. The survey focused on capturing participants' motivators and barriers to providing gender-affirming care in their practice. The topics and factors assessed were informed by the literature review findings. The factors assessed include education, training, provision of transition-related medication or surgery, medical assessments, non-medical patient support, attitudes/values, confidence, and accountability. The participants were also given the opportunity to express other motivators and barriers not mentioned in the survey.

Two mandatory questions were included in the survey to assess the participants' eligibility: 1) job title, and 2) whether their practice was located in Hamilton. The remaining questions were optional. All responses were confidential and anonymous. Participants were assured completing the survey was voluntary and would not impact their practice.

The format of the survey questions varied. The survey used multiple choice, 5-point Likert scales, and three open-ended questions to allow for further input. The research team recorded results from the survey in an Excel spreadsheet and later created charts and graphs summarizing the responses. A copy of survey questions included can be found in Appendix A.

HTHC helped recruit survey participants. The research team provided HTHC with the survey, letter of information, and promotional poster to be shared with their networks and social media. HTHC contacted local health teams who agreed to share the survey opportunity to their networks. The local health teams included: Hamilton Family Health Team, Hamilton Family Medicine. and McMaster Family Health Team. The survey was active for four weeks, from June 28 to July 28.

HTHC also helped clean the data. In the original survey, participants were asked to indicate their job title (i.e., "Primary care physician", "Nurse practitioner in a primary care practice", "Registered nurse in a primary care practice", "Physician assistant in a primary care practice" and "other"). The team decided to create 3 categories to code the job title responses based on their profession's capacity/limitations when it comes to providing care related to medical transition. The first category included PCPs who can provide all aspects of medical transition-related care (i.e., "Primary care physician" and "Nurse practitioner in a primary care practice"). The second category included PCPs who can provide some aspects of medical transition-related care (i.e., "Registered nurse in a primary care practice" and "Physician assistant in a primary care practice"). The third category included PCPs who cannot provide medical transition-related care, but still play an important role in providing overall gender-affirming primary care to patients (i.e., "Other", including professionals such as mental health counsellors). Two responses were removed from the analysis because they did not meet the requirement of working in Hamilton. Another 13 responses were eliminated because they were not

considered providers or influencers of gender-affirming care within primary care. The total number of respondents included in the analysis for this report is 43.

The following are some notable limitations of the literature review:

1. **Generalizability.** The aim of the study was to collect the attitudes and feedback of primary care physicians and nurse practitioners. However, they only make up 58.1% of the sample (25 out of 43). Where appropriate, the research team decided to present the findings as cross-tabulations to distinguish how primary care physicians and nurse practitioners responded in comparison to the other job titles represented in the sample.
2. **Self-selection bias**, or the fact that PCPs decided for themselves whether to fill the survey out or not, may have led to an overrepresentation of respondents with a positive concern for transgender and non-binary healthcare issues.

3. Literature Review

The reviewed literature outlines several possible barriers and motivators impacting primary care providers (PCPs) provision of gender-affirming care. These factors are summarized below in Table 1 and described in more detail in the following sections.

Table 1. Summary of literature review findings: plausible barriers and motivators to providing gender-affirming care (GAC)

Category	Barriers	Motivators
Confidence	• Lack of confidence in ability to provide GAC (Johnson & Shearer, 2017)	
Knowledge and education	• Lack of training and knowledge regarding the provision of GAC (Bourns, 2019; Brooker & Loshak, 2020; Coutin et al., 2018; Snelgrove et al., 2012) • Lack of access to or aware of professional resources regarding GAC (Snelgrove, et al., 2012) • Lack of comfort interacting with or speaking with transgender, non-binary or genderqueer patients (e.g. using pronouns, appropriate terminology) (Coutin et al., 2018; McPhail et al., 2016)	• Provision of professional training and resources (Cherabie et al., 2018; Spencer et al., 2017; Stryker et al., 2020) • Inclusion of gender-affirming care in medical school curricula (Bourns, 2019; Brooker & Loshak, 2020; McPhail et al., 2016)
Relevance to practice	• PCPs' belief that gender-affirming care is within the scope of primary care (Snelgrove et al., 2012)	• PCPs' belief that gender-affirming care is not within the scope of primary care (Johnson & Shearer, 2017)
Health system and institute	• Lack of support from the workplace for providing gender-affirming care (Brooker & Loshak, 2020; Snelgrove et al., 2012)	• Support of professional networks for providing GAC (Ker et al., 2020; Spencer et al., 2017)
Attitudes and values	• Attitudes and values are in line with providing GAC (Snelgrove et al., 2012; Stroumsa et al., 2019; Vijay et al., 2018)	• Attitudes and values are not in line with providing GAC (Shires et al., 2018; Vijay et al., 2018)
Accountability	• Concerns about the potential repercussions of providing gender-affirming care (e.g. malpractice,	

	threatening medical license) (Snelgrove et al., 2012) • Concerns of GAC causing harm to patients (e.g. medical complications, negatively impacting mental health) (McPhail et al., 2016; Snelgrove et al., 2012)	

3.1. Confidence

3.1.1 Barrier

Lack of confidence in ability to provide gender-affirming care. 67 medicine residents surveyed in the United States reported an average to low level of confidence for providing care for trans patients (median of 2 out of 5) (Johnson & Shearer, 2017). Moreover, only 9% of respondents felt confident prescribing hormone replacement therapy (Johnson & Shearer, 2017). Johnson and Shearer (2017) hypothesize that a lack of formal education, a lack of exposure to trans people, and a lack of knowledge of gender-affirming guidelines are plausible reasons for medical residents' discomfort.

3.2. Knowledge and education

3.2.1. Barriers

Lack of training and knowledge regarding the provision of gender-affirming care. There is no standardized curriculum on trans health or gender-affirming care in Canadian medical, nursing schools and residency programs (Bourns, 2019; Snelgrove et al., 2012). Consequently, various literature reviews, surveys, and interviews with Canadian medical residents all report a lack of education among medical residents on gender-affirming care (Brooker & Loshak, 2020; Coutin et al., 2018; Snelgrove et al., 2012). Lack of training may result in low comfort levels among PCPs in providing gender-affirming care; for instance, a survey of 319 graduates from a Canadian medical residency program reported most respondents did not feel competent in gender-affirming care because of a lack of training (Coutin et al., 2018).

