

## THE DELIVERY OF PRIMARY CARE FOR TRANSGENDER INDIVIDUALS

EXPLORING THE DELIVERY AND IMPLEMENTATION OF PRIMARY  
CARE SERVICES FOR TRANSGENDER INDIVIDUALS: AN ONTARIO  
CASE STUDY

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### **Lay Abstract**

Primary care, such as a family doctor, is where people get day-to-day healthcare. Worldwide, transgender individuals encounter barriers to appropriate healthcare, in particular access to practitioners who understand their health needs. This thesis aims to explore how primary care services are delivered to transgender individuals in Ontario, through a study that examined different ways services are provided, from a family doctor working alone in a clinic to a clinic with a team of practitioners (e.g., family doctors, nurse practitioners, nurses, counsellors). Interviews with practitioners, a survey, and clinic documents showed that primary care for transgender individuals is part of regular primary care services; whether delivered via a rapid access specialty clinic or embedded into regular primary care services, study participants were easily able to integrate primary care for transgender individuals into their routine work. However, evidence also highlighted the need for practitioners to obtain specialized knowledge of transgender needs.

## **Abstract**

Transgender individuals represent one of the most marginalized and underserved populations in healthcare. Issues such as discrimination, lack of practitioner experience and knowledge, and a deficiency of services have contributed to the healthcare barriers experienced by transgender individuals. There is a lack of literature demonstrating how primary care services are delivered to transgender individuals and a need for research that helps advance our knowledge about the delivery and implementation of primary care services for this population. This thesis explores how primary care services are delivered and implemented from a perspective that acknowledges the complexities of the healthcare needs of the transgender population.

A multiple-case study design was used to explore the implementation and delivery of primary care for transgender individuals in Ontario within different delivery models of primary care and through diverse roles of primary care team members. Normalization Process Theory, an implementation theory and conceptual framework, was used in this study to understand and explain the dynamic processes that occur during implementation of interventions in healthcare, and guide data collection and analysis. Three cases representing different models of primary care delivery in Ontario were identified, all of which provide primary care services to transgender individuals. These models included a solo physician Fee-For-Service practice, a Family Health Team and a Community

Health Centre. The multiple sources of data collection strategies used were interviews, a survey, documental evidence, and field notes. Participants included multiple members of the primary healthcare team, such as practitioners, clinical support staff and executive directors. This study helps to advance our knowledge of the delivery and implementation of primary care services for transgender individuals. Implications for nursing practice, including highlighting the need for curricula changes and understanding the nursing role, are discussed.

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### **List of Abbreviations**

CHC	Community Health Centre
EMR	Electronic Medical Record
FHT	Family Health Team
FFS	Fee-For-Service
FTM	Female-to-male
HIV	Human Immunodeficiency Virus
LGBT	Lesbian, Gay, Bisexual and Transgender
MTF	Male-to-female
NoMAD	NOrmalization MeASURE Development
NPT	NormalizatiON Process Theory
NP	Nurse Practitioner
OHIP	Ontario Health Insurance Program
USA	United States of America

### **Declaration of Academic Achievement**

Erin Ziegler is the study lead and primary author of all of the chapters included in this sandwich thesis. As primary author, responsibilities included: study design, data collection and analysis, interpretation of findings, and writing manuscripts. Dr. Ruta Valaitis supervised the study. Drs. Ruta Valaitis, Nancy Carter, Cathy Risdon and Jennifer Yost were co-authors of all manuscripts. Their contributions included providing feedback on the study design, reviewing coding and themes, and editing all chapters.



## **Chapter 1**

### **Introduction**

As a primary healthcare nurse practitioner, I provide primary care to individuals across the lifespan. Primary healthcare nurse practitioners are advanced practice registered nurses who are specialists in primary care, providing accessible, comprehensive care to individuals of all ages (College of Nurses of Ontario, 2019). Years ago, as a new nurse practitioner, I met a transgender patient who told me of their struggle to find a primary care practitioner. They had gone years without one, avoiding interactions with the healthcare system and purchasing their transgender hormones online. They needed a practitioner who would be sensitive to their needs, be nonjudgmental, and support them in their transition journey. It was at this point that I became aware of a gap in primary care services for transgender individuals and the barriers to accessing these services in Ontario. Also, I reflected on the gaps in my knowledge and the limited exposure to transgender health issues in my undergraduate and graduate nurse practitioner training. I felt unprepared to provide this patient with the care they needed and deserved but wanted to do everything I could to give them that. I began reading about transgender healthcare issues and attended a workshop from Rainbow Health Ontario to learn all I could about providing primary care to transgender individuals.

To address some of these service gaps, I implemented a program in my workplace which provides primary care services to transgender individuals.

Currently there are over 120 individuals enrolled in the program, all at various stages of their transition. It has been incredibly rewarding to watch these patients transition into their true self, to see their happiness and share in their excitement. Listening to my patients tell me of their struggles accessing healthcare, barriers they have faced, and the impact it has had on their wellbeing prompted me to explore the provision of primary care services for transgender individuals in Ontario.

### **Background and Research Problem**

The term transgender is used to identify those whose gender identities do not match their birth-assigned sex (Giblon & Bauer, 2017), where the term cisgender identifies those whose gender identities match their birth-assigned sex (LGBT Health Program, 2015). In Ontario there are approximately 77,000 transgender adults (Giblon & Bauer, 2017). Primary care is “that level of a health service system that provides entry into the system for all new needs and problems, provides person-focused care over time, provides care for all” (Starfield, 1998, p. 8). In addition to general primary care, transgender individuals have healthcare needs related to their transition, including receiving hormone therapy and surgical interventions (Sanchez, Sanchez, & Danoff, 2009). Despite their unique needs, practitioners in North America receive minimal training and education about transgender healthcare (Alegria, 2011; Roberts & Fantz, 2014). Additionally, the limited number of practitioners providing this care often leaves patients on long wait lists or traveling great distances to receive this care (Rotondi et al., 2013).

The research literature related to transgender health to date has focused on definitions and terminology, barriers to care, providing culturally sensitive care, and the general principals of hormone therapy and medical transitions. Despite an evolving understanding of the current barriers faced by transgender individuals, there are still substantial gaps in care provision for this population. Little is known about the delivery of primary care for transgender individuals, particularly within a Canadian context. Understanding who is delivering this care, how it is delivered, and issues faced in the delivery of care is important to enhance and improve the provision of primary care services for this population.

The aim of this thesis is to understand how primary care is delivered and implemented in Ontario to best meet the primary care needs of transgender individuals. This exploratory case study answered the five research questions. The following questions are addressed in Chapter 4:

1. How is primary healthcare for transgender individuals delivered within different primary care models in Ontario?
2. What activities do interdisciplinary team members engage in when delivering primary healthcare to transgender individuals?

The following questions are addressed in Chapter 5:

3. What has supported primary care practitioners' capacity to develop their competence in delivering primary care to transgender individuals?
4. How is the delivery of primary healthcare for transgender individuals implemented within different primary care models in Ontario?

5. How does the implementation of primary healthcare services for transgender individual compare across various models of primary care delivery?

This thesis also aims to inform primary care practice for transgender individuals. The findings of this study have the potential to inform and advance health policies with the goal of improving health outcomes for transgender individuals by expanding access to care, the quality of care, and the efficiency with which care is delivered. Additionally, this research considers practitioners' training in transgender health issues, and thus can inform curriculum content related to transgender healthcare needs and management to eliminate barriers experienced by this vulnerable population when accessing healthcare services.

This thesis, considered a sandwich thesis, includes four manuscripts that have been prepared for publication in peer-reviewed journals. These papers consist of a state-of-the-art literature review focusing on transgender healthcare (Chapter 2), the study protocol paper which provides details on the methods used in this research (Chapter 3), the findings from an exploratory case study reporting on models of care, team roles and activities (Chapter 4), and the use of Normalization Process Theory to explore the implementation of primary care services for transgender individuals (Chapter 5). The conclusion, Chapter 6, synthesizes all four papers and draws out implications for research, education, policy and practice, with emphasis on nursing practice.

## **Chapter 2**

### **Primary care for transgender individuals: A review of the literature reflecting a Canadian perspective**

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## **Abstract**

**Purpose:** Primary research and conceptual literature related to transgender health issues have historically focused on definitions, hormone therapy, medical transitions and transgender sensitive care provision. Further understanding is needed on the delivery of primary care for transgender individuals. A state-of-the-art review was done to synthesize primary research and conceptual literature on the primary care needs of the transgender population and their access to primary care. The aim was to identify knowledge gaps in Canada's primary care system for the transgender population.

**Methods:** A state-of-the-art review was conducted to explore current matters and highlight gaps for future research. Primary research and conceptual literature published between 2000 and 2018 was included. Reference lists of included articles supplemented the search.

**Results:** There is limited literature on the delivery of primary care for transgender individuals, particularly in Canada. Barriers and enablers to accessing care have been explored from patient and practitioners' perspectives but less often from an organizational perspective.

**Conclusions:** Additional primary studies are needed to provide an understanding of transgender primary care needs and access issues, specifically in the Canadian context. Further research is needed to provide a stronger understanding of primary care delivery to reduce the invisibility and disparities experienced by transgender individuals accessing services. With better understanding of transgender health

issues, primary care practitioners can advocate for the health needs of their patients and improve care delivery.

## Introduction

The transgender community has gained increased visibility in society; however, it represents one of the most underserved populations in healthcare (Alegria, 2011; Bauer et al., 2009; Roberts & Fantz, 2014). Healthcare barriers experienced by transgender individuals include marginalization, discrimination, lack of practitioner experience and knowledge, a deficiency of services, and structural barriers (Alegria, 2011; Institute of Medicine, 2011; Snelgrove, Jasudavicius, Rowe, Head, & Bauer, 2012). The term *transgender* describes an individual whose gender identity or expression differs from that of their assigned sex at birth (Institute of Medicine, 2011; Reisner, Radix, & Deutsch, 2016). This term is often used as an umbrella term to encompass this diverse group and includes those identifying as transgender, transitioned, or transsexual (Bauer et al., 2009). For this paper, the term *transgender* will be used to represent all of these diverse groups.

Estimates of the size of the transgender population vary throughout the literature. Most estimates use either a clinic-based estimate or geographic methodologies to calculate the population size (Deutsch, 2016). Clinic-based estimates assume that all transgender individuals seek medical care. These approximations of the transgender population come from collecting the number of transgender patients in the care setting and dividing it by the total number of individuals within that same setting, which often results in an underestimation of the population and a sampling bias. Geographic estimates aim to have a more



representative sample by including gender identity data in census activity (Deutsch, 2016). International population size data using geographic estimates has ranged from 1 in 30,400 to 1 in 200,000 for female-to-male (FTM) individuals and 1 in 11,900 to 1 in 45,000 for male-to-female (MTF) individuals (Coleman et al., 2012). Using global population statistics, in 2016 it was surmised that there are approximately 25 million transgender individuals worldwide (Winter et al., 2016). Studies from the United States of America (USA) estimate the transgender population to be between 0.3% and 0.5% of the total population (Buchholz, 2015; Conron, Scott, Stowell, & Landers, 2012; Reisner, et al., 2016; Wichinski, 2015). Flores, Herman, Gates, and Brown (2016) developed a conservative frequency estimate that 0.6% of adults in the USA identify as transgender. This conclusion is based on data from 19 states using the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (Flores et al., 2016).

Canadian data on the population size of transgender individuals is lacking. Current census and population health surveys, such as the Canadian Community Health Survey, only collect gender data for two categories, male and female (Davidson, 2015; Statistics Canada, 2016), excluding transgender populations. Canadian studies have used population estimates from the USA to describe transgender population size (Bauer, Zong, Scheim, Hammond, & Thind, 2015b; Beagan et al., 2013; Heinz & MacFarlane, 2013). The most recent estimate is approximately 200,000 transgender adults in Canada. This number was developed

using the estimate of 0.6% extrapolated to the 2016 Canadian census (Giblon & Bauer, 2017).

In Ontario, approximately half of the transgender population are living full-time in their felt gender (Scheim & Bauer, 2015). Compared to FTM individuals, MTF individuals are less likely to be living in their felt gender without medical treatment (Scheim & Bauer, 2015). This could be related to the increased levels of transphobia and discrimination experienced by MTF individuals (Marcellin, Scheim, Bauer, & Redman, 2013; Scheim & Bauer, 2015). It is estimated that only 23% of transgender Ontarians have socially and medically transitioned, which does not necessarily include both hormone therapy and/or surgeries (Scheim & Bauer, 2015). Regardless of their gender, individuals have healthcare needs and require primary care. Primary care provides entry into the healthcare system with person-focused care over time and care for all (Starfield, 1998). Most healthcare issues affecting transgender individuals mirror those of the general population, however transgender individuals also have unique healthcare needs and can experience distinct barriers accessing and obtaining this care (Makadon, 2011). The primary care needs of transgender individuals are largely related to medically-supervised transition, providing access to and monitoring the administration and dosing of transgender hormones (Sanchez, Sanchez, & Danoff, 2009). The provision of hormones is within the scope and practice of primary care practitioners, including nurse practitioners (NP) and physicians (LGBT Health Program, 2015).

The purpose of this state-of-the-art review is to synthesize the primary research and conceptual literature related to the needs of the transgender population and primary care access, as well as to identify gaps in knowledge. The aim of the paper is to present a Canadian perspective focused on the adult population, which has been informed from both Canadian and international literature.