Lack of access to or awareness of professional resources regarding gender-affirming care. Interviews with Canadian PCPs found a lack of knowledge among PCPs of the existence of guidelines and resources available to support their delivery of gender-affirming care (Snelgrove, et al., 2012). The interviewed PCPs expressed difficulty in finding "trans-friendly" referral options for their patients (Snelgrove et al., 2012). Moreover, the PCPs reported a lack of reliable, PCP-directed information on trans-care management on the internet (Snelgrove et al., 2012).

Lack of comfort interacting with or speaking with transgender, non-binary or genderqueer patients (e.g. using pronouns, appropriate terminology). A Canadian

survey reported most PCPs do not know the specifics of gender-affirming care, including its relevant terminology and procedures (Coutin et al., 2018). Correspondingly, in interviews with Canadian PCPs, many admitted to a lack of knowledge of gender pronouns and feared offending patients (McPhail et al., 2016).

A common finding among the reviewed Canadian studies is that the lack of education contributes to the other barriers mentioned in this review, including physician concerns about the consequences of care (McPhail et al., 2016; Snelgrove et al., 2012), attitudes and values (Brooker & Loshak, 2020), and systemic deficiencies in addressing trans peoples' needs (Snelgrove et al., 2012).

3.2.2. Motivators

Provision of professional training and resources. Medical students and residents who received a lecture on trans health reported an increase in their comfort level with providing gender-affirming care 90 days after the intervention (Cherabie et al., 2018). A survey of PCPs in the United States found those who were knowledgeable in medical aspects of transition were more willing to provide gender-affirming care (Shires et al., 2018). Reasons PCPs have sought out training include wanting to fill a need in the community, their patients requesting gender-affirming care (Stryker et al., 2020), and individual interest (Spencer et al., 2017).

Inclusion of gender-affirming care in medical school curricula. Brooker & Loshak (2020) recommend embedding gender-affirming care education in Canadian medical and nursing schools to increase PCPs' competency. In another study of Canadian PCPs, one participant suggested introducing the topic of gender-affirming care in medical school could acquaint PCPs with the concept and its implications for practice (McPhail et al., 2016). Training topics should include hormone treatment, surgeries, and the variation of trans patients' needs (Brooker & Loshak, 2020). Research on Canadian PCPs recommend four teaching strategies to optimize PCPs' learning of gender-affirming care: small group learning, self-learning, standardized patient roleplay situations, and real in-clinic exposure (Bourns, 2019; McPhail et al., 2016).

3.3. Relevance to practice

3.3.1. Barrier

PCPs' belief that gender-affirming care is not within the scope of primary care. Snelgrove and colleagues (2012) previously reported that gender identity was viewed as an area of psychiatry in Canada. As a result, some PCPs believe they do not have the resources or expertise to provide gender-affirming care (Snelgrove et al., 2012).

3.3.2. Motivator

PCPs' belief that gender-affirming care is within the scope of primary care. 97% of respondents in a small survey of medical residents in the United States felt that

understanding trans healthcare was valuable to their practice (Johnson & Shearer, 2017).

3.4. Health system and institute

3.4.1. Barrier

Lack of support from the workplace for providing gender-affirming care. For example, focus groups with Canadian PCPs found a lack of gender selection options on patient intake forms and records negatively impacted the use of gender-affirming pronouns (Brooker & Loshak, 2020). Moreover, the lack of policies to address the division of responsibilities in healthcare has dissuaded PCPs from dedicating their time to trans patients during clinic hours (Snelgrove et al., 2012).

3.4.2. Motivators

Support of professional networks for providing gender-affirming care. Studies of PCPs in New Zealand and South Africa found that PCPs were more likely to provide gender-affirming care if they had personal networks or relationships with trans, non-binary and gender-diverse communities (Ker et al., 2020; Spencer et al., 2017). Ker and colleagues (2020) found that if these networks are designed to educate, advocate and provide care, it can increase PCPs likelihood of providing gender-affirming care in their own practice. Personal and professional networks can facilitate PCPs when making referrals for patients, educate them on updated guidelines and practices, and help PCPs ensure their practice is a safe space for their patients (Ket et al., 2020; Spencer et al., 2017).

3.5. Attitudes and values

3.5.1. Barrier

Attitudes and values are not in line with providing gender-affirming care. Canadian PCPs with personal biases and negative beliefs about gender identity, sexuality, or sexual health were less receptive to learning about and adopting gender-affirming care into their practice (Snelgrove et al., 2012). Similarly, an American study found PCPs who expressed transphobic values also reported having less knowledge on gender-affirming care (Stroumsa et al., 2019). Another study conducted in Malaysia linked internalized shame, fear, stereotypes, and discriminatory intent as barriers associated with providing gender-affirming care (Vijay et al., 2018).

3.5.2. Motivator

Attitudes and values are in line with providing gender-affirming care. A survey of American physicians found that lower levels of transphobia were associated with higher willingness to continue gender affirming therapy (Shires et al., 2018). Additionally, a

survey of PCPs in Malaysia showed they were more likely to believe in providing adequate care for gender diverse patients if their levels of stigma were lower (Vijay et al., 2018).

3.6. Accountability

3.6.1. Barriers

Concerns about the potential repercussions of providing gender-affirming care (e.g. malpractice, threatening medical license). Interviews with PCPs in Canada revealed concerns about patients regretting irreversible treatments (Snelgrove, et al., 2012). PCPs fear treatment regret because it may lead to patients taking legal action against the PCP and threaten their medical license (Snelgrove et al., 2012).

Concerns of gender-affirming care causing harm to patients (e.g. medical complications, negatively impacting mental health). Canadian PCPs reported concerns about prescribing hormone replacement therapy because of their knowledge that treatment outcomes can vary and have unknown impacts on a patient's body (McPhail et al., 2016). As a result of the varying treatment outcomes, some PCPs fear their patients may have unrealistic expectations that they cannot promise (Snelgrove, et al., 2012).

4. Survey

The research team surveyed primary care providers (PCPs) in Hamilton about their experience, motivators and barriers related to providing gender-affirming care. The following section shows the results of the survey.

4.1. Demographics

Table 2 shows the ages of the 43 PCPs who completed the survey. The average age of the respondents was 43 years old, with participants ranging from 29 to 65 years old. Most respondents fell into the 29-38 age group (16 out of 43 participants) and the 39-48 age group (15 out of 43 participants).

Table 2. Age of PCPs (N = 43)

Age	Number of participants (N)	Percentage of participants (%)
29-38	16	37.2 %
39-48	15	34.9 %
49-58	8	18.6 %
59+	4	9.3 %

Table 3 shows the frequencies of job titles reported by the 43 PCPs who completed the survey. The majority of respondents fell into the category of primary care physicians and nurse practitioners (25 out of 43 participants).

Table 3. Job titles of PCPs (N = 43)

Job title	Number of participants (N)	Percentage of participants (%)
Primary care physicians and nurse practitioners	25	58.1 %
Primary care registered nurses and physician assistants	10	23.3 %
Other PCPs	8	18.6 %

Table 4 shows the number of years the PCPs who responded to the survey have held their job title based on 43 responses. The majority of the PCPs that responded to the survey have held their position for 5-9 years (14 out of 43 participants).

Table 4. Number of years primary care professionals have held their job title (n = 43)

Job title	0 - 4 yrs	5 - 9 yrs	10 - 14 yrs	15 - 19 yrs	20 + yrs
Primary care physicians and nurse practitioners	3 (7.0%)	8 (18.6%)	3 (7.0%)	5 (11.6%)	6 (14.0%)
Primary care registered nurses and physician assistants	0	4 (9.3%)	4 (9.3%)	1 (2.3%)	1 (2.3%)
Other PCPs	3 (7.0%)	2 (4.7%)	1 (2.3%)	0	2 (4.7%)
All responses	6 (14.0%)	14 (32.5%)	8 (18.6%)	6 (14.0%)	9 (20.9%)

Table 5 shows the type of work environments the 43 respondents work in. The most common work environment for respondents was being part of a family health team (28 out of 43 participants).

Table 5. Type of work environment PCPs work in (N = 43)

Work environment	Number of times selected (N)	Percentage of times selected (%)
Family Health Team	28	51.8 %
Hospital	11	20.4 %
Private practice	8	14.8 %
Other	4	7.4 %
Community centre	3	5.6 %
Total number of selections	54	100 %

4.2. Level of experience providing gender-affirming care

Table 6 and 7 show which forms of gender-affirming care the surveyed PCPs have experience providing. 25 (58.1%) respondents have experience providing 1 or more assessed forms of care related to medical transition, and 34 (79.1%) respondents have experience providing non-medical aspects of transition (N = 43). Of the three forms of care related to medical transition, PCPs were most experienced in providing hormone

replacement therapy (22 out of 43 participants; 51.2%) and least experienced providing pubertal suppression (8 out of 43 participants; 18.6%).

Table 6. PCPs experience providing gender-affirming care (N = 43)

	Care related to medical transition			Non-medical aspects of transition
	Pubertal suppression	**Hormone replacement therapy**	**Support access to gender- affirming surgery**	**Non-medical support**
Yes	8 (18.6%)	22 (51.2%)	19 (44.2%)	34 (79.1%)
No	23 (53.5%)	11 (25.6%)	17 (39.5%)	6 (13.9%)
I don't know	2 (4.7%)	1 (2.3%)	1 (2.3%)	1 (2.3%)
Does not apply	10 (23.2%)	9 (20.9%)	6 (14%)	2 (4.7%)
All responses	43 (100%)	43 (100%)	43 (100%)	43 (100%)

Table 7. PCPs experience providing care related to medical transition (N = 43)

	PC physicians and nurse practitioners (N = 25)	PC registered nurses and physician assistants (N = 10)	Other PCP (N = 8)	All responses (N=43)
No experience	5 (20%)	7 (70%)	6 (75%)	18 (41.9%)
1 form assessed	4 (16%)	0 (0%)	2 (25%)	6 (14.0%)
2 forms assessed	11 (44%)	3 (30%)	0 (0%)	14 (32.5%)
All 3 forms assessed	5 (20%)	0 (0%)	0 (0%)	5 (11.6%)

Table 8 shows the surveyed PCPs' experience providing pubertal suppression by job title. Of the 8 respondents who had experience providing pubertal suppression, 7 of them were PC physicians and nurse practitioners and 1 was a PC registered nurse or physician assistant.

Table 8. PCPs experience providing pubertal suppression by job title (N = 43)

	PC physicians and nurse practitioners	PC registered nurses and physician assistants	Other PCP	All responses
Yes	7 (16.3%)	1 (2.3%)	0 (0%)	8 (18.6%)
No	16 (37%)	6 (14%)	1 (2.3%)	23 (53.5%)
I don't know	0 (0%)	1 (2.3%)	1 (2.3%)	2 (4.6%)
Does not apply	2 (4.7%)	2 (4.7%)	6 (14%)	10 (23.3%)
All responses	25 (58%)	10 (23.3%)	8 (18.6%)	43 (100%)

Table 9 shows the surveyed PCPs' experience providing hormone replacement therapy (HRT) by job title. Of the 22 respondents who had experience providing HRT, 19 of them were PC physicians and nurse practitioners, 2 were a PC registered nurse or physician assistant, and 1 fell under the category of other.

Table 9. PCPs experience providing hormone replacement therapy by job title (N = 43)

	PC physicians and nurse practitioners	PC registered nurses and physician assistants	Other PCP	All responses
Yes	19 (44.2%)	2 (4.7%)	1 (2.3%)	22 (51.2%)
No	5 (11.6%)	6 (14%)	0 (0%)	11 (25.6%)
I don't know	0 (0%)	0 (0%)	1 (2.3%)	1 (2.3%)
Does not apply	1 (2.3%)	2 (4.7%)	6 (14%)	9 (20.9%)
All responses	25 (58.1%)	10 (23.3%)	8 (18.6%)	43 (100%)

Table 10 shows the surveyed PCPs' experience providing assessments and support in accessing gender-affirming surgery by job title. Of the 19 respondents who had experience providing support in accessing gender-affirming surgery, 15 of them were PC physicians and nurse practitioners, 3 were a PC registered nurse or physician assistant, and 1 fell under the category of other.

Table 10. PCPs experience providing assessments and support in accessing gender-affirming surgery by job title (N = 43)

	PC physicians and nurse practitioners	PC registered nurses and physician assistants	Other PCP	All responses
Yes	15 (34.9%)	3 (7%)	1 (2.3%)	19 (44.2%)
No	9 (21%)	6 (14%)	2 (4.7%)	17 (39.5%)
I don't know	0 (0%)	0 (0%)	1 (2.3%)	1 (2.3%)
Does not apply	1 (2.3%)	1 (2.3%)	4 (9.3%)	6 (14%)
Total responses	25 (58.1%)	10 (23.3%)	8 (18.6%)	43 (100%)

Table 11 shows the surveyed PCPs' experience providing non-medical aspects of gender-affirming care by job title. Of the 34 respondents who had experience providing non-medical aspects of gender-affirming care, 20 of them were PC physicians and nurse practitioners, 8 were a PC registered nurse or physician assistant, and 6 fell under the category of other.