### **Methods**

State-of-the-art reviews explore current issues, offering new viewpoints and identifying areas for further research (Grant & Booth, 2009). This review explored the transgender population and their healthcare needs, including access to primary care. Primary research and conceptual literature was included. The search strategy included searching MEDLINE, CINAHL, Cochrane EBM Reviews, Proquest, PsycINFO, LGBT Life, Sociology Database, Social Science Abstracts, and Social Work Abstracts. Databases were searched using the following search terms: transgender OR trans OR transgendered person OR transsexualism; health OR health care OR healthcare OR primary health; access OR barriers OR service access OR service use; curriculum AND transgender; primary health model OR teams OR interprofessional team. An additional review of reference lists from included articles supplemented the search.

Primary research and conceptual literature, including articles and reports, published between January 2000 and April 2018 was included. To be included, papers needed to address primary care needs and access for the transgender population. Papers in languages other than English were excluded. The evidence

was synthesized narratively. Barriers and enablers to accessing care were explored from patient, practitioner and organizational perspectives.

## **Results**

Thirty-three primary research studies and 27 conceptual articles and reports were identified through the search and included in the review. Primary research studies included 26 quantitative studies (Asscheman et al., 2011; Bauer, Scheim, Pyne, Travers, & Hammond, 2015a; Bauer, Travers, Scanlon, & Coleman, 2012; Bauer, Scheim, Deutsch, & Massarella, 2014; Bauer et al., 2015b; Chan, Skocylas, & Safer, 2016; Conron et al., 2012; Craig, Iacono, Paceley, Dentato, & Boyle, 2017; Cruz, 2014; Deutsch, 2011; Dhejne et al., 2011; Eyszel, Koehler, Dekker, Shener, & Nieder, 2017; Flores et al., 2016; Giblon & Bauer, 2017; Gorin-Lazard et al., 2012; Grant et al., 2010; Heinz & MacFarlane, 2013; Hyde et al., 2014; Lim, Johnson, & Eliason, 2015; Moll et al., 2014; Obedin-Maliver et al., 2011; Rondahl, 2009; Rotondi et al., 2013; Saewyc, Pyne, Forhard-Dourlent, Travers, & Veale, 2017; Sanchez et al., 2009; Scheim & Bauer, 2015), five qualitative studies (Bauer et al., 2009; Beagan et al., 2013; Roller, Sedlak, & Draucker, 2015; Snelgrove et al., 2012; Sperber, Landers, & Lawerance, 2005), and two mixed-method studies (McInroy, Craig, & Austin, 2014; White et al., 2015). Fourteen studies were conducted in Canada (Bauer et al., 2009; Bauer et al., 2012; Bauer et al., 2014; Bauer et al., 2015a; Bauer et al., 2015b; Beagan et al., 2013; Chan et al., 2016; Giblon & Bauer, 2017; Heinz & MacFarlane, 2013; McInroy et al., 2014; Rotondi et al., 2013; Saewyc et al., 2017; Scheim & Bauer,

2015; Snelgrove et al., 2012), two jointly in Canada and the USA (Craig et al., 2017; Obedin-Maliver et al., 2011), and 17 in other countries (Asscheman et al., 2011; Conron et al., 2012; Cruz, 2014; Deutsch, 2011; Dhejne et al., 2011; Eyssel et al., 2017; Flores et al., 2016; Gorin-Lazard et al., 2012; Grant et al., 2010; Hyde et al., 2014; Lim et al., 2015; Moll et al., 2014; Roller et al., 2015; Rondahl, 2009; Sanchez et al., 2009; Sperber et al., 2005; White et al., 2015). Conceptual articles were predominantly internationally-focused, with 19 from the USA (Alegria, 2011; Center for Excellence in Transgender Health, 2012; Daniel & Butkus, 2015; Deutsch, 2016; Deutsch et al., 2013; Feldman & Goldberg, 2006; Gardner & Safer, 2013; Institute of Medicine, 2011; Jenner, 2010; Lee, 2000; Markwick, 2016; Mayer et al., 2008; Ranji, Beamesderfer, Kates, & Salganicoff, 2014; Roberts & Fantz, 2014; Wichinski, 2015; Williamson, 2010; Winter et al., 2016; Wylie et al., 2016), one from Spain (Esteva de Antonio, Gomez-Gil, & GIDSEEN Group, 2013), and one from Switzerland (Thomas et al., 2017). Six conceptual papers came from Canada (Collier, 2015; Government of Canada, 2017; Ministry of Government and Community Services, 2016; Ministry of Health and Long Term Care, 2016, 2018; LGBT Health program, 2015). Research purposes of the primary studies and subjects of conceptual literature were grouped together to explore common themes, which included the population size of transgender individuals (Deutsch, 2016; Flores et al., 2016; Scheim & Bauer, 2015; Wichinski, 2015; Winter et al., 2016), transgender healthcare needs (Asscheman et al., 2011; Bauer et al., 2012; Bauer et al., 2015a; Center for Excellence in

Transgender Health, 2012; Conron et al., 2012; Dhejne et al., 2011; Gorin-Lazard et al., 2012; Hyde et al., 2014; Institute of Medicine, 2011; Jenner, 2010; Lee, 2000; LGBT Health, 2015; Saewyc et al., 2017; Scheim & Bauer, 2015; Sperber et al., 2005; Thomas et al., 2017; Williamson, 2010; Winter et al., 2016; Wylie et al., 2016), healthcare barriers (Bauer et al., 2009; Bauer et al., 2014; Bauer et al., 2015a; Bauer et al., 2015b; Collier, 2015; Cruz, 2014; Daniel & Butkus, 2015; Deutsch, 2011; Esteva de Antonio et al., 2013; Eyssel et al., 2017; Gardner & Safer, 2013; Government of Canada, 2017; Grant et al., 2010; Heinz & MacFarlane, 2013; Jenner, 2010; Markwick, 2016; Mayer et al., 2008; Ranji et al., 2014; Roberts & Fantz, 2014; Roller et al., 2015; Rotondi et al., 2013; Sanchez et al., 2009; Sperber et al., 2005; Wichinski, 2015), and practitioner training and education (Alegria, 2011; Beagan et al., 2013; Chan et al., 2016; Craig et al., 2017; Giblon & Bauer, 2017; Lim et al., 2015; Mayer et al., 2008; McInroy et al., 2014; Moll et al., 2014; Obedin-Maliver et al., 2011; Rondahl, 2009; Snelgrove et al., 2012; White et al., 2015). See Appendix 1 for characteristics of each study and Appendix 2 for the focus of the conceptual articles and reports.

### **Primary Care Needs of Transgender Individuals**

Transgender individuals require health screening, preventative care, risk assessments, and periodic exams (Feldman & Goldberg, 2006; Jenner, 2010; Thomas et al., 2017). Healthcare related to medical transition, such as hormone therapy and surgeries has been identified as a priority in the transgender population (LGBT Health Program, 2015; Sanchez et al., 2009; Wylie et al.,

2016). It has been identified that medical and social transition has improved overall health, personal safety, self esteem, mental health (Hyde et al., 2014; Rotondi et al., 2013), and quality of life (Gorin-Lazard et al., 2012). Most transgender individuals only access primary care services for medical transition purposes (Jenner, 2010; Winter et al., 2016). A Canadian study estimated 42% of transgender individuals living in Ontario are currently taking hormone therapy (Scheim & Bauer, 2015), with 67% receiving this treatment from their primary care provider (Rotondi et al., 2013). Furthermore, an estimated 26% received hormones from non-medical sources, including friends, buying on the street or from online pharmacies (Rotondi et al., 2013). Surgical transition through transition-related surgeries is also a key aspect of the transition process for some transgender individuals. Surgeries, including orchiectomy and vaginoplasty for MTFs, and mastectomy, hysterectomy, metoidioplasty, or phalloplasty for FTM individuals, are often desired by transgender individuals (Rotondi et al., 2013). Scheim and Bauer (2015) found that in their sample of 433 transgender individuals living in Ontario, 24% of MTF and 30% of FTM individuals have had some form of transition-related surgery.

Healthcare needs within the transgender population outside of transitional support are similar to the general population in terms of illnesses and chronic disease (Roller et al., 2015). Chronic disease rates, such as those of diabetes, cancer, osteoporosis and cardiovascular disease, are comparable with the cisgender population (Center for Excellence in Transgender Health, 2012).

However, transgender individuals experience more short- and long-term adverse outcomes related to chronic disease compared to the general population, due to factors such as discrimination, personal reluctance to access care, and structural barriers to healthcare (Roller et al., 2015; Sperber et al., 2005; White et al., 2015; Williamson, 2010). Increased mortality rates in the transgender population related to increased rates of human immunodeficiency virus (HIV) and coronary artery disease have also been identified when compared to the cisgender population (Asscheman et al., 2011; Dhejne et al., 2011). Studies have shown that HIV prevalence is higher in transgender individuals in both the USA and Canada. Transgender individuals' rates of HIV have been reported at over four times the USA national average (Grant et al., 2010). Similarly, the TransPULSE study in Ontario (N=433), the only large, probability-based data set on transgender health and healthcare in Canada, found an HIV prevalence of 0.6% in FTM and 3.0% in MTF individuals, higher than the national average (Bauer et al., 2012). High rates of HIV are possibly related to unsafe sexual practices or sharing needles for hormone injection (Roller et al., 2015).

Higher prevalence of depression, anxiety, substance abuse, self-harm, and suicide have also been identified as transgender health issues compared to the issues of cisgender individuals (Institute of Medicine, 2011; Roller et al., 2015). Stigma experienced by the transgender population is thought to be a main factor for these issues (Lee, 2000). A large, Australian cross-sectional study (N=946) found that 57% of transgender individuals had been diagnosed with depression



and 39% with anxiety (Hyde et al., 2014). The Canadian Trans Youth Study found that over half of the 268 Ontario youth who participated had reported self-harm behaviours without the intent to die in the past 12 months (Saewyc et al., 2017). The USA National Transgender Discrimination Survey, a large cross-sectional study with a sample of 7,000 transgender individuals, reports that 41% had attempted suicide, which is well above the 2% national average (Grant et al., 2010). In one study of transgender Ontarians, 35% of participants seriously considered, and 11% attempted, suicide in the previous year (Bauer et al., 2015a).

### **Access to Primary Care**

Canadian literature that addressed access to primary care for transgender population originated from British Columbia and Ontario. Sperber et al. (2005) identified two components to accessing transgender healthcare: (1) locating a practitioner who is comfortable and knowledgeable about transgender issues, and (2) securing and paying for services not covered by insurance. It has been reported internationally that up to 40% of transgender individuals do not have a primary care practitioner (Jenner, 2010) and 30-40% do not utilize regular medical care (Sanchez et al., 2009). A needs assessment completed on Vancouver Island, British Columbia identified access to healthcare as the top personal need of transgender individuals (Heinz & MacFarlane, 2013). Refusal of medical care by healthcare practitioners has been reported by up to 17% of transgender individuals based on their gender expression (Grant et al., 2010; Wichinski, 2015). The Ontario TransPULSE Survey found that 21% of transgender

individuals avoided the emergency department due to their gender expression (Bauer et al., 2014).

From an international perspective, delivery of care for transgender individuals varied depending on where individuals live. Furthermore, access to healthcare for transgender individuals is obtained in a variety of settings including primary care offices, speciality clinics and academic facilities. Additionally, coverage for medical care varies and is country-specific. Boston, New York and San Francisco have implemented specialized transgender care clinics in the USA (Reisner, Poteat, et al., 2016; Reisner, Radix, et al., 2016). The study by Deutsch (2011) examined practice characteristics of clinics providing transgender care in the USA and found that 16.7% were private practices, 8.3% were academic facilities and 75% were not-for-profit, community-based clinics. In the USA, most Americans obtain health insurance through their employer; however transgender individuals are more likely to be uninsured compared to the general population (Ranji et al., 2014). Furthermore, in the USA transgender individuals may face additional financial expenses if their insurance does not cover transgender healthcare expenses, as some plans categorize their care as a pre-existing medical condition (Daniel & Butkus, 2015). In Spain healthcare services for transgender individuals are provided in multidisciplinary team clinics, of which there are nine throughout the country (Esteva de Antonio et al., 2013).

Canada's universal healthcare system provides coverage to all Canadian citizens. Healthcare delivery and health insurance is mandated provincially

(Government of Canada, 2017). In the province of Ontario, transgender healthcare is provided in primary care settings; however there are a limited number of primary care practitioners providing this care, and patients are often left on waiting lists or travel great distances to receive healthcare (Rotondi et al., 2013). Based on a weighted estimate conducted in the TransPULSE Survey, it is estimated that 83% of transgender individuals in Ontario have a family physician compared to 90% of the general Canadian population (Bauer et al., 2015b). The Ontario Health Insurance Program (OHIP) covers 100% of medical visits and diagnostic testing for residents of Ontario, substantially reducing some costs associated with accessing healthcare. Prescription medication, such as hormone therapy, is covered for individuals with private insurance or those receiving government benefits (Rotondi et al., 2013). Effective January 1, 2018, OHIP+ was introduced to provide drug coverage, including transgender hormones, to Ontario residents aged 24 years and younger (Ministry of Health and Long Term Care, 2018). Transition-related surgery, including orchiectomy, vaginoplasty, mastectomy, hysterectomy, metoidioplasty and phalloplasty, are covered under OHIP with special application and approval. Until March 2016, all surgical assessments and approvals went through one centre in Ontario, which at that time had a wait list of 1,500 patients. Currently in Ontario, applications and referrals for mastectomy can be done by a physician or NP trained in the provision of transgender healthcare with multiple surgical centres located in Ontario. For genital surgery, patients require letters of support from two healthcare

practitioners trained in transgender healthcare, one from a physician or NP, and the second from another physician or NP, registered nurse, social worker with a Master's degree or psychologist (Ministry of Health and Long Term Care, 2016). However, the approval process is long with many criteria which must be met prior to approval, including a minimum of 12-months continuous hormone therapy and often a referral to another practitioner in order to obtain the second assessment. Once approved, there is an additional wait list for surgery as many facilities do not offer these surgical procedures (Rotondi et al., 2013). For example, there is currently no facility in Ontario which provides genital transition-related surgery and therefore patients are referred to Quebec, the USA or overseas (Ministry of Health and Long Term Care, 2016). These gaps and barriers in service limit access to healthcare in Ontario for transgender individuals.