Table 11. PCPs experience providing non-medical aspects of gender-affirming care by job title (N = 43)

	PC physicians and nurse practitioners	PC registered nurses and physician assistants	Other PCP	All responses
Yes	20 (46.5%)	8 (18.6%)	6 (14%)	34 (79.1%)
No	4 (9.3%)	2 (4.7%)	0 (0%)	6 (14%)
I don't know	0 (0%)	0 (0%)	1 (2.3%)	1 (2.3%)
Does not apply	1 (2.3%)	0 (0%)	1 (2.3%)	2 (4.6%)
Total responses	25 (58.1%)	10 (23.3%)	8 (18.6%)	43 (100%)

Table 12 shows the number of PCPs asked about different types of gender-affirming care by patients. As the table shows, the most common form of gender-affirming care asked by patients was non-medical aspects of gender-affirming care (29 out of 43 participants; 67.4%). The second most common form was hormone replacement therapy (27 out of 43 participants; 62.8%). Comparably, Table 12 results reflect the results in Table 6 outlining PCPs experience with providing gender-affirming care.

Table 12. Types of gender-affirming care asked by patients by job title (N=43)

	PC Physicians and Nurse Practitioners	PC Registered Nurses and Physician Assistants	Other PCP	Total number of selections
Pubertal suppression	10 (40%)	1 (10%)	1 (12.5%)	12
Hormone replacement therapy	21 (84%)	4 (40%)	2 (25%)	27
Accessing gender-affirming surgery	20 (80%)	3 (30%)	1 (12.5%)	24
Non-medical aspects of gender-affirming care	18 (72%)	6 (60%)	5 (62.5%)	29
Not been asked about any form of gender-affirming care	1 (4%)	3 (30%)	2 (25%)	6
I don't know	1 (4%)	0 (0%)	0 (0%)	1
Total number of selections	71	17	11	99

Table 13 shows which type of gender-affirming care PCPs received training on by job title. PCPs most commonly received training on non-medical aspects of gender-affirming care (19 out of 43 participants). Notably, 16 out of 43 respondents indicated that they have not received any training on topics of gender-affirming care.

Table 13. Type of gender-affirming care PCPs received training on by job title (N=43)

	PC physicians and nurse practitioners	PC registered nurses and physician assistants	Other PCP	Total number of selections
Pubertal suppression	3 (12%)	0 (0%)	0 (0%)	3
Hormone replacement therapy	13 (52%)	0 (0%)	1 (12.5%)	14
Accessing gender-affirming surgery	11 (44%)	1 (10%)	0 (0%)	12

Non-medical aspects of gender-affirming care	11 (44%)	4 (40%)	4 (50%)	19
No training	10 (40%)	3 (30%)	3 (37.5%)	16
I don't know	0 (0%)	0 (0%)	0 (0%)	0
Total number of selections	48	8	8	64

Table 14 shows the reasons why PCPs sought training or education on gender-affirming care. The most common reasons for receiving training were to form better relationships with their patients (19 out of 43 participants), a moral obligation (18 out of 43 participants) and previous experience working with trans and non-binary patients (13 out of 43 participants).

Table 14. PCPs reasons for receiving training in gender-affirming care (N = 43)

	PC physicians and nurse practitioners	PC registered nurses and physician assistants	Other PCP	Total number of selections
It was a part of my medical school curriculum	2 (8%)	0 (0%)	0 (0%)	2
I was curious about it	6 (24%)	4 (40%)	2 (25%)	12
I felt a moral obligation to learn about it	8 (32%)	5 (50%)	5 (62.5%)	18
I have a personal connection to the communities who commonly seek gender-affirming care (e.g., the trans community)	4 (16%)	3 (30%)	2 (25%)	9
I had previous experiences with trans and non-binary patients	6 (24%)	5 (50%)	2 (25%)	13
It was required by my employer	2 (8%)	1 (10%)	1 (12.5%)	4
A patient requested this type of care	8 (32%)	2 (20%)	0 (0%)	10
Gender-affirming care is not widely available in my	5 (20%)	1 (1%)	1 (0%)	7

community and I want to change that				
I felt it would allow me to form better relationships with my patients	9 (36%)	6 (60%)	4 (50%)	19
Total number of selections	50	27	17	94

4.3. Level of confidence, education and attitudes

Respondents were asked for their level of agreement with various statements addressing their confidence, education, practice, and beliefs about gender-affirming care. The level of agreement was rated on a 5-point scale, where 1 meant they strongly disagreed and 5 meant they strongly agreed. Below presents the results in three tables: Table 15 shows the overall distribution of results, Table 16 shows the weighted average of results by job title, and Table 17 shows the distribution by respondents' level of experience with providing gender affirming care.

The weighted average in Tables 15 and 16 suggests PCPs neither disagree nor agree with having a lack of knowledge of gender-affirming care (C, 3/5). However, the distribution of respondents' answers in Table 15 show that statement (C) has a neutral overall score because of a split vote rather than respondents voting neutral. 18 (41.9%) respondents agreed with the statement to some extent, 19 (44.9%) respondents disagreed with the statement to some extent and 6 (14%) respondents were neutral.

Table 15. Perceptions of gender-affirming care (N = 43)

Statement	1 - Strongly Disagree	2 - Disagree	3 - Neutral	4 - Agree	5 - Strongly Agree	Weighted average (standard deviation)
(A) I am confident in my ability to provide respectful and informed gender-affirming care (n=43).	6 (14%)	5 (11.6%)	10 (23.2%)	16 (37.2%)	6 (14%)	3.3(1.3)
(B) I have received proper training regarding the provision of gender-affirming care (n=43).	11 (25.6%)	7 (16.3%)	11 (25.6%)	10 (23.2%)	4 (9.3%)	2.7(1.3)
(C) I have enough knowledge about gender-affirming care that I feel comfortable providing it (n=43).	6 (14%)	12 (27.9%)	6 (14%)	14 (32.5%)	5 (11.6%)	3(1.3)

(D) I have access to or am aware of training resources regarding gender-affirming care (n=43).	4 (9.3%)	9 (20.9%)	7 (16.3%)	17 (39.5%)	6 (14%)	3.3(1.2)
(E) If provided with training and resources regarding gender-affirming care, I would feel comfortable starting to provide it (n=42).	4 (9.5%)	2 (4.8%)	2 (4.8%)	18 (42.8%)	16 (38.1%)	4(1.3)
(F) I feel comfortable interacting with or speaking with transgender, non-binary or genderqueer patients (e.g. using pronouns, appropriate terminology) (n=43).	1 (2.3%)	5 (11.6%)	2 (4.7%)	21 (48.8%)	14 (32.6%)	4(1.0)
(G) I believe medical training should cover topics of gender-affirming care (n=43).	2 (4.7%)	2 (4.7%)	3 (7%)	8 (18.6%)	28 (65.1%)	4.3(1.1)
(H) I believe gender-affirming care is within the scope of my practice (n=43).	1 (2.3%)	4 (9.3%)	5 (11.6%)	14 (32.5%)	19 (44.1%)	4(1.1)
(I) The institution(s)/centre(s) I practice at support health care providers in providing gender-affirming care to patients (n=43).	4 (9.3%)	1 (2.3%)	8 (18.6%)	11 (25.6%)	18 (41.9%)	3.9(1.3)
(J) I have a professional network that supports me in providing gender-affirming care (n=43).	3 (7%)	4 (9.3%)	6 (14%)	14 (32.5%)	16 (37.2%)	3.8(1.2)
(K) My attitudes and values are in line with providing gender-affirming care (n=43).	1 (2.3%)	2 (4.7%)	5 (11.6%)	12 (27.9%)	23 (53.5%)	4.3(1.0)
(L) I have concerns about the potential repercussions of providing gender-affirming care (e.g., malpractice, threatening medical license) (n=43).	9 (20.9%)	15 (34.9%)	14 (32.6%)	4 (9.3%)	1 (2.3%)	2.4(1.0)
(M) I have concerns that providing gender-affirming care would cause harm to patients (e.g., medical complications, negatively impacting mental health) (n=43).	12 (27.9%)	15 (34.9%)	8 (18.6%)	7 (16.3%)	1 (2.3%)	2.3(1.1)

Table 16 shows respondents' level of agreement by job titles. Table 16 explains any differences in agreement across participants' job titles. The levels of agreement were similar across titles for most of the statements. However, when asked about their access and awareness of training resources (D), PC physicians and nurse practitioners slightly agreed (3.6/5) and PC registered nurses and physician assistants slightly disagreed (2.6/5). Moreover, PC physicians and nurse practitioners slightly agreed more (4/5) than PC registered nurses and physician assistants slightly disagreed (3.3/5) when asked about supportiveness of their work environment (I).

Table 16. Perceptions of gender-affirming care by job title (N = 43)

Statement	PC physicians and nurse practitioners	PC registered nurses and physician assistants	Other PCP	All responses
(A) I am confident in my ability to provide respectful and informed gender-affirming care (n=43).	3.4(1.1)	3(1.4)	3(1.6)	3.3(1.3)
(B) I have received proper training regarding the provision of gender-affirming care (n=43).	2.8(1.2)	2.5(1.6)	2.8(1.4)	2.7(1.3)
(C) I have enough knowledge about gender-affirming care that I feel comfortable providing it (n=43).	3.2(1.2)	2.6(1.4)	2.8(1.5)	3(1.3)
(D) I have access to or am aware of training resources regarding gender-affirming care (n=43).	3.6(1.0)	2.6(1.4)	3.1(1.4)	3.3(1.2)
(E) If provided with training and resources regarding gender-affirming care, I would feel comfortable starting to provide it (n=42).	4(1.2)	4(1.7)	3.9 (0.8)	4(1.3)
(F) I feel comfortable interacting with or speaking with transgender, non-binary or genderqueer patients (e.g. using pronouns, appropriate terminology) (n=43).	3.9(1.0)	4(1.2)	4.1(1.0)	4(1.0)
(G) I believe medical training should cover topics of gender-affirming care (n=43).	4.4(0.9)	4.2(1.7)	4.5(1.1)	4.3(1.1)
(H) I believe gender-affirming care is within the scope of my practice (n=43).	4(1.1)	4.2(1.2)	4.3(0.9)	4(1.1)

(I) The institution(s)/centre(s) I practice at support health care providers in providing gender-affirming care to patients (n=43).	4(1.3)	3.3(1.3)	4.5(0.9)	3.9(1.3)
(J) I have a professional network that supports me in providing gender-affirming care (n=43).	4(1.1)	3.1(1.5)	4.1(0.8)	3.8(1.2)
(K) My attitudes and values are in line with providing gender-affirming care (n=43).	4.2(1.0)	4.4(1.3)	4.4(0.5)	4.3(1.0)
(L) I have concerns about the potential repercussions of providing gender-affirming care (e.g., malpractice, threatening medical license) (n=43).	2.5(1.0)	2.2(0.9)	2.3(1.0)	2.4(1.0)
(M) I have concerns that providing gender-affirming care would cause harm to patients (e.g., medical complications, negatively impacting mental health) (n=43).	2.4(1.1)	2.3(1.4)	2(1.1)	2.3(1.1)

Table 17 provides an overview of various factors that may impact PCPs provision of gender-affirming care by respondents' level of experience. Participants with some experience providing gender-affirming care strongly agreed that accessing training and resources would help them feel more comfortable providing gender-affirming care (4.3/5, N=18). Moreover, on average, PCPs agreed that topics of gender-affirming care should be covered in medical training (4/5, N=43). Notably, participants with some experience providing gender-affirming care agreed with the statement slightly more (4.6/5, N=19) than participants who had little or no experience (4.1/5, N=24). Lastly, the majority of surveyed PCPs agreed their attitudes and values are in line with providing gender-affirming care (4.3/5, N=43). Participants with experience providing gender-affirming care indicated a stronger level of agreement with this statement (4.4/5, N=19) than participants who had little or no experience (4.1/5, N=24).