As previously mentioned, hormone therapy is a priority for the transgender population (LGBT Health Program, 2015; Sanchez et al., 2009). Rotondi et al. (2013) found that in their sample of 433 transgender individuals living in Ontario, a quarter of the sample had obtained and used hormones from a nonmedical source, such as a friend or purchased on the street or on the Internet. Risks of improper dosing, organ dysfunction or infection have been reported when transgender individuals do not have access to medical care (Sanchez et al., 2009) and engage in “do-it-yourself” surgeries (Rotondi et al., 2013). Similar to Ontario, unsupervised hormone use has been reported in the range of 29% to 63% of

transgender patients without access to hormone therapy who were living in New York City, USA (Sanchez et al., 2009).

### **Barriers to Transgender Healthcare**

**Barriers based on patient experience.** Numerous barriers to accessing healthcare services are encountered by transgender individuals. Transgender individuals have expressed anxiety and reluctance to disclose their gender identity when receiving medical care for fear of discrimination (Markwick, 2016; Mayer et al., 2008; Roberts & Fantz, 2014; Sperber et al., 2005). Furthermore, Grant et al. (2010) found that 28% of transgender patients in their sample had been verbally harassed and 2% had been physically assaulted while attempting to access care.

A major barrier identified by individuals is gaining access to a practitioner who is knowledgeable about transgender healthcare (Cruz, 2014; Gardner & Safer, 2013; Heinz & MacFarlane, 2013; Roberts & Fantz, 2014; Sanchez et al., 2009). A Canadian study by Heinz and MacFarlane (2013) found that 63% of respondents had to provide education to their doctor about transgender healthcare and 11% said their doctor was not at all knowledgeable. It has also been reported that transgender individuals often feel they have been denied healthcare when their primary care practitioner claims transgender health issues are outside their scope of practice (Collier, 2015).

**Barriers based on practitioner experience.** Minimal training and formal education is provided to healthcare practitioners, including nurses, NPs and

physicians, about transgender health-specific issues (Alegría, 2011; Roberts & Fantz, 2014). Lack of transgender specific medical education has been identified by practitioners as a barrier for providing healthcare to this population (Snelgrove et al., 2012). A Canadian study by Beagan et al. (2013) found physician and nurses felt uncertain about transgender care and wanted more specialized knowledge. Traditionally the formal education of nurses and physicians in transgender healthcare is often provided under the larger context of lesbian, gay, bisexual and transgender (LGBT) health (Obedin-Maliver et al., 2011).

White et al. (2015) conducted a survey to assess the LGBT-related content in medical school curricula in Canada and the USA. The authors found that medical schools teach a median of five hours of LGBT content in their required curricula. Most students felt prepared to provide generalized sexual healthcare to the LGBT population, but unprepared to address transgender healthcare issues (White et al., 2015). Only one third of medical schools in Canada and the USA provided education on transgender hormones and or surgical transition (Obedin-Maliver et al., 2011). A cross-sectional study of 365 Canadian medical students found that 24% thought transgender health was proficiently taught and only 6% felt they had sufficient knowledge to care for transgender individuals (Chan et al., 2016). Moll et al. (2014) found only 26% of emergency medicine residency programs in the USA included a specific LGBT lecture, accounting for an average of 45 minutes on LGBT health.

While medical curricula devoted limited time to LGBT healthcare education, nursing curricula is also lacking. A study of baccalaureate nursing education in the USA found that the median time devoted to LGBT content was 2.12 hours (Lim et al., 2015). Rondahl (2009) found that only 10% of nursing students in Sweden had a basic level of knowledge regarding the LGBT population. This lack of educational preparedness suggests a substantial lack of awareness of transgender health issues and identifies a need in medical and nursing education. Current curricula do not provide the breadth and depth of knowledge needed to properly provide care to transgender individuals. We found no studies that identified the amount of time this topic is covered in NP curricula.

Lack of educational training on transgender healthcare has also been identified in social work. A study by Craig et al. (2017) found that social work educational programs in Canada and the USA lacked LGBT content across the curriculum and topics that were addressed lacked depth. McInroy et al. (2014) found a lack of curriculum content specific to gender minority populations in Canadian social work programs. Confusion was also noted between sexual minorities and gender minority, suggesting a lack of understanding of the terminology and difference between the two. Sexual minorities include individuals who identify as homosexual, where gender minorities are those identifying as transgender (McInroy et al., 2014). We found no studies pertaining to the educational preparedness of psychologists.

Not only is there limited LGBT content in academic programs, there is also an insufficient number of practitioners trained to meet the needs of this population (Mayer et al., 2008). Practitioners often refer transgender individuals to other practitioners and specialists, such as endocrinologists, whom they assume may better address transgender health concerns. This approach can be interpreted by transgender individuals as an unwillingness to provide them care (Bauer et al., 2009). In an attempt to address gaps in practitioner knowledge, the Ontario Ministry of Health and Long-term Care has funded the Trans Health Connection program to provide transgender-related cultural competence and clinical care training for healthcare providers across the province (Giblon & Bauer, 2017; Rainbow Health Ontario, 2017).

**Organizational barriers.** Organizational barriers to transgender healthcare include lack of transgender-friendly spaces and gender-neutral washrooms, binary gender documentation in electronic medical records (EMR), and inappropriate reference ranges for laboratory systems (Bauer et al., 2009; Markwick, 2016; Roberts & Fantz, 2014). Bauer et al. (2009) identify the lack of policies to accommodate transgender individuals as evidence of “institutional erasure” in the Ontario healthcare system. Use of EMRs in healthcare is vital; however, they can be a critical barrier for transgender individuals accessing healthcare. Transgender individuals may have preferred names, gender, or pronouns which are different than those listed on their government documents. Most EMR systems are not set up to accommodate information which is different



from the government documentation (Deutsch et al., 2013). Additionally, accessing the healthcare system could involve unwanted disclosure of an individual's transgender identity, such as a transgender male visiting a gynecologist's office (Eyssel et al., 2017).

The binary nature of health intake forms and sex designation on health-related documents can affect patients' experiences with the healthcare system (Bauer et al., 2009). Sex designation on health documents is a critical barrier as it can affect billing and eligibility for sex-specific procedures, such as a prostate-related blood work for a transgender female patient. In an attempt to remove this barrier in 2016, the Ontario government allowed residents the option to make their OHIP cards gender-neutral (Ministry of Government and Community Services, 2016).

## **Discussion**

Transgender health literature has historically focused on definitions, the essentials of hormone therapy, medical transitions, and transgender-sensitive care provision. There is an identified lack of research on primary care of transgender individuals in Canada. Given the paucity of Canadian research, international data was used to further inform our knowledge and augment the Canadian perspective. Four main themes dominated the primary research and conceptual literature: difficulties determining transgender population size; primary care needs of transgender individuals; access to primary care; and barriers to transgender healthcare.

The findings of this state-of-the-art review point to the need for more research to address knowledge gaps in transgender healthcare. Addressing the difficulty in determining the population size can be improved by advocating for the addition of the categories of transgender male, transgender female or gender non-conforming on census forms and data collection. Exploration into effective delivery models and strategies for implementation of primary care services to address transgender healthcare is also needed. There is a need to build primary care practitioners' knowledge and clinical competence in providing person-centred primary care for this population. Including transgender health issues in medical, nursing and allied health curricula will help address practitioner knowledge gaps related to supporting patients through their transition process. Additionally, more educational opportunities for practitioners, such as workshops, online learning modules and conferences, will aid in developing and increasing knowledge for providing care to this population.

This review also identifies that further research is needed to understand how primary care is effectively implemented and delivered in primary care to this marginalized population, especially within an interdisciplinary team. Further primary studies are needed from both patient and organizational perspectives to provide an understanding of transgender primary care needs and issues related to access. Further research is also needed to provide an increased understanding of transgender healthcare needs which may help to reduce the invisibility and

disparities experienced by transgender individuals when accessing primary care services.

### **Limitations of this review**

Most of the Canadian literature relating to transgender healthcare is from Ontario and may not be generalizable to the broader Canadian context due to provincial differences in healthcare services, such as healthcare coverage and access to transgender surgeries. Exploration of transgender healthcare from other provincial perspectives is recommended. While several electronic databases were searched, further exploration of education-specific databases (e.g. ERIC) or EMBASE may have identified additional literature on the barrier of educational preparedness and curricula.

### **Conclusion**

This paper provides a synthesis of the literature regarding the transgender population and their access to primary care with a Canadian perspective. Transgender individuals continue to experience healthcare barriers, including access to competent, knowledgeable practitioners, medications and surgeries. With an increased understanding of transgender health issues, and primary care access barriers, primary care practitioners can advocate for the health needs of their patients, eliminate current healthcare barriers, and reduce the invisibility and disparities experienced by transgender individuals when accessing primary care.

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### **Chapter 3**

## **Exploring the delivery and implementation of primary care services for transgender individuals in Ontario: Case study protocol**

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## **Abstract**

**Background:** Historically transgender individuals have experienced barriers in accessing primary care services. In Ontario, Canada, healthcare for transgender individuals is accessed through primary care; however, there are a limited number of practitioners providing transgender care, and patients are often on waiting lists and/or travel great distances to receive care. The purpose of this study is to understand how primary care is delivered and implemented in Ontario for transgender individuals.

**Methods:** A case study methodology will be used to explore this phenomenon in different primary care contexts. Normalization Process Theory is used as a guide for the study development. Three cases known to provide transgender primary care and represent different Ontario primary care models (i.e., family health team, community health centre, solo practitioner) have been identified. Comparing transgender care delivery and implementation across different models is vital to understanding how primary care provision to this population can be supported and spread. Qualitative interviews with primary care practitioners and clinical support staff will be conducted. Participants will also complete the NoMAD survey, a tool to measure implementation processes. The tool will be modified to explore implementation of primary care services for transgender individuals.

Documentary evidence will be collected. Cross-case synthesis will be completed to compare the cases.

**Discussion:** Findings will provide an Ontario perspective on the delivery and implementation of primary care for transgender individuals in different primary care models. Barriers and facilitators in implementation and delivery will be also identified. Providing an understanding and increasing awareness of the implementation and delivery of primary care for transgender individuals may help to reduce the invisibility and disparities transgender individuals experience when accessing primary care services. Understanding the delivery of primary care could allow care providers to implement primary care services for transgender individuals and improve access to healthcare for this vulnerable population.

## Introduction

The transgender community continues to represent one of the most marginalized and underserved populations in healthcare (Alegria, 2011; Bauer et al., 2009; Roberts & Fantz, 2014). Issues including discrimination, lack of provider experience and knowledge, a deficiency of services, and structural barriers contribute to the marginalization and healthcare barriers experienced by this population (Alegria, 2011; Institute of Medicine, 2011; Snelgrove, Jasudavicius, Rowe, Head, & Bauer, 2012). Language regarding gender has evolved over the years, with meanings varying over time and between disciplines (Coleman et al., 2012). *Transgender* describes an individual whose gender identity or expression differs from that of their assigned sex at birth (Institute of Medicine, 2011; Reisner et al., 2015).

Estimates of the transgender population vary throughout the literature. International prevalence data over the years has ranged from 1 in 11,900 to 1 in 45,000 for male-to-female individuals and 1 in 30,400 to 1 in 200,000 for female-to-male individuals (Coleman et al., 2012). Recently, Flores, Herman, Gates, and Brown (2016) developed a conservative frequency estimate that 0.6% of adults in the United States of America (USA) identify as transgender. The most recent Canadian calculation using the estimate of 0.6% extrapolated to the 2016 Canadian census is approximately 200,000 transgender adults, with about 77,000 living in Ontario (Giblon & Bauer, 2017).

## **Transgender Healthcare**

Most healthcare issues affecting transgender individuals mirror those of the general population; however transgender individuals also have unique healthcare needs and can experience distinct barriers accessing and obtaining this care (Makadon, 2011). Unique primary care needs of transgender individuals are mainly related to medically supervised transition, including providing access to and monitoring the administration and dosing of transgender hormones (Sanchez, Sanchez, & Danoff, 2009), which has been identified as a priority for this population (Heinz & MacFarlane, 2013; LGBT Health Program, 2015; Sanchez et al., 2009).

Access to a practitioner who is knowledgeable about transgender healthcare needs has been identified as a considerable barrier for transgender individuals (Cruz, 2014; Gardner & Safer, 2013; Heinz & MacFarlane, 2013; Roberts & Fantz, 2014; Sanchez et al., 2009). Nurses, nurse practitioners, physicians, and other practitioners receive very little formal education about transgender health-specific issues (Alegria, 2011; Roberts & Fantz, 2014). Research examining the educational preparedness of nurses and physicians in transgender knowledge is generally grouped under the broader umbrella of lesbian, gay, bisexual and transgender (LGBT) health. For the purpose of transgender competent healthcare, this is problematic as this grouping is too broad and pairs sexual preference with gender identity. White et al. (2015) found that medical schools in the USA and Canada teach a median of five hours of LGBT

content in their required curricula. Obedin-Maliver et al. (2011) found that one-third of medical schools provided education on transgender hormones and or surgical transition. A study by Lim, Johnson, and Eliason (2015) found that the median time devoted to teaching LGBT health to baccalaureate nursing students in the USA was 2.12 hours.