Table 17. Perceptions of gender-affirming care by level of experience with medical aspects of gender-affirming care (N = 43)

Statement	Little or no experience (0 or 1 assessed forms, N = 24)	Some experience (2 or more assessed forms, N = 19)	All responses (N = 43)
(a) I am confident in my ability to provide respectful and informed gender-affirming care (n=43).	2.6(1.3)	4.1(0.6)	3.3(1.3)

(b) I have received proper training regarding the provision of gender-affirming care (n=43).	2.3(1.2)	3.3(1.2)	2.7(1.3)
(c) I have enough knowledge about gender-affirming care that I feel comfortable providing it (n=43).	2.3(1.2)	3.8(0.8)	3(1.3)
(d) I have access to or am aware of training resources regarding gender-affirming care (n=43).	2.8(1.3)	4(0.8)	3.3(1.2)
(e) If provided with training and resources regarding gender-affirming care, I would feel comfortable starting to provide it (n=42).	3.7(1.4)	4.3(0.9)	4(1.3)
(f) I feel comfortable interacting with or speaking with transgender, non-binary or genderqueer patients (e.g., using pronouns, appropriate terminology) (n=43).	3.8(1.1)	4.2(1.0)	4(1.0)
(g) I believe medical training should cover topics of gender-affirming care (n=43).	4.1(1.3)	4.6(0.7)	4.3(1.1)
(h) I believe gender-affirming care is within the scope of my practice (n=43).	3.7(1.2)	4.5(0.7)	4(1.1)
(i) The institution(s)/centre(s) I practice at support health care providers in providing gender-affirming care to patients (n=43).	3.7(1.5)	4.3(0.8)	3.9(1.3)
(j) I have a professional network that supports me in providing gender-affirming care (n=43).	3.5(1.4)	4.3(0.7)	3.8(1.2)
(k) My attitudes and values are in line with providing gender-affirming care (n=43).	4.1(1.1)	4.4(0.8)	4.3(1.0)
(l) I have concerns about the potential repercussions of providing gender-affirming care (e.g., malpractice, threatening medical license) (n=43).	2.3(1.1)	2.5(0.9)	2.4(1.0)
(m) I have concerns that providing gender-affirming care would cause harm to patients (e.g., medical complications, negatively impacting mental health) (n=43).	2.4(1.3)	2.2(0.9)	2.3(1.1)

4.4. Final comments

The survey provided open-ended questions for participants to expand on factors that inhibit or motivate them to provide gender-affirming care and possible interventions to help support them. 11 out of 43 participants commented on factors in the survey and 12

out of 43 commented on unmentioned factors. 23 out of 43 listed ways they could be supported in the future.

Table 18 shows the three main ideas described most frequently when expanding on factors that motivate or prevent them from providing gender-affirming care: education (N=4), scope of primary care (N=2), and internal biases (N=2).

Table 18. Motivation and barrier themes from open-ended responses

Theme	Explanation	Illustrative Quote(s)
Education	Participants expressed interest in being educated on gender-affirming care, but that access to educational resources is limited and often time consuming (N=4)	*"I have been interested in the past with the education provided, but with just two patients in the practice interested in transitioning, it is very difficult to do three to four full days of education on this topic for the sessions I have seen."*
Scope of primary care	One participant expressed that primary care is the best place for patients who are seeking gender-affirming care (N=1) Another participant felt that treatments that fall under gender-affirming care do not fall within the scope of primary care (N=1)	*"Gender-affirming care = person-centred care = primary care. This is exactly where best care & supports should be accessed for all who require it."* *"Puberty suppression would not be something that I feel should be delivered in primary care."*
Internal Biases	Some participants expressed having to fight their own internal biases or have a conscientious objection to providing gender-affirming care, but ensured that their patients are still able to seek the care they need (N=2)	*"Finally as a white cis-gendered person who grew up in a less accepting time - I have to occasionally fight my own internal biases and I am open with my clients and highlight that they can call me out as needed which seems to have been effective to date."* *"I am very aware of this vulnerable population and wish to provide compassionate care/supports as needed. The reason I do not personally prescribe transitioning therapies is related to my personal understanding of gender and my conscientious objection to a change in gender. I will not allow my personal views to prevent any of my patients from receiving the care they desire, and so I have formed a connection with colleagues who are comfortable providing this care. I always assure my patients that I continue to care for*

		their ongoing health needs while they see my colleagues for this area of practice and I am fortunate to have many excellent relationships with my trans patients."

Below are some of the influential factors participants mentioned that were not mentioned in the survey:

- Setting aside time to educate oneself is difficult to do (N=2)
- Long waiting times in their area motivates them to provide gender-affirming care (N=1)
- Certifications needed to write letters of support are strict (N=1)
- Capacity for new patients is limited (N=1)
- Concerns about offending patients (N=1)
- Educating others who are enthusiastic serves as a motivator (N=1)

Table 19 shows possible interventions that participants would find helpful in providing gender-affirming care, including training (N=14), community of practice (N=4), and relevant mental health resources (N=3).

Table 19. Possible interventions to support PCPs with providing gender-affirming care

Intervention	Explanation	Illustrative Quote
Education/ Training	Participants expressed more formal training is needed on both the medical (surgeries, puberty suppression) and non-medical aspects of gender-affirming care that is specific to their workplace (i.e., emergency department) which could look like a focused one-day workshop or online modules (N=14)	*"More formal training. All of the education I have received has been from my own reading and from mentorship with a colleague - it's a great start, but some foundational modules or workshops would have given more confidence in my earlier days."*
Community of Practice	Participants stated it would be nice to have a place where health care professionals (including surgeons and endocrinologists) can ask each other questions, seek mentorship, or find a referral if their workplace cannot support follow ups for gender-affirming care (N=4)	*"A referral number or consultant I could send patients to. As an ER doctor it would not be appropriate for me to initiate care without followup but I would like to be able to help transgender patients receive gender-affirming care."*
Mental Health Support	Participants would like to learn about mental health resources (i.e. therapy, peer support groups) that are easily accessible and affordable (or covered by	*"I would like to know where to direct my patients in Hamilton for accessible and affordable therapy and peer support."*

	OHIP) that they can refer their patients to (N=3)	

5. Discussion

This study investigated plausible factors that influence primary care practitioners (PCPs) provision of gender-affirming care in Hamilton. To do this, the research team conducted a brief scoping review to investigate previously-studied factors (i.e., motivators and barriers) and then assessed the plausible importance of these factors in a survey distributed to PCPs across Hamilton. In total, 43 PCPs responded to the survey, and our analysis revealed some patterns and themes in the data that could strategically inform HTHC's future work to increase provision in the city.

Given the exploratory nature of this research, we first want to acknowledge that our interpretation of the findings and discussion of the implications are tentative. For instance, due to difficulties recruiting PCPs in Hamilton to fill out a survey, a small sample size of 43 was used in our analysis. A small sample size led to a relatively high variance in the data (e.g., many reported standard deviations were at least 1 Likert scale point away from the average) preventing us from conducting statistical tests and distinguishing certain factors over others in terms of their probable level of importance in shaping PCPs' provision of gender-affirming care. Moreover, the sample may be biased in terms of who was made aware of and decided to fill out the survey. Notably, the majority of respondents reported working for a family health team, with only approximately 15% of the sample representing individuals from private practice. We believe it's important to reflect on whether those from family health teams might tend to have different experiences providing gender-affirming care than PCPs in private practice due to institutional pressures, supports, and/or guidelines. Similarly, self-selection bias, or the fact that PCPs decided for themselves whether to fill the survey out or not, may have led to an overrepresentation of respondents with a positive concern for transgender and non-binary healthcare issues.