### **Primary Care Delivery in Ontario**

To understand how transgender care is delivered through primary care in Ontario, it is important to understand the organization of primary care models. Canada has a publicly-funded, universal health insurance system which covers all medically necessary services (Laberge, Wodchis, Barnsley, & Laporte, 2016). Ontario uses a single-payer insurance model which covers necessary medical services. All legal residents of Ontario are enrolled in the Ontario Health Insurance Plan (OHIP) and are required to provide their OHIP number to receive insured services (Rudoler et al., 2015). Primary care in Ontario has been reorganized over the last twenty years and now features multiple models of care delivery (Laberge et al., 2016). A model of care is a multidimensional concept describing the organization and delivery of healthcare services (Department of Health, 2007). In Ontario, the key variables are modes of physician payment, governance, and support for interprofessional team practice. Common models include Fee-for-Service, Family Health Networks, Community Health Centres, and Family Health Organizations (Dahrouge et al., 2009; Health Force Ontario, 2017; Laberge et al., 2016).

The Fee-for-Service (FFS) model offers remuneration for each service provided as determined by the schedule of benefits (Dahrouge et al., 2009; Laberge et al., 2016). FFS practitioners may be solo or practice in small groups. Family Health Networks and Family Health Organizations are a blended-capitation model which requires physicians to work in groups of three or more (Glazier, Koop, Schultz, Kiran, & Henry, 2012; Health Force Ontario, 2016; Rudoler et al., 2015). Family Health Organizations are also eligible to co-locate with a Family Health Team, (FHT). These organizations receive additional funding for an interprofessional team which may include nurse practitioners, social workers, dietitians, and pharmacists (Dahrouge et al., 2016; Laberge et al., 2016; Rudoler et al., 2015). Both Family Health Networks and Family Health Organizations involve contractual accountability to the Ministry of Health for the services provided within the blended-capitation model. Lastly, a Community Health Centre (CHC) is run by a community board to provide team-based primary care services to populations that have trouble securing services or are in “hard-to-serve” communities (Devlin et al., 2013). Healthcare practitioners in CHCs are salaried.

### **Theoretical Framework**

The Normalization Process Theory (NPT) is an implementation theory and conceptual framework used to understand and explain the dynamic processes that occur during implementation of interventions in healthcare (May, et al., 2011). NPT is “concerned with the social organization of work (implementation), of

making practices routine elements of everyday life (embedding), and of sustaining embedded practices in their social contexts (integration)” (May & Finch, 2009). NPT postulates that practices become routinely embedded or normalized as the result of people working to enact them (May et al., 2009).

NPT focuses on four theoretical constructs which describe mechanisms that are energized by the investments of the participants (May, et al., 2011). *Coherence* explores the means that a practice is made by a set of ideas that are socially defined and organized by competencies. These ideas and competencies hold the practice together (May & Finch, 2009). *Cognitive participation* of individuals in an organization promotes or inhibits the legitimation of the intervention; it is driven by the commitments of the participants (May & Finch, 2009; May, et al., 2011). The process of *collective action* is driven by the efforts of participants; it is the material and mental work that is done to enact a practice (May & Finch, 2009; May, et al., 2011). Collective action may be the reshaping of behaviours or actions or the reorganization of a collective purpose (May & Finch, 2009). The final theoretical construct is that patterns of collective action and outcomes are continuously evaluated through *reflexive monitoring* (May & Finch, 2009).

For this study, the delivery and implementation of transgender primary care will be explored using NPT. Transgender primary care consists of any primary care services obtained by individuals who identify as transgender. This can include but is not limited to general episodic care, chronic-care management,

medical-supervised transition (including providing access to and monitoring of transgender hormones), and counselling.

### **Research Questions**

An exploratory case study will be used to answer the following research questions:

1. How is primary healthcare for transgender individuals delivered within different primary care models in Ontario?
2. What activities do interdisciplinary team members engage in when delivering primary healthcare to transgender individuals?
3. What has supported primary care practitioners' capacity to develop their competence in delivering primary care to transgender individuals?
4. How is the delivery of primary care for transgender individuals implemented within different primary care models in Ontario?
5. How does the implementation of primary care services for transgender individual compare across various models of primary care delivery?

### **Methods**

#### **Research Design**

Qualitative methods explore, describe and explain phenomena (Creswell, 2007). This study will use an exploratory, multiple-case study design (Yin, 2014) to explore the implementation and delivery of primary healthcare for transgender individuals in Ontario. Case study research explores specific issues through examination of cases within a system (Creswell, 2007), and allows investigators



to explore and retain a holistic and real-world experience (Yin, 2014). The qualitative case study methodology allows for a phenomenon to be explored through different lenses by using a variety of data sources (Baxter & Jack, 2008).

As there are few documented examples of primary care services for transgender patients (Deutsch, 2011; Esteva de Antonio, Gomez-Gil, & GIDSEEN Group, 2013; Reisner, Radix, & Deutsch, 2016; Wylie et al., 2016), a case study design allows for an in-depth exploration of how these services are implemented into practice and delivered in Ontario by exploring factors influencing this process. A multiple-case study will allow for the exploration of the differences and similarities among the cases within different primary care models to develop a rich understanding of the phenomenon (Yin, 2014). Case study methodology is a valuable method for evaluating programs (Baxter & Jack, 2008). Yin's case study methodology was selected for this study as it allows for multiple-case analysis and the use of both qualitative and quantitative data (Yin, 2014).

### **Unit of Analysis—The Cases**

A purposeful sampling strategy will be used. Purposeful sampling involves selecting organizations which can purposefully inform the understanding of the research problem and central phenomenon being explored (Creswell, 2007). To explore and understand primary care for transgender individuals, three cases will be used for this research study. The three cases will represent different primary care delivery models in Ontario. The comparison of primary care services

and implementation across different primary care delivery models is vital in understanding the provision of care across the province. The cases will include one solo physician Fee-For-Service practice, one Community Health Centre, and one Family Health Team in Ontario, all of which have been providing primary care to transgender individuals. The purpose of examining cases already providing care to transgender individuals is to understand the characteristics of the patient population, the different roles, activities and preparation of practitioners to provide this care, the process of implementation, and factors which influence the program implementation.

### **Participants**

Organizations currently providing primary care services to transgender individuals will be invited to participate in the study. Organizations will be identified as potential site through the researcher's networks and Rainbow Health Ontario, a province-wide program to improve access to services and to promote the health of Ontario's LGBT communities (Rainbow Health Ontario, 2018). Once organizational consent is obtained from the Director, study participants will be recruited from each organization. Primary data will be collected from employees in each organization. Individuals will be eligible to participate in the study if they: 1) are currently involved in any way in the delivery of primary care services or have contact with transgender individuals; and 2) are fluent in English. The types of individuals invited to participate in interviews are listed in Table 1.

Table 1  
*Types of Interview Participants*

	Case 1 – Solo Fee-for-service	Case 2 – Community Health Centre	Case 3 – Family Health Team
Physician Lead	1	1	1
Other physicians	0-1	1-2	1-2
Nurse Practitioner	0-1	1-2	1-2
Nurse	1	1	1
Clinical Support Staff	1	1	1
Allied Health Professionals	0-1	1-2	1-2
Total n	3-6	7-9	7-9

The decision to include this array of primary care practitioners and clinical support staff will help to provide a rich and comprehensive description of each case. As well, in Canada there is a trend for primary care to be provided by interdisciplinary teams. Participants who consent to participate will be contacted by the principal investigator to arrange an in-person or telephone interview at a time convenient for the participant. They will receive a \$25 gift card from a coffee chain as a token of appreciation for their participation.

### **Data Collection**

Data collection in case study research involves the use of multiple sources of evidence from within each case (Yin, 2014). The use of multiple sources of evidence provides a broader range of data and understanding of the cases (Yin, 2014). This study will collect data from semi-structured interviews, a survey and documentary evidence.

Semi-structured interviews will be conducted by the principal investigator to collect qualitative data that addresses research questions 1 to 4. The use of semi-structured interviews allows the researcher to ask specific questions related to the study purpose while ensuring that participant can freely express their opinions and thoughts about the topic (Burns & Grove, 2005; Speziale & Carpenter, 2007). Participants will be interviewed using the developed interview guides. Questions asked to participants are listed in Table 2.

Table 2  
*Semi-Structured Individual Interview Guide*

Questions for Practitioners	Questions for Clinical Support Staff
<ol style="list-style-type: none"> <li>1. Can you tell me what primary care for transgender individuals means to you?</li> <li>2. Tell me about yourself, what is your role in the organization?</li> <li>3. Tell me about your practice with transgender patients?</li> <li>4. How would you describe the primary care for transgender patients in your organization?</li> <li>5. How easy or difficult it has been to integrate primary care for transgender patients into the work that you do, and any ways that your work has changed as a result?</li> <li>6. Tell me about team members' activities in the delivery of primary care to transgender patients?</li> <li>7. If you could create the best possible primary care service/program for transgender individuals in Ontario, what would it look like?</li> <li>8. Is there any other information you want to give me about the provision of primary care services for transgender patients at your organization?</li> </ol>	<ol style="list-style-type: none"> <li>1. Can you tell me what primary care for transgender individuals means to you?</li> <li>2. Tell me about yourself, what is your role in the organization?</li> <li>3. How would you describe the primary care for transgender patients in your organization?</li> <li>4. I would like to know how easy or difficult it has been to integrate primary care for transgender patients into the work that you do, and any ways that your work has changed as result?</li> <li>5. Tell me about team members' activities in the delivery of primary care to transgender patients?</li> <li>6. Is there any other information you want to give me about the provision of primary care services for transgender patients at your organization?</li> </ol>

The use of open-ended questions allows participants to contribute as much detail as they see fit and allows the researcher to ask follow-up questions to probe further (Creswell, 2007; Turner, 2010). Areas to be explored in the interviews include the experience of practitioners and clinical support staff with transgender patients, the development and implementation of the primary care program, program demographics, and the roles of the members of the team.

A pilot test will be done of the interview guide. The purpose of the pilot test will be to determine if there are any flaws, limitations or weaknesses in the interview design (Turner, 2010). The pilot test will be done at the first case study site as part of data collection. Participants will be interviewed using the interview guide and asked in the consent form if they agree to be contacted again for further questions should gaps be identified in the interview guide. If necessary, revisions will be made to the interview guide.

Primary care practitioners' interviews will take approximately 90 minutes to complete. Interviews with clinical support staff will take approximately 45 minutes. Consent for recording will be obtained and interviews will be transcribed verbatim. Participants will be given a copy of the interview guide before the interview so that they can reflect on the questions and develop detailed responses and consider anonymous case examples to discuss during the interview. Field notes will also be used by the researcher to document observations, and consider the context of the setting, potential themes, insights, and further issues to explore

which arise during the interview. Participants will be asked to complete a demographic questionnaire (Appendix C).

All participants, except clinical support staff, will be asked to complete the Normalization Measure Development (NoMAD) tool (Finch et al., 2015) to answer research question 5. The NoMAD tool is a 23-item instrument based on the constructs of NPT for measuring implementation processes from the viewpoint of professionals involved in the healthcare program or intervention implementation (Finch et al., 2013). The development methods of the NoMAD tool included item generation, workshops, interviews, item quality appraisal, and theory validation (Finch et al., 2013). Psychometrics for the NoMAD instrument have been determined and will be reported in a forthcoming publication. T. Finch, from Northumbria University, the lead author of the publication has stated that, "The NoMAD instrument has good face validity, construct validity and internal consistency, for assessing staff perceptions of factors relevant to embedding interventions that change their work practices" (personal communication, May 24, 2017). The tool developers recommend that the tool be adapted for specific use, suggesting replacing the word "intervention" with a term that would be most familiar to study participants (Normalization Process Theory, 2017). For this study, "intervention" was replaced with "primary care for transgender patients." Participants will complete the NoMAD survey (Appendix D) anonymously and place the completed forms in a sealed drop box located at their organization prior to their interview.

Documentary evidence, including administrative reports, proposals, evaluations, and other relevant internal records will also be gathered from each case. Use of documentary evidence in case study research can provide specific insight into the development and implementation of the delivery of primary care for transgender patients at each organization. However, a weakness with using documentary evidence is that it can be difficult to retrieve and vary by organization (Yin, 2014).

### **Data Analysis**

Qualitative data analysis will be conducted concurrently with data collection to allow for clarification and further exploration of emerging concepts and themes in future interviews (Baxter & Jack, 2008; Miles, Huberman, & Saldana, 2014). Yin (2014) recommends starting the data analysis process by exploring the data to look for patterns, insights, or concepts. All qualitative data will be transcribed and reviewed for accuracy. NVivo 11, a qualitative data management and analysis software, will be used for data analysis (QSR International, 2017). Deductive codes will be initially developed from the concepts of NPT, the research purpose, and research questions. Following this, inductive coding will be done as new codes emerge during the data collection (Miles, et al., 2014). Line-by-line coding of all data sources will follow within the first-cycle coding. Second-level coding will be completed by grouping first-cycle data into smaller categories, themes or constructs (Miles et al., 2014) within the large concepts from NPT. Codes that do not fit under NPT concepts will be

included. The code book will be reviewed with the research team to obtain agreement on the organization of codes and naming of themes.

Qualitative content analysis will be used to summarize the informational content of the data (Sandelowski, 2000) and is a systematic and objective means of describing and quantifying phenomena (Elo & Kyngäs, 2008). An inductive approach will be used as there is not enough prior knowledge about the phenomenon (Elo & Kyngäs, 2008). This approach moves from the specific to the general, allowing for particular instances to be observed and then combined into a general statement (Elo & Kyngäs, 2008).

Further data analysis will be done using cross-case synthesis (Baxter & Jack, 2008; Yin, 2014). Cross-case synthesis is a method of data analysis which facilitates the comparison of commonalities and differences within the cases and creates word tables to display the data from individual cases to form categories (Khan & Vanwynsberghe, 2008; Yin, 2014). NVivo queries will be used to create matrices to support cross-case synthesis which can identify differences and commonalties by categories or themes (Miles et al., 2014; Yin, 2014).

Quantitative data from the NoMAD instrument will be analyzed using SPSS, however there is currently no existing literature on how the analysis of data collected with the NoMAD instrument should be analyzed (Finch et al., 2015). The NoMAD instrument is divided into Option A and Option B. For analysis and interpretation, the Likert response format in Option A will be recoded to 1 = *strongly disagree* to 5 = *strongly agree*. Descriptive statistics using means and



standard deviation will be used to describe participants' responses to Option A, by NPT construct and each individual question (Normalization Process Theory, 2017). Frequencies and percentages will be used to describe responses to Option B. Mean NPT construct scores will be compared across the three different primary care models. Independent t-tests will be conducted to determine if there are any statistically significant differences between the primary care models using a significance level of 0.05.

Convergence of qualitative and quantitative data will be completed (Baxter & Jack, 2008; Yin, 2014) to give an overall understanding of how primary care services are implemented and delivered in Ontario.

### **Validity and Reliability**

Yin (2014) identifies four tests for judging the quality of case study research designs: construct validity, internal validity, external validity, and reliability. The following methodological considerations and strategies will address the validity and reliability across the overall study. Use of replication logic in multiple case studies will ensure external validity. Literal replication logic states that each case must be carefully selected to predict similar results (Yin, 2014). If cases are contradictory, initial questions are revised and retested with another case to ensure external validity (Yin, 2014). To confirm construct validity multiple sources of evidence will be collected and a chain of evidence will be established (Yin, 2014). Analytical techniques during data analysis such as pattern

matching, explanation building and addressing rival explanations will be done to ensure internal validity (Yin, 2014).

Lincoln and Guba (1985) identify four strategies to ensure trustworthiness and reliability in qualitative research: credibility, transferability, dependability, and confirmability. These four strategies will be used in this study to ensure the trustworthiness of results. Multiple methods of triangulation will be used to ensure credibility, dependability and confirmability. Data methods triangulation will be done by collecting and comparing data from multiple sources (Krefting, 1991; Patton, 1999) which include individual interviews, a survey, and documentary evidence. Triangulation of data sources will be done by using three different cases to collect data to maximize the range of data (Krefting, 1991; Patton, 1999). Investigator triangulation will occur with the use of the research team to support the analysis and interpretation of the results (Krefting, 1991; Patton, 1999).

The use of a consistent semi-structured interview guide will enhance credibility. A field journal for researcher self-reflection and ideas will be maintained as a method to ensure credibility and confirmability (Guba, 1981). The use of the journal will allow for reflection on potential biases and preconceived assumptions to be addressed (Krefting, 1991). Transferability will be established through a thick description, which is a detailed account of the field experience (Guba, 1981; Lincoln & Guba, 1985). This thick description of context will allow

for readers to evaluate the extent to which the conclusions drawn are transferable to other times, settings, situations, and individuals (Guba, 1981).

### **Ethical Considerations**

This study was approved by the Research Ethics Board at McMaster University (Appendix E). All participation in this study will be voluntary. Organizational consent (Appendix F) from each case will be obtained, as well as consent (Appendix G) from all participants (Burns & Grove, 2005). All data will remain confidential and identifying information will be removed (Burns & Grove, 2005). There is a small possibility that due to the specialization of the organizations providing transgender services, they may be recognizable to some local readers of the study findings. This will be discussed with the directors of these organizations as well as all participants in the consent and prior to any released reports. The potential benefits of participating in the study will be outlined to the participants, including the use of information from this study to develop and improve the provision of primary healthcare to transgender individuals.

### **Limitations**

Several limitations need to be considered. This study will explore three cases; therefore, results may not be transferrable to organizations in different contexts. However, a thick description of each case, will permit readers to determine the relevance of the results to their setting. Similarly, this study will only explore three primary care models, thus results may not be transferable to

other primary care models. The delivery and implementation of transgender care will only be explored retrospectively at one point in time which limits the understanding of implementation over time and has the potential for recall bias. Further, practitioners who may have been instrumental in the implementation may have left the organization.

### **Conclusion**

The aim of this study is to understand how primary care services for transgender individuals are delivered and implemented within the different primary care models in Ontario. Therefore, providing an understanding of the barriers and enablers of implementing and delivering primary care services for transgender individuals. This understanding may help to reduce the disparities transgender individuals experience when accessing primary care services.

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## **Chapter 4**

### **Models of care and team activities in the delivery of transgender primary care: An Ontario case study**

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## **Abstract**

**Background:** Transgender individuals experience barriers accessing primary care. In Ontario, primary care is delivered through a variety of delivery models. Literature supports team delivery of primary care for transgender individuals in general, yet little is known about the delivery of primary care to transgender individuals in Ontario and the role of primary care teams.

**Purpose:** We attend to explore how primary care for transgender individuals is delivered within three different primary care models in Ontario; the roles primary care team members enact in care delivery; and barriers, enablers and clinical competence of practitioners in delivering transgender care.

**Methods:** Case study methodology was used to compare transgender care across three Ontario primary care models (solo practice, Family Health Team and Community Health Centre). Key informants identified cases known to provide transgender care for case selection. Qualitative interviews were conducted, and documentary evidence and field notes were also collected (November 2017 - January 2018).

**Main Findings:** Practitioners clearly articulated their role and the activities they were responsible for in providing care, however they tended to work independently. In cases with an interdisciplinary team there was limited collaboration. Nurse practitioners, physicians, and counsellors contributed the most to the delivery of care. Key challenges in delivering primary care included lack of service coordination within organizations, and the need for practitioner

education. Continuing educational sessions, clinical practice guidelines, and mentorship aided capacity building.

**Conclusions:** Providing primary care to transgender individuals is within the scope of practice for primary care practitioners and can be part of routine care delivered in solo practice, Family Health Teams, and Community Health Centre models of care. Primary care team collaboration can be strengthened by regular team meetings. Professional training needs to include transgender education and continuing education opportunities need development.



## **Introduction**

The primary care needs of transgender and non-transgender individuals are similar, however transgender individuals have unique needs related to medically-supervised transition. A priority for this population identified in the literature includes access to hormone therapy and transition related surgeries (Heinz & MacFarlane, 2013; LGBT Health Program, 2015; Sanchez, Sanchez, & Danoff, 2009). Transgender individuals continue to experience barriers accessing and obtaining care (Makadon, 2011). Barriers include marginalization (Alegria, 2011; Bauer et al., 2009), access to a practitioner who is knowledgeable about transgender healthcare needs (Cruz, 2014; Gardner & Safer, 2013; Heinz & MacFarlane, 2013; Roberts & Fantz, 2014; Sanchez et al., 2009), organizational issues including lack of gender neutral washrooms (Markwick, 2016; McCann & Sharek, 2016; Vermeir, Jackson, & Marshall, 2018), binary gender documentation (Roberts & Fantz, 2014; Vermeir et al., 2018), and inappropriate reference ranges for laboratory systems (Markwick, 2016). Furthermore, practitioners receive minimal education regarding transgender health specific issues (Alegria, 2011; Roberts & Fantz, 2014).

There are approximately 25 million transgender individuals worldwide (Winter et al., 2016), with approximately 200,000 transgender adults in Canada and 77,000 in Ontario (Giblon & Bauer, 2017). In Ontario, transgender healthcare is provided in primary care settings however, there continues to be few practitioners providing transgender health services, and long waiting times

(Rotondi et al., 2013). Historically, primary care in Ontario was reorganized resulting in multiple models of care delivery (Laberge, Wodchis, Barnsley, & Laporte, 2016) which presents a unique opportunity for study. The *model of care* concept includes the organization and delivery of healthcare services (Department of Health, 2007). Ontario primary care models of care are categorized based on payment and remuneration of primary care physicians including: Fee-for-Service; Family Health Networks; Community Health Centres; and Family Health Organizations (Dahrouge et al., 2016; Health Force Ontario, 2017; Laberge et al., 2016). By 2012, 75% of Ontario's population and 75% of primary care physicians were enrolled in these four models of care (Marchildon & Hutchison, 2016).

Fee-for-Service (FFS) physicians practising in small groups or as solo practitioners receive remuneration for each service as determined by the schedule of benefits (Dahrouge et al., 2009; Laberge et al., 2016). It does not include interdisciplinary teams and patients are not rostered. In the Family Health Networks and Family Health Organizations, physicians work in groups of three or more with a blended capitation salary, and patients are rostered (Glazier, Koop, Schultz, Kiran, & Henry, 2012; Health Force Ontario, 2016; Rudoler et al., 2015). The blended capitation model requires contractual accountability to the Ministry of Health. Family Health Teams (FHT) are co-located within Family Health Organizations where patients are rostered, and pay is based on blended-capitation or blended-salary payment (Dahrouge et al., 2009; Laberge et al., 2016). Family Health Teams receive additional funding for interdisciplinary teams (Dahrouge et

al., 2016; Laberge et al., 2016; Rudoler et al., 2015). Community Health Centres (CHC) have salaried physicians and interdisciplinary teams, and provide services to “hard-to-serve” communities within a catchment area or defined patient population (Devlin et al., 2013).

Interdisciplinary collaboration and care coordination are key for the provision of transgender primary care (Esteva de Antonio, Gomez-Gil, & GIDSEEN Group, 2013). Literature supports an interdisciplinary team approach to transgender primary care (Deutsch, 2011; Esteva de Antonio et al., 2013; Reisner et al., 2015; Reisner, Radix, & Deutsch, 2016; Thornhill & Klein, 2010). While the importance of interdisciplinary teams is highlighted, little is known about how teams provide care. Key disciplines identified within interdisciplinary teams include physicians, nurse practitioners (NP), nurses, mental health professionals, and pharmacists (Deutsch, 2011; Reisner et al., 2015; Thornhill & Klein, 2010; Wylie et al., 2016). Mental health professionals such as psychologists, psychiatrists, and social workers can be vital to the provision of transgender primary care (Deutsch, 2011; Wylie et al., 2016).

Despite awareness of barriers to accessing healthcare for transgender individuals, little is known about how primary care is delivered to this population and how delivery differs across models of primary care in Ontario. The aim of this paper is to explore how care is delivered in different models of primary care, primary care team members’ roles and activities in the delivery, and what enablers and challenges are present when providing care to this population. For the purpose

of this study the term *role* is used to describe an individual's profession or job title, while the term *activity* is the work or tasks that an individual performs in their role. Results of this study can support primary care practices in the delivery of services to transgender individuals and be used to support and develop continuing education initiatives.

### **Methods**

An exploratory multiple case study design was used (Yin, 2014). Using purposeful sampling, three cases representing primary care delivery models in Ontario were selected including a solo practice FFS organization, CHC, and FHT. A key informant from Rainbow Health Ontario and the first author, a NP with knowledge of providing primary care to the transgender population, identified eligible organizations known to provide primary care services to transgender individuals. Organizational consent was obtained, and participants were recruited from each organization by the primary investigator. Participants were eligible if they: 1) were currently involved in the delivery of healthcare services or had contact with transgender individuals in the practice; and 2) were fluent in English. Participants included physicians, NPs, nurses, allied health professionals, and clinical support staff. Nineteen individuals completed the study.

Case study data collection requires multiple sources of evidence (Yin, 2014). Data collection methods included semi-structured interviews with providers and support staff, document evidence, and investigator field notes. On-site interviews ran between 25-100 minutes each. A semi-structured interview

guide was used. Examples of questions included: “What is your role in the organization?”; “How would you describe the primary care for transgender patients in your organization?”; and “Tell me about the activities of team members.” All interviews were recorded and transcribed verbatim. Documentary evidence (reports, proposals, evaluations) pertaining to the delivery of care for transgender individuals was collected from each case where available. All data was analyzed using qualitative content analysis (Sandelowski, 2000) and cross-case synthesis (Baxter & Jack, 2008; Yin, 2014) in NVivo 11 (QSR International, 2017). NVivo queries created matrices to support cross-case synthesis and identify differences and commonalities between cases (Miles, Huberman, & Saldana, 2014; Yin, 2014). Triangulation was facilitated by collecting and comparing data from multiple sources (Krefting, 1991; Patton, 1999), using three cases to maximize the range of data (Krefting, 1991; Patton, 1999), and working with a multidisciplinary research team (nurses and a physician) experienced in primary care and qualitative research to support analysis and interpretation of results (Krefting, 1991; Patton, 1999).

Credibility was enhanced with the consistent use of a semi-structured interview guide (Krefting, 1991). A field journal for researcher reflexivity and ideas was maintained to support credibility and confirmability (Guba, 1981). Transferability was established through thick descriptions of cases (Guba, 1981; Lincoln & Guba, 1985). Ethics Board approval was obtained from McMaster University Hamilton Integrated Research Ethics Board (HIREB #07-332).

## Findings

Case 1 was a Fee-for-Service organization with one physician and one clinical support staff, who have provided care to approximately 140 transgender individuals for two years. Case 2 was a FHT that has provided care to approximately 70 transgender patients over the last 7-10 years. Their interdisciplinary team consisted of 20 staff that were all involved in providing care to transgender individuals. Case 3 was a CHC with 45 staff providing care to approximately 300 transgender individuals. It was unknown how long this organization has provided care to this population. Table 1 highlights key characteristics of each case and the number and type of staff who participated in the study. The term *practitioner* is used to describe any healthcare practitioner who provides direct care to patients, the term *nurse* includes registered nurses and registered practical nurses, whereas the term *counsellor* includes mental health workers, such as social workers and psychotherapists.