With these limitations in mind, a central finding from this study is that although the majority of respondents in our survey (79.1%) reported having experience with non-medical aspects of medical transition (e.g., using patients' preferred name and pronouns), just under half (41.9%) had no experience (including 20% of physicians and nurse practitioners) providing care related to medical transition (i.e., pubertal suppression, hormone replacement therapy, and gender-affirming surgery). It is important to note that all but five professionals (four of which were non-physicians or nurse practitioners) reported having been asked about gender-affirming care by a patient previously, so the lack of experience cannot be solely attributed to a lack of demand among patients.

5.1 Possible barriers to providing gender-affirming care

Among PCPs with little or no experience providing medical-related gender-affirming care, on average they reported:

- Low confidence in their ability to provide respectful and informed gender-affirming care,
- A lack of proper training regarding the provision of gender-affirming care,
- Lack of sufficient knowledge about gender-affirming care, and
- Lack of access to or awareness of training resources regarding gender-affirming care.

These factors emerge as plausible barriers after accounting for variables such as:

- Believing that gender-affirming care is within the scope of their practice,
- Perceiving adequate institutional support for providing gender-affirming care, and
- Having attitudes and values that are in line with providing gender-affirming care,

to which, on average, participants responded positively.

To a lesser extent, entrenched personal beliefs about gender identity and sexual health at odds with trans patients' lives may deter some PCPs' from personally addressing certain trans'- and non-binary peoples' health needs. For instance, in our study, a small number of PCPs reported that their attitudes and values were not in line with providing gender-affirming care. Although one physician elaborated that their personal beliefs did not prevent them from referring trans patients to colleagues that could provide the care they need, these beliefs deterred the individual from offering this care themselves.

5.2 Possible motivators for providing gender-affirming care

PCPs with some experience providing gender-affirming care reported on average:

- High confidence in their ability to provide respectful and informed gender-affirming care,
- A high comfort level interacting with or speaking with transgender, non-binary, or genderqueer patients (e.g., using pronouns, appropriate terminology),
- Attitudes and values in line with providing gender-affirming care,

corresponding with:

- Access to or awareness of training resources regarding gender-affirming care,
- Institutional support for providing gender-affirming care,
- A professional network that supports them in providing gender-affirming care.

Regardless of PCPs' experience providing gender-affirming care, respondents reported, on average, that:

- If they were provided with training and resources regarding gender-affirming care, they would feel more comfortable providing it,
- Medical training should cover topics of gender-affirming care.

These findings may suggest that access to education, training, and resources, along with high comfort, confidence, and positive attitudes and values towards working with transgender, non-binary, or genderqueer patients are enablers of gender-affirming care.

5.3 Possible interventions to increase the provision of gender-affirming care

Though our findings are speculative, many are in line with what's already been studied in the medical literature. Combining insights from this study with insights in the literature foreground two potential intervention areas that could increase the scope and scale of gender-affirming healthcare availability in Hamilton:

1. *Improve access to appropriate education and training*

A central pattern to our findings was the potential importance of knowledge-based interventions to the provision of gender-affirming care. Knowledge-based interventions can be further distinguished by their relevance to medical school education vs. professional (or "post-medical school") education and training opportunities.

Our findings state that a large number of PCPs have not received any training on topics relating to gender-affirming care, and who believe that more training opportunities on both the medical and non-medical aspects of gender-affirming care should be made available. Of those with training in gender-affirming care, only two physicians and/or nurse practitioners had received this training in medical school. These findings are consistent with literature highlighting that only a minority of medical professionals obtain formal training on transgender health issues while in medical school (Johnson & Shearer, 2017; Snelgrove et al., 2012). This structural disparity points to a need for upstream interventions to advocate for gender-affirming care as a formal requirement of PCP training. Indeed, increasing access to knowledge on transgender health issues and guidelines for providing gender-affirming care in medical school curricula has been found to positively influence attitudes and comfort levels with providing medical aspects of gender-affirming care such as hormonal therapy among medical students (Cherabie et al., 2018; Safer & Pearce, 2013; Thomas & Safer, 2015). Though intervening in the medical education system is nonspecific to the Hamilton region, supporting initiatives seeking to standardize gender-affirming care in medical training may increase the number of PCPs trained in gender-affirming care who go on to establish their practice in Hamilton.

Though most PCPs in our study did not receive training on gender-affirming care in medical school, a corresponding and relevant finding is that many sought out other forms of training to fill this gap. Indeed, the majority of our sample agreed that, if provided with more training and resources, they would feel more comfortable providing gender-affirming care. This suggests a need to increase available information and resources related to appropriate care strategies for transgender and non-binary people

for working primary care professionals. Though our closed-ended survey research falls short of identifying what information is necessary for PCPs, previous qualitative research with Ontario physicians suggests a need for more widely available information on appropriate clinical management of trans patients (i.e., clinical guidelines), ethical considerations regarding medical transitioning treatments, and the process for diagnosing (vs. pathologizing) gender identity dysphoria (Snelgrove et al., 2012). These findings highlight a plausible need to support professional training courses, workshops, and online resources on topics relating to gender-affirming care that are targeted to PCPs in Hamilton. Moreover, HTHC could consider championing the dissemination of appropriate clinical guidelines for gender-affirming care, such as the guidelines published by Rainbow Health Ontario (Bourns, 2019).

2. *Develop a community of practice*

Our findings suggest a strong relational aspect to the provision of gender-affirming care. Survey results suggest a significant number of PCPs feel morally obligated to support transgender and non-binary healthcare needs out of their personal connections to the communities seeking care and a desire to improve relationships with patients. Some participants also discussed the desire for increased connections to other healthcare professionals who can collaborate on gender-affirming care strategies, seek mentorship, and find referrals if their workplace cannot support follow-ups for gender-affirming care. The latter findings are consistent with research highlighting the perceived importance of establishing communities of service professionals to build referral networks, transfer best practices regarding transgender and non-binary medical care, and better coordinate services (Snelgrove et al., 2012; Spencer et al., 2017).