Table 1  
*Case characteristics*

	Case 1: Fee-For- Service	Case 2: Family Health Team	Case 3: Community Health Centre	
<b>Team members participating in the study</b>	Physician	1	1	2
	Nurse Practitioner	-	1	2
	Nurse	-	1	2
	Counsellor	-	1	3
	Program Manager	-	1	-
	Community Support Worker	-	-	1
	Clinical Support Staff	1	1	1
Number of staff in the organization	2	20	45	
Number of staff participating in the study	2	6	11	
Estimated of transgender patients in the practice	140	70	300	
Length of time providing transgender primary care	2 years	7-10 years	Unsure	

The mix of team members varied between cases. Cases 2 and 3 included nurses, NP’s and other allied health practitioners, which were absent in Case 1. All participants described their roles and activities in providing primary care services to transgender individuals (see Table 2).

Table 2  
*Roles and Activities of Team Members*

	Physician	NP *	Nurse *	Counsellor *	Clinical Support Staff	Other *
Administrative duties					✓	✓
Advocacy	✓			✓		✓
Assessments	✓	✓	✓	✓		
Care Coordination				✓		✓
Chronic Disease Management	✓	✓				
Counselling		✓		✓		
Episodic Care	✓	✓				
Health Promotion			✓	✓		
Medication Teaching and Administration of injections (hormones, vaccinations)			✓			
Order, monitor and follow up on diagnostic testing	✓	✓				
Patient Education/teaching		✓	✓	✓		
Prescribing Medication	✓	✓				
Preventative Care	✓	✓	✓			
Referrals	✓	✓		✓		

*Note.* Other includes individuals who identified as a program manager or community support worker

\*Excluded FFS case

### **Participant Roles and Activities**

All participants clearly articulated their role and the activities they were responsible for in delivering primary care to transgender individuals. However, some participants were unable to describe the contribution of others to the delivery of care to transgender individuals. Nurses accurately described other team members' activities more often than other participants. Physicians and NP's were the practitioners with the most involvement in delivering primary care services to transgender individuals. Their activities were similar and the most



common were patient assessments, counselling, providing transgender hormone therapy, and referrals to specialists and for surgery. Team members observed similarities between the roles stating, “patients have a physical exam by the physician or the nurse practitioner and [they] start them on hormones” (Nurse 1 CHC). In all cases, physicians and NP’s self-identified as the most responsible practitioner for transgender patients. Non-clinical staff, such as program managers and clinical support staff, were least involved with primary care delivery.

Participants in all cases viewed the delivery of primary care to transgender individuals as no different from care provided to other individuals: “I provide primary care to anyone the same way” (NP 2 CHC). Additionally, they all acknowledged accepting referrals for new transgender patients, identifying them as a priority population.

Overall, primary care services included preventative and episodic care, hormone therapy and monitoring, referrals for transition related surgeries, counselling, and chronic disease management. As Physician 2 from the CHC noted: “It’s complete primary care.” A counsellor supported this notion:

We treat individuals that identify as trans, their primary care, very similar to cisgender individuals. That it’s really looking at having their annual physical, health promotion and education around, like, healthy lifestyle, smoking, kind of meeting all of those health targets that are expected in primary care. (Counsellor FHT)

Hormone therapy and access to transition-related surgeries are priorities for individuals (Sanchez et al., 2009) and this need was recognized in all three cases.

In terms of the specifics around diagnosis of gender dysphoria and initiation of hormones or other needs that they had, we've made efforts to do that...it's mostly been provision of medical services with potential referral to surgeons or other practitioners, as necessary. (Physician FFS)

Transition psychosocial readiness assessments are completed by team members, depending on the cases. The solo FFS physician does all patient assessments and recommendations for treatment, and initiates hormone therapy. However, in team-based cases patients are seen by multiple team members, including nurses and counsellors, before hormone therapy is initiated by the prescribing practitioner.

Two processes for initiation of hormone therapy were identified. The first was embedded in primary care provided to patients at that organization. Patients could see their primary care practitioner for a variety of issues, including hormone therapy. Physicians and NPs in Cases 2 and 3 addressed all aspects of primary care for their patients. "I feel that I am providing primary care to all of my patients regardless of gender or what their concerns are" (NP FHT). The second process provided rapid access to hormones for patients whose current practitioner felt unable to initiate therapy. The program's goal is to improve access to hormone therapy. "It's an easy way for them to come in and start or continue their hormone therapy treatments. We have patients coming from all over Ontario to

see us” (Clinical Support Staff FFS). Cases 1 and 3 provided rapid access which included seeing individuals on a short-term basis to initiate hormones and then return to their regular primary care practitioner.

We had such a long waiting list that we couldn’t take all these people. So, we constructed the idea of making a hormone start clinic to get people started and push primary care providers in the community to continue what we had started. (NP 2 CHC)

Case 3 applied a team-based approach with members having specific roles in the program.

They go to triage by the social workers, and they have an intake with the counsellors. Then have a visit with the nurse. We’re making sure that they’re safe to proceed to visit number two, which is a physical exam by the physician or the NP and start on hormones. So, they have blood work done and by visit two they are leaving with a prescription. And visit three they come back 6 weeks later and see us again...and then transferring back to their primary care provider. (Nurse 2 CHC)

### **Barriers and Enablers in the Delivery of Care**

**Interdisciplinary collaboration within an organization.** Transgender patients often see multiple practitioners to address their health needs (counsellors or specialists) or to complete a secondary surgical assessment (another practitioner). Case 3 participants identified barriers to collaborating with interdisciplinary team members to deliver care. For example, a barrier in Case 3

was the division between the primary care program and the rapid access program. An internal policy caused a separation in these two programs, making it difficult for patients to move from one program to the other. A physician stated, “We sort of work in silos. I can’t get my patients to connect with the other provider that works here [in the rapid access clinic]” (Physician 1 CHC). Another practitioner also experienced similar barriers when trying to access hormone injection support: “This is a patient of mine, why can’t a nurse here give the injection to this person even though they’re not a primary care client here? This does not make sense” (Counsellor 3 CHC).

Despite some barriers as noted above, participants in Cases 2 and 3 acknowledged the value of collaboration and team work as an enabler in care delivery.

It’s been really beneficial to have a team...a specialised team...and different disciplines within the team so that...you can provide the best care possible for the person, so we’re not doing this in isolation. (Counsellor 1 CHC)

Enablers were case conferences or team meetings which provided opportunities to discuss patient care needs and work together to develop care plans. “It’s very collaborative amongst the team. A social worker, nurse, and the practitioner are all working together to optimize the care that the client is getting. [...]. So, we have time set aside for case conferencing” (NP 1 CHC). Case conferences also allow for greater understanding of roles to enable team functioning: “Although, I

have a different role, we also work together as a team. So, I often will consult with them” [Counsellor FHT].

**Coordination of services external to the organization.** Finding appropriate and knowledgeable practitioners external to the organization was a barrier to care delivery for Cases 2 and 3. “The community didn’t have a lot of supports because [the patient] had some complications with the surgery. And so, to find someone who knew what was going on was really quite difficult” (NP FHT). Finding services that were transgender-friendly and “safe” was equally challenging such as, “anticipating where it’s safe to get your blood work done, where it’s safe to go for an x-ray or go for a mammogram” (Physician 2 CHC).

Coordinating access to surgical assessments was a challenge in Case 3: “I think it’s still a difficult system to navigate” (Physician 1 CHC). The key challenge was the requirement of two surgical assessment letters: “it’s just logistically hard. Often, I’ll know the person, and then no one else does. So how do I get a second letter?” (NP 2 CHC). It was also challenging to coordinate patients getting assessed by another practitioner on the team to obtain another letter. “They often need two physicians or two healthcare providers to certify for gender surgery for OHIP. And I can’t get my patients to connect with the transgender clinic so that they can get two providers (Physician 1 CHC).

**Maintaining competency in transgender health.** Lack of formal and continuing education was a substantial challenge identified in all cases. “It’s always evolving, so I’m always wanting to seek training, to seek more knowledge

because I feel like it's such a rapid changing field" (Counsellor FHT). Participants in Cases 2 and 3 received continuing education from their organization, however they wanted further educational opportunities. Although participants identified a learning need, a barrier was being unaware of where to obtain it. "I almost feel like I don't know what's out there... if there is anything out there" (RN 2 CHC), and "the challenge has been to find where that [education] would be" (Counsellor 1 CHC). Physicians and counsellors identified their main learning needs were supporting individuals to prepare for surgery and writing support letters. "Folks are now starting to say, 'I want to pursue surgical options.' And I'm somewhat unprepared. I don't have the detailed knowledge of what that involves" (Physician 2 CHC) and "I would like to get training on how to write surgery letters" (Counsellor 2 CHC).

Practitioners in all cases identified resources as enablers, such as clinical practice guidelines, transgender-specific training, and conferences, as main avenues for developing competence. Rainbow Health Ontario's training and biannual conference (Rainbow Health Ontario, 2018) and Sherbourne Health Centre's clinical practice guidelines (LGBT Health Program, 2015) were identified in all cases as primary references and sources for continuing education. Mentorship provided practitioners with opportunities to build competence. Case 3 noted mentorship within the team. The physician [CHC 2] stated, "I would mentor all of those practitioners." Nurses were also identified as mentors.

Another nurse...has had a little bit more of experience. So, she's one of those experts. She's my go-to for questions. So, kind of learning informally through her, asking questions and... kind of as we go – a mentor in that way. (RN 2 CHC)

Rainbow Health Ontario's mentorship teleconference was a resource identified in all cases: "Every Wednesday is a trans health connection mentorship program where we can call in as providers in the community and troubleshoot, ask very specific questions. And that's been really helpful too" (Counsellor FHT). In Case 1, mentorship outside the organization was particularly important: "Providers can participate and ask questions... specific questions or general questions or reach out to the group for information or just hear what's going on in the community in general. So, it's [trans mentorship call] another really excellent resource" (Physician FSS).

## **Discussion**

Study participants clearly understood their roles in providing care to transgender individuals, however they were not always able to describe the roles and activities of others. It is not surprising that NPs and physicians contributed the most in providing primary care to transgender individuals. An identified priority for transgender individuals is obtaining hormone therapy (Sanchez et al., 2009; Sperber, Landers, & Lawrance, 2005; Wylie et al., 2016), and the scope of practice for NPs and physicians allows them to diagnose, prescribe therapy, and monitor patients. Generalized primary care, including acute episodic visits and

preventive care, is managed by physicians and NPs, with support from the primary care team. Although no longer a requirement before starting hormones or having surgery, mental health services, including counselling, constitutes another large portion of primary care services for transgender individuals (Markwick, 2016; Sperber et al., 2005). Counsellors provide support during the transition process by advocating, educating, and assessing patients for therapy or surgery (Coleman et al., 2012; Wylie et al., 2016). The key activities of nurses involved initial assessments, medication administration, teaching, and preventative care updates including vaccinations. Most practitioners reported working independently. Care coordination was only mentioned by counsellors and a community support worker; however, it is likely that other team members also did this activity but did not speak to it. The clinical support staff was responsible for administrative duties, including managing patient appointments.

While the work of NPs in primary care has been optimized, primary care nurses are underutilized and not working to the full scope of practice (Registered Nurses' Association of Ontario, 2012). Effective primary care nursing is economical and improves access, patient satisfaction, continuity of care, and health outcomes (Canadian Nurses Association, 2013; Health Council of Canada, 2009; Keleher, Parker, Abdulwadud, & Francis, 2009). Key activities and competencies include health assessments, healthcare management, education, health promotion, and counselling (Canadian Nurses Association, 2011; Community Health Nurses of Canada, 2011; Halcomb, Stephens, Bryce, Foley, &



Ashley, 2016). Optimizing nursing roles has the potential to improve the delivery of primary care to transgender individuals.

Team meetings or case conferences were discussed by some, but not all, participants in Cases 2 and 3. It is unclear if some participants attended these meetings but did not discuss it. Opportunities for ongoing shared communication through team meetings is critical in supporting effective interdisciplinary collaboration (Heale, Dickieson, Carter, & Wenghofer, 2014; Morgan, Pullon, & McKinlay, 2015), and can aid in the coordination and integration of transgender care (Reisner et al., 2016). Team collaboration can be enhanced through a team vision with shared goals, formal quality processes, and engaging practitioners to feel part of the team (Mulvale, Embrett, & Razavi, 2016).

Despite the presence of interdisciplinary teams in Cases 2 and 3, there were collaboration barriers. For example, difficulty accessing services from other team members was a barrier in Case 3. Organizational leadership needs to ensure that appropriate structural and relational supports are in place to support teamwork (Heale et al., 2014).

There was no evidence to describe the optimal interdisciplinary teams needed in the provision of primary care to this population in either the FHT or the CHC. Case 1, as a solo practitioner, was able to deliver care to many transgender patients without an interdisciplinary team. Key aspects of care were provided by the solo practitioner, including hormone therapy and counselling. This raises

further questions related to the optimal mix of primary care staff to support this population.

Primary care delivered by an interdisciplinary team or solo practitioner can provide comprehensive care to transgender individuals. However, challenges exist in finding resources and practitioners external to the organization that are safe for transgender individuals, such as a diagnostic imaging lab which is transgender friendly or a specialist who has knowledge of caring for transgender individuals. Referrals to outside individuals, such as counsellors, medical specialists, or surgeons may be required, but essentially transgender patients should receive routine care from their primary care practitioner. Practitioners can reduce barriers to care for transgender individuals by providing access to primary care, hormone therapy, and surgical referrals. In Ontario, transgender individuals are often left on waiting lists or travel great distances to receive healthcare (Rotondi et al., 2013). Primary care practitioners can improve the wait and travel times for transgender individuals by routinely offering this care. Additionally, providing primary care to marginalized populations can improve generalized primary care provided to all populations (Starfield, Gervas, & Mangin, 2012).

Practitioners developed competence through mentorship, clinical practice guidelines, and continuing education opportunities. Improved education is needed to expand practitioners' knowledge regarding transgender health needs, treatment, and management. Advocating for curriculum development to include transgender content can help address barriers patients experience in finding a knowledgeable

practitioner. Additionally, continuing educational opportunities need to be available for ongoing capacity building. Including transgender-specific content in primary care conferences, workshops, and training may also help.

### **Limitations**

This study presents an analysis at only one point in time. Exploring cases in three different models of care provides a snapshot into the delivery of transgender primary care in Ontario. Results may not be generalizable to all primary care settings in Ontario, but because of the purposeful selection of cases, they could be transferable to similar models of care. Cases already providing primary care to transgender individuals were selected, whereas other primary care organizations may be more limited in their experience with this population, thereby limiting transferability of results. However, the results can inform practices interested in improving care to the transgender population. Further studies involving more sites and other models (i.e., NP-led clinics and Aboriginal Health Centres) will allow for different perspectives on the delivery of care, enablers and barriers, and the development of competencies to provide this care.

### **Conclusion**

Primary care practitioners and teams providing care to transgender individuals are working hard to improve access to care and eliminate common barriers. Providing primary care services to transgender individuals is within the scope of practice for primary care practitioners and can be part of routine care. This study identifies areas to further improve the care delivery for transgender

individuals. Results support the development of educational initiatives that include the delivery of care to transgender individuals. Efforts should be made to improve practitioner training in professional education programs. More research is needed to focus on collaboration in teams providing care for transgender individuals and the impact it can have on healthcare outcomes. The study's findings point towards the need for further research in Canada. It is important to note that making small changes based on the findings of this study, such as improvements to education and team collaboration could have a positive impact on the delivery of care for transgender individuals in Ontario.

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## Chapter 5

### **“Primary care is primary care”: Use of Normalization Process Theory to explore the implementation of primary care services for transgender individuals in Ontario**

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## Abstract

**Background:** In Ontario, Canada, healthcare for transgender individuals is accessed through primary care; however, there are a limited number of practitioners providing transgender care, and patients are often on waiting lists and/or traveling great distances to receive care. Understanding how primary care is implemented and delivered to transgender individuals is key to improving access and eliminating healthcare barriers. The purpose of this study is to understand how the implementation of primary care services for transgender individuals compares across various models of primary care delivery in Ontario.

**Methods:** A qualitative, exploratory, multiple-case study guided by Normalization Process Theory (NPT) was used to compare transgender care delivery and implementation across three primary care models. Three cases known to provide transgender primary care and represent different primary care models in Ontario, Canada (i.e., family health team, community health centre, fee-for service physician) were explored. The NoMAD survey, a tool to measure implementation processes, and qualitative interviews with primary care practitioners and allied healthcare staff were administered.

**Results:** Using the NPT framework to guide analysis, key themes emerged about implementation of primary care services for transgender individuals. These themes include creating a safe space for patients, identifying gaps in services, understanding practitioners' roles, and the need for more training and education in transgender care for practitioners.

**Conclusions:** Primary care services for transgender individuals can and should be delivered in all models of primary care. Training and awareness for healthcare practitioners are needed to develop capacity in providing primary care to transgender individuals. A greater number of practitioners and organizations are needed to take on this work, embedding and normalizing transgender care into routine practice to address barriers to access and improve quality of care for transgender individuals.



## **Introduction**

Canada has a publicly funded, universal health insurance system which covers all medically necessary services (Laberge, Wodchis, Barnsley, & Laporte, 2016). Yet despite this accessibility, transgender individuals continue to experience marginalization and barriers to healthcare access (Alegria, 2011; Bauer et al., 2009; Roberts & Fantz, 2014). Irrespective of their gender, all individuals require primary care. Primary care for transgender individuals consists of any primary healthcare services needed by individuals who identify as transgender. This can include, but is not limited to, general episodic care, chronic care management, medical supervised transition (including providing access to and monitoring of transgender hormones), and counselling. Transgender individuals have specialized healthcare needs related to their transition. Access to transgender hormones, surgery (Heinz & MacFarlane, 2013; Sanchez, Sanchez, & Danoff, 2009), and knowledgeable practitioners who can provide these services has been identified as major barriers to healthcare (Cruz, 2014; Gardner & Safer, 2013; Heinz & MacFarlane, 2013; Roberts & Fantz, 2014; Sanchez et al., 2009).

The size of the transgender population in Canada is based on estimates, as the current census solely collects data using male or female gender markers (Davidson, 2015; Statistics Canada, 2016). The estimate of transgender adults in Canada is approximately 200,000, of which 77,000 live in the province of Ontario (Giblon & Bauer, 2017). In Ontario approximately 83% of transgender

individuals have a primary care physician compared to 90% of the general cisgender population (Bauer, Zong, Scheim, Hammond, & Thind, 2015).

In Ontario, primary care is delivered in multiple models of primary care (Laberge et al., 2016; Marchildon & Hutchison, 2016). These models are generally categorized based on the remuneration method of physicians and include: Fee-for-Service (FFS), Blended Capitation, and Salaried models (Health Force Ontario, 2016; Laberge et al., 2016; Marchildon & Hutchison, 2016). Table 1 describes the primary care models in Ontario.

Table 1  
*Characteristics of Ontario Models of Primary Care*

<b>Model</b>	<b>Description</b>	<b>Remuneration</b>	<b>Rostered Patients</b>	<b>Interdisciplinary Teams</b>
Fee-For-Service	Solo or group physicians Walk in clinics	Fee-For-Service	No	No
Family Health Organization	Group of three or more physicians	Blended Capitation	Yes	Limited
Family Health Network				
Family Health Team (FHT)	Interdisciplinary team	Blended Capitation or Blended Salary	Yes	Yes
Community Health Center (CHC)	Interdisciplinary team	Salary	No Have catchment area or defined patient populations	Yes

In the FFS model, remuneration is based on services provided (Dahrouge et al., 2009; Laberge et al., 2016). Family Health Organizations and Family Health Networks are blended-capitation models which allow for physicians to work in groups (Glazier, Koop, Schultz, Kiran, & Henry, 2012; Health Force

Ontario, 2016; Rudoler et al., 2015). Family Health Organizations are eligible to work with a Family Health Team (FHT), an interdisciplinary team which may include nurse practitioners (NP), nurses, social workers, dietitians and pharmacists (Dahrouge et al., 2016; Laberge et al., 2016; Rudoler et al., 2015). FHTs are part of a blended capitation or blended-salary model of remuneration (Health Force Ontario, 2016). Community Health Centres (CHC) are salary-based models with interdisciplinary teams providing primary care services to “hard-to-serve” communities (Devlin et al., 2013; Health Force Ontario, 2016). Seventy-five percent of Ontario residents and 75% of primary care physicians were enrolled in the new models of primary care by 2012 (Marchildon & Hutchison, 2016). In Ontario there are 101 CHCs (Ministry of Health and Long Term Care, 2015) and 184 FHTs (Ministry of Health and Long Term Care, 2016).

### **Exploring Implementation of Primary Care for Transgender Individuals**

Understanding how primary care is implemented and delivered to transgender individuals is key to improving access and eliminating healthcare barriers. By examining implementation in different primary care models which serve transgender populations, valuable insight can be obtained on how care can be optimized in practice (Craig et al., 2013). No primary research or conceptual literature exists on the implementation of primary care programs for the transgender population. Within the conceptual literature two programs of lesbian, gay, bisexual and transgender (LGBT) healthcare have been identified. The transgender population is often grouped together with those individuals

identifying as lesbian, gay and bisexual; although not specific to the transgender population these programs may be generalizable. Yehia et al. (2015) explored the implementation of an interprofessional LGBT health program within the University of Pennsylvania. The authors developed a framework for LGBT Health Program Development which included four steps for successful implementation: establish the need and gain support; conduct strategic planning and communication; implement activities; and finally, evaluate progress. As part of implementation, the LGBT Health Program delivered lectures on LGBT healthcare and research, hosted networking events, and advocated for LGBT awareness. The authors noted that these initiatives helped to institutionalize the program and build a foundation of support for further success. Fenway Health in Boston Massachusetts is a leading LGBT healthcare facility that implemented a specific transgender primary care program in 2007 (Mayer, Mimiaga, vanDerwarker, Goldhammer, & Bradford, 2007; Reisner et al., 2015). The Fenway Health clinics have a philosophy of “accessible, patient-centered care that view gender affirmation as routine part of primary care service delivery” (Reisner et al., 2015, p. 587). No information could be found specific to the implementation process, structure, or members of the Fenway Health program team. However, the key services implemented as part of the transgender healthcare program include primary care, family planning, transgender-specific healthcare, complementary and alternative medicine specialties, pharmacy, optometry, dentistry, and diagnostic imaging (Reisner et al., 2015). No other

research was found on the implementation of healthcare services within the LGBT population, and more specifically there was no research that examined specific healthcare services for transgender individuals. Further research is required to understand primary care delivery to this population in order to successfully address and eliminate existing barriers and marginalization.

### **Theoretical Framework**

The Normalization Process Theory (NPT) is a theory and conceptual framework used to understand implementation of interventions in healthcare (May, et al., 2011). NPT hypothesizes that practices become routine or normalized as the result of people working to enact them (May et al., 2009). NPT has not been used to explore the implementation of any LGBT healthcare programs or initiatives. Within primary care, however, NPT has been used to evaluate complex mental health services (Franx, Oud, De Lange, Wensing, & Grol, 2012; Gask, Rogers, Campbell, & Sheaff, 2008; Gunn et al., 2010), chronic kidney disease management (Blakeman, Protheroe, Chew-Graham, Rogers, & Kennedy, 2012), chronic back pain (Sanders, Foster, & Bie Nio, 2011), insulin use for diabetes management (Furler, Spitzer, Young, & Best, 2011), infertility (Wilkes & Rubin, 2009), and weight management (Sturgiss, Elmitta, Haeslera, van Weel, & Douglas, 2017).

NPT identifies four theoretical constructs: coherence, cognitive participation, collective action, and reflexive monitoring (May & Finch, 2009; May, et al., 2011). Coherence explores the means by which a practice is

established using a set of ideas and competencies hold the practice together.

Driven by the commitment of the participants, cognitive participation promotes or inhibits the legitimation of the intervention. Collective action is the material and mental work that is done to enact a practice and may include the reshaping of behaviours or actions or the reorganization of a collective purpose. In the final construct, patterns of collective action and outcomes are continuously evaluated through reflexive monitoring (May & Finch, 2009).

The purpose of this study is to understand how implementation of primary care services for transgender individuals compares across three models of primary care in Ontario. The implementation and specific care that is delivered in primary care to transgender individuals was explored using NPT. For the purpose of this paper the intervention explored was the delivery of primary care services for transgender individuals.

## **Methods**

### **Case Selection and Boundaries of the Case**

A qualitative, exploratory, multiple-case study design (Yin, 2014) was used for this study. Three cases were purposefully selected that represented different primary care delivery models in Ontario. The comparison of programs and implementation across different primary care delivery models is vital in understanding the provision of care across Ontario. The cases invited to participate in the study included a FFS organization, a FHT and a CHC, currently providing primary care services to transgender individuals. Organizations were

identified as potential sites through the primary researcher's networks and through Rainbow Health Ontario, a province-wide program to improve access to services and to promote the health of Ontario's LGBT communities (Rainbow Health Ontario, 2018a). These organizations were then invited to participate in the study. Organizational consent was obtained first from the Director of the organization, followed by recruitment of study participants in the organizations. Primary data was collected from employees in all three cases. Individuals were eligible to participate in the study if they: 1) were currently involved in any way in the delivery of primary care services or had contact with transgender individuals in the organization; and 2) were fluent in English. Study participants included physicians, NPs, nurses (registered nurses and registered practical nurses), allied health professionals, clinical support staff and executive directors. Allied health professionals included social workers, counsellors, psychotherapists, community support workers and program coordinators. Clinical support staff included medical receptionists and clerks. For the purpose of analysis, individuals who identified their role as either social workers, counsellors or psychotherapists were categorized under the term, "counsellor."

### **Multiple Data Sources and Methods**

Data collection included multiple sources of evidence from within each case, allowing for a broader range of data and understanding of the cases (Yin, 2014). Data was collected using the NOrmalization MeASURE Development (NoMAD) tool (Finch et al., 2015), semi-structured interviews, investigator field

notes and document analysis. The primary investigator recruited participants, obtained written consent to participate, and collected relevant documents. Data collection occurred in person and on site at each organization.

All participants, except clinical support staff, completed the NoMAD tool (Finch et al., 2015), a 23-item instrument based on the constructs of NPT from the viewpoint of professionals involved in the healthcare program (Finch et al., 2013). Psychometrics for the NoMAD instrument have been submitted for publication by the authors. Personal communication with T. Finch, lead author on the NoMAD manuscript, states that "The NoMAD instrument has good face validity, construct validity and internal consistency, for assessing staff perceptions of factors relevant to embedding interventions that change their work practices" (T. Finch, personal communication, June 7, 2017). The developers suggest adapting the tool for specific use by replacing the word "intervention" with a term that would be more familiar to study participants (Normalization Process Theory, 2017). For this study, "intervention" was replaced with "primary care for transgender patients."

Semi-structured interviews were conducted by the principal investigator using the developed interview guides (Ziegler, Valaitis, Carter, Risdon, & Yost, 2018). One interview guide was specific for practitioners and the other guide was for clinical support staff. Areas explored in the interviews included practitioners' experience with transgender patients, the development and implementation of the primary care program, program demographics, and the role of the primary care team. Interviews were audiotaped and transcribed verbatim. Additionally, relevant



documentary evidence including administrative reports, proposals, evaluations, and clinic forms were also collected.

### **Analysis**

Data analysis was completed by the primary investigator, who is a PhD student and primary care NP with a clinical focus in providing transgender primary care. Members of the research team (RV, NC, CR, and JY) have experience in conducting qualitative research. EZ and CR have experience in LGBT health and CR, NC and RV have experience in primary care research. Qualitative data was analysed using NVivo 11. Analysis occurred concurrently with data collection to allow for clarification and further exploration of emerging concepts and themes in future interviews (Baxter & Jack, 2008; Miles, Huberman, & Saldana, 2014). Deductive codes were developed from the concepts of NPT and the research questions to form the organizing structure for the inductive coding. Inductive coding was done as new codes emerged from the data (Miles et al., 2014). Qualitative content analysis (Sandelowski, 2000) and cross-case synthesis (Baxter & Jack, 2008; Yin, 2014) was completed. Once coding was completed, NVivo matrix queries were conducted to identify differences and commonalties among the cases (Miles et al., 2014; Yin, 2014). Coding and analysis were reviewed in collaboration with the research team and all members agreed on the coding structure.

Quantitative data from the NoMAD instrument was analyzed using SPSS (IBM Analytics, 2017). The NoMAD instrument is divided into Option A and

Option B for each question. The Likert response format in Option A was coded as 1 = *strongly disagree* to 5 = *strongly agree*. Participants were instructed to select Option B if the statement in Option A was not relevant. Option B responses include *not relevant to my role*, *not relevant at this stage* or *not relevant to the delivery of care*. Descriptive statistics were used to describe participants' responses to Option A, by NPT construct and each individual question (Normalization Process Theory, 2017). A mean score was calculated for each NPT construct and compared across the three cases. Option B results were reported using frequencies and percentages.

Convergence of qualitative and quantitative data was completed (Baxter & Jack, 2008; Yin, 2014) to give an overall understanding of how primary care services for transgender individuals are implemented in Ontario.

### **Validity and Reliability**

Yin (2014) identifies four measures for quality of case study research designs: construct validity, internal validity, external validity, and reliability. The quality of this study was enhanced with the collection of multiple data sources and a chain of evidence (construct validity); pattern matching and explanation building in data analysis (internal validity); and use of replication logic in multiple case studies (external validity and reliability). Furthermore, trustworthiness (Lincoln & Guba, 1985) was ensured through multiple methods of data collection and sources (dependability); use of semi-structure interviews and fields notes (credibility); thick descriptions of the cases (transferability); and

triangulation of results from interviews, documents and NoMAD tool (confirmability). Ethics Board approval was obtained from McMaster University Hamilton Integrated Research Ethics Board (HiREB #3751).

## **Results**

First, a brief description of each case and participants will be provided. Second, the qualitative and quantitative results will be presented within the four NPT framework constructs: coherence, cognitive participation, collective action and reflexive monitoring.

### **Summary of Cases**

**Case 1: Fee-for-Service:** This case has been providing primary care services to transgender individuals for two years and has approximately 140 patients. One physician and one clinical support staff work for the organization located in a small-size urban community, population between 50,000-200,000 (Organisation for Economic Co-operation and Development, 2018). Both participated in the study.

**Case 2: Family Health Team:** This case has been providing primary care services to transgender individuals for seven to ten years and has approximately 70 patients. There are twenty staff in the organization which includes physicians, NPs, allied health practitioners, clinical support staff and management. All practitioners in this organization are involved in providing primary care to transgender patients. In total, there were 7 study participants including a physician (n=1), NP (n=1), nurse (n=1), counsellor (n=1), program manager (n=1), clinical

support staff (n=1) and executive director (n=1). The clinic is in a medium-sized urban setting, population between 200,000-500,000 (Organisation for Economic Co-operation and Development, 2018).

**Case 3: Community Health Centre:** This case serves approximately 300 transgendered patients. It is unknown how long the practice has provided care to transgender individuals. There are 45 staff in the organization. There was a total of 12 study participants including physicians (n=2), NPs (n=2), nurses (n=2), counsellors (n=3), a community support worker (n=1), a clinical support staff (n=1) and an executive director (n=1). The clinic is in a metropolitan area, population between 500,000 and 1.5 million (Organisation for Economic Co-operation and Development, 2018).

Nineteen individual interviews and 18 NoMAD surveys were completed from the three cases (Table 2). Practitioners who completed the NoMAD survey and interview included physicians (n=4), NPs (n=3), nurses (n=3), counsellors (n=4), a community support worker (n=1) and a program manager (n=1). Clinical support staff (n=3) only participated in the interview as their role was not directly involved in the implementation of services. Executive directors (n=2) only completed the NoMAD survey as their role was not involved in direct patient contact.

Table 2  
*Data Collection by Case*

Case	Interviews	NoMAD survey
Fee-For-Service (n =2)	2	1
Family Health Team (n = 7)	6	6
Community Health Centre (n = 12)	11	11
TOTAL (n=21)	19	18

Table 3 illustrates the main themes that were identified across all cases from the interviews. These results will be presented and categorized under the NPT constructs.

Table 3  
*Identified NPT Themes*

<b>Construct</b>	<b>Major theme(s) identified</b>
Coherence	“Exactly that, primary care”
	“It’s a safe and welcoming space”
Cognitive Participation	Understanding their individual role as practitioners
	Lack of access to primary care services for transgender individuals
Collective Action	The need for more specific training about primary care for transgender individuals
	Resources to improve care for transgender individuals
Reflexive Monitoring	“It’s not really that difficult” to provide primary care to transgender individuals

Table 4 demonstrates the results of the NoMAD survey organized by NPT construct. Convergence of NoMAD survey results and qualitative themes is explored by construct.

Table 4

*NoMAD Results*

Item	Mean (SD) Overall (N=18)	Mean (SD) FFS (n=1)	Mean (SD) FHT (n=6)	Mean (SD) CHC (n=11)	Mann-Whitney U test (Significance)	Independent T Test (Significance)
<b>Coherence (Sense Making)</b>						
1.1-I can see how the delivery of primary care to transgender patients differs from usual primary care	3.56 (1.38)	4.00 (0.00)	3.67 (1.37)	3.45 (1.51)	-	$p=0.73$
1.2-Staff in this organization have a shared understanding of the purpose of primary care for transgender patients	4.17 (0.86)	5.00 (0.00)	4.50 (0.55)	3.91 (0.94)	-	$p=0.50$
1.3-I understand how the delivery of primary care to transgender patients affects the nature of my work	4.28 (0.90)	5.00 (0.00)	3.83 (1.17)	4.45 (0.69)	-	$p=0.21$
1.4-I can see the potential value of primary care for transgender individuals for my work	4.78 (0.43)	5.00 (0.00)	4.67 (0.52)	4.82 (0.41)	-	$p=0.23$
<b>Cognitive Participation</b>						
2.1-There are key people who drive the delivery of primary care for transgender patients forward to get others involved	4.44 (0.71)	5.00 (0.00)	4.50 (0.55)	4.36 (0.81)	$p=0.88$	-
2.2-I believe that participating in the delivery of primary care to transgender patients is a legitimate part of my role	4.82 (0.39)	5.00 (0.00)	4.67 (0.52)	4.90 (0.32)	$p=0.49$	-
2.3-I'm open to working with colleagues in new ways to deliver primary care to transgender patients	4.89 (0.32)	5.00 (0.00)	4.83 (0.41)	4.91 (0.30)	$p=0.81$	-
2.4-I will continue to support the delivery of primary care services for transgender patients	4.89 (0.32)	5.00 (0.00)	5.00 (0.00)	4.82 (0.41)	$p=0.59$	-
<b>Collective Action</b>						
3.1-I can easily integrate the delivery of transgender primary care into my existing work	4.41 (0.51)	4.00 (0.00)	4.50 (0.55)	4.40 (0.52)	-	$p=0.65$

3.2-The delivery of primary care to transgender patients disrupts working relationships *	4.18 (1.02)	4.00 (0.00)	4.17 (1.60)	4.18(0.60)	-	<i>p</i> =0.07
3.3-I have confidence in other people’s ability to deliver primary care to transgender patients	4.11 (0.68)	4.00 (0.00)	4.17 (0.75)	4.09 (0.70)	-	<i>p</i> =0.80
3.4-Work is assigned to those with skills appropriate to the delivery of primary care for transgender patients	3.83 (0.71)	4.00 (0.00)	3.83 (0.41)	3.82 (0.87)	-	<i>p</i> =0.18
3.5-Sufficient training is provided to enable staff to delivery primary care to transgender patients	3.67 (0.84)	4.00 (0.00)	4.00 (0.63)	3.45 (0.93)	-	<i>p</i> =0.09
3.6-Sufficient resources are available to support the delivery of primary care to transgender patients	3.56 (1.04)	4.00 (0.00)	3.67 (1.03)	3.45 (1.13)	-	<i>p</i> =0.52
3.7-Management adequately supports the delivery of primary care to transgender patients	4.39 (0.85)	4.00 (0.00)	4.67 (0.52)	4.18 (0.98)	-	<i>p</i> =0.25
<b>Reflexive Monitoring</b>						
4.1-I am aware of reports about the effects of the delivery of primary care to transgender patients	3.88 (1.05)	5.00 (0.00)	3.67 (1.03)	3.90 (1.10)	-	<i>p</i> =0.62
4.2-The staff agree that the delivery of primary care to transgender patients is worthwhile	4.72 (0.46)	5.00 (0.00)	4.67 (0.52)	4.73 (0.47)	-	<i>p</i> =0.65
4.3-I value the effects that delivering primary care to transgender patients has had on my work	4.76 (0.44)	5.00 (0.00)	4.50 (0.55)	4.90 (0.32)	-	<i>p</i> = <b>0.01</b>
4.4-Feedback about the delivery of primary care to transgender patients can be used to improve it in the future	4.76 (0.43)	5.00 (0.00)	4.67 (0.52)	4.80 (0.42)	-	<i>p</i> =0.31
4.5-I can modify how I delivery primary care to transgender patients	4.47 (0.62)	5.00 (0.00)	4.40 (0.55)	4.45 (0.69)	-	<i>p</i> =0.41

\*Item reverse scored

## Coherence

Coherence involves the “sense-making” work in which individuals take part in. Participants somewhat agreed that there is some difference in the delivery of primary care to transgender patients compared to non-transgender patients ( $M=3.56$ ,  $SD=1.38$ ). There was agreement on a number of items including a shared understanding of the purpose in providing primary care to transgender individuals ( $M=4.17$ ,  $SD=0.86$ ), understanding how the delivery of primary care affected their work ( $M=4.28$ ,  $SD=0.90$ ), and that they could see the potential value in their work ( $M=4.78$ ,  $SD=0.43$ ). The coherence construct was normally distributed; there was no statistically significant difference between the CHC ( $M=4.16$ ,  $SD=0.53$ ) and FHT ( $M=4.17$ ,  $SD=0.72$ );  $t=0.25$ ,  $p=0.98$ . All participants selected Option A answers and therefore Option B was not selected for this construct.

**Theme: “Exactly that, primary care”.** Qualitative data supported the survey results for this construct. Participants agreed there was value in providing primary care to transgender individuals and viewed it the same as the primary care provided to all their patients, independent of gender. “Primary care is primary care is primary care” (CHC Nurse 1), and “I see it as exactly that, primary care” (FHT Counsellor), were common sentiments expressed throughout the cases. A physician summed it up as: “I feel like the information that you’re trying to gather isn’t any different than we try to gather from our other patients. In other words, it’s still a review of systems. It’s still a past medical history” (CHC Physician 2).



**Theme: “It’s a safe and welcoming space”.** All participants had a shared understanding of the value of providing primary care for transgender individuals. Providing a safe and welcoming space was seen throughout all cases as a key foundation to implementing a primary care program for transgender individuals. Physician 2 described the CHC as

“a positive space that we hope they [transgender individuals] would feel welcome to be able to open up about what their healthcare needs are, and not be at risk of feeling stigmatized or treated any differently than our other patients.”

### **Cognitive Participation**

Cognitive participation refers to relational work done by participants as a collective to build and sustain a new intervention (May & Finch, 2009). Participants agreed that key people drive the delivery of primary care for transgender patients forward ( $M=4.44$ ,  $SD=0.71$ ), that they were open to working with colleagues and continuing to support the delivery of transgender primary care ( $M=4.89$ ,  $SD = 0.32$ ), and that the delivery of primary care to transgender patients is a legitimate part of their role ( $M=4.82$ ,  $SD=0.39$ ). The cognitive participation construct was not normally distributed; therefore, the Mann-Whitney U test was used to identify differences between the FHT and CHC. There was no statistically significant difference between these cases,  $U=31$ ,  $p=0.88$ . Option B, *not relevant to my role* was selected by 1 participant (5.5%) for question 2.2 which stated, “I believe that participating in the delivery of primary care to transgender patients is a legitimate part of my role.”

**Theme: Understanding their individual role as practitioners.** Qualitative data supported the survey results for this construct. All participants understood their role in delivering primary care services for their transgender patients. Most participants saw the delivery of primary care for transgender patients as being no different than care they provide to all their patients. As CHC NP 1 described, “I am providing primary care, and my role is to do that.” Additionally, many participants identified that advocacy was a key component in their role: “there’s also a role for advocacy within the centre or within the community” (CHC Counsellor 1). While all participants could define their role, many were not able to describe what other team members’ roles entailed. Many