Developing a community of practice in Hamilton could support existing and future primary care professionals in all aspects of gender-affirming care. Existing family health teams and networks could constitute an initial institutional basis for this community, though it should not be restricted to healthcare professionals. As previously discussed, our findings propose that personal connections to the transgender and non-binary community are a motivator for increasing competency in gender-affirming care. Moreover, Ker et al. (2020) found that partnering with gender-diverse communities and seeking their practical input can make the clinical environment more accessible and affirming from the perspective of transgender and non-binary patients. As such, a community of practice should foster active collaboration and partnerships with the populations it’s seeking to better serve.

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Appendix A: Survey Questions

Thank you for your interest in participating in this survey about your experience with providing gender-affirming care. Your feedback will help the Hamilton Trans Health Coalition (HTHC) with designing interventions to increase gender-affirming care in primary healthcare practices within Hamilton. The survey should take approximately 10 minutes to complete.

Your responses will be completely confidential and anonymized. The feedback that you provide will not affect your current practice or relationships with patients.

Participating in this survey is completely voluntary and you are able to stop taking the survey at any time. You have the option to skip any question (other than two mandatory screening questions) that you are not comfortable answering.

If you have questions, or you require translation and any form of assistance to complete this survey, please contact us at sab.denicola@gmail.com and coordinator@hthc.ca

By proceeding with the survey and clicking “submit” at the end of the survey, you are indicating your consent to participate in this survey. If you do not want to participate in the survey, you can exit the survey by closing this tab in your browser.

1. What is your job title? (mandatory)
    a. Primary care physician (i.e., family doctor)
    b. Registered nurse in a primary care practice
    c. Nurse practitioner in a primary care practice
    d. Physician assistant in a primary care practice
    e. Other:

2. How many years have you held this job title?
    a. 0-4
    b. 5-9
    c. 10-14
    d. 15-19
    e. 20+
    f. Prefer not to answer

3. What is your age?
    - *(Open-ended question)*

4. Do you work in Hamilton, Ontario? (mandatory)
    a. Yes
    b. No

5. What environment(s) do you work/practice in? (Check all that apply)
    a. Private practice
    b. Part of a Family Health Team
    c. Hospital
    d. Community centre
    e. Other: ____

f. Prefer not to answer

Gender-affirming care in primary care settings can be divided into two categories: care related to medical transition (e.g., puberty suppression, hormone replacement therapy, gender-affirming surgery access) and care related to non-medical aspects of transition (e.g., using correct name and pronouns, education on safe chest binding and genital tucking, providing a letter to support legal gender marker change).

6. Within your primary care practice, have you ever provided **pubertal suppression as a form of medical transition to a patient?**

a. Yes
b. No
c. I do not know
d. This does not apply to me
e. Prefer not to answer

7. Within your primary care practice, have you ever provided **hormone replacement therapy as a form of medical transition to a patient?**

a. Yes
b. No
c. I do not know
d. This does not apply to me
e. Prefer not to answer

8. Within your primary care practice, have you ever provided **assessments and support accessing gender-affirming surgery for a patient?**

a. Yes
b. No
c. I do not know
d. This does not apply to me
e. Prefer not to answer

9. Within your primary care practice, have you ever provided **non-medical aspects of transition to a patient** (e.g. using correct name and pronouns, education on safe chest binding and genital tucking, providing a letter to support legal gender marker change)?

a. Yes
b. No
c. I do not know
d. This does not apply to me
e. Prefer not to answer

10. Have you ever been asked by a patient about gender-affirming care? (select all that apply)

a. I have been asked about pubertal suppression
b. I have been asked about hormone replacement therapy
c. I have been asked about accessing gender-affirming surgery
d. I have been asked about non medical aspects of gender-affirming care
e. I have not been asked about any form of gender-affirming care
f. I do not know if I have been asked about gender-affirming care
g. This does not apply to me
h. Prefer not to answer

11. Have you received education/training regarding gender-affirming care? (select all that apply)

a. I have received training on pubertal suppression
b. I have received training on hormone replacement therapy
c. I have received training on accessing gender-affirming surgery
d. I have received training on non medical aspects of gender-affirming care
e. I have not received training on any form of gender-affirming care
f. I do not know if I have received training on any form of gender-affirming care
g. This does not apply to me
h. Prefer not to answer

12. If you have received education/training regarding gender-affirming care, why did you obtain it? (Select all that apply)

- It was a part of my medical school curriculum
- I was curious about it
- I felt a moral obligation to learn about it
- I have a personal connection to the communities who commonly seek gender-affirming care (e.g., the trans community)
- I had previous experiences with trans and non-binary patients
- It was required by my employer
- A patient requested this type of care
- Gender-affirming care is not widely available in my community and I want to change that
- I felt it would allow me to form better relationships with my patients
- Other: ____
- I did not receive education/training on gender-affirming care
- Prefer not to answer

13. To what extent do you agree or disagree with the following statements? 1 being “strongly disagree” and 5 being “strongly agree.”

Answer options: 1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5- strongly agree, and prefer not to answer, N/A

Subtitle: General confidence

a. I am confident in my ability to provide respectful and informed gender-affirming care

Subtitle: Education

b. I have received proper training regarding the provision of gender-affirming care
c. I have enough knowledge about gender-affirming care that I feel comfortable providing it
d. I have access to or am aware of training resources regarding gender-affirming care
e. If provided with training and resources regarding gender-affirming care, I would feel comfortable starting to provide it
f. I feel comfortable interacting with or speaking with transgender, non-binary or genderqueer patients (e.g., using pronouns, appropriate terminology)
g. I believe medical training should cover topics of gender-affirming care

Subtitle: Relevance to practice

h. I believe gender-affirming care is within the scope of my practice

Subtitle: Health system/institute

i. The institution(s)/centre(s) I practice at support health care providers in providing gender-affirming care to patients
j. I have a professional network that supports me in providing gender-affirming care

Subtitle: Attitudes and Values

k. My attitudes and values are in line with providing gender-affirming care

Subtitle: Accountability

l. I have concerns about the potential repercussions of providing gender-affirming care (e.g., malpractice, threatening medical license)
m. I have concerns that providing gender-affirming care would cause harm to patients (e.g., medical complications, negatively impacting mental health)

14. The above statements asked you about various factors that may impact your ability to confidently provide gender-affirming care (i.e., education, relevance to practice, attitudes and values, and accountability). Would you like to provide an additional rationale or comments on one or more of these factors?

- *(open-ended question)*

15. What support would you find helpful for increasing your confidence with providing gender-affirming care?

- *(open-ended question)*

16. Are there any other factors that would motivate you or hinder you from providing gender affirming care that were not mentioned in this survey?

- *(open-ended question)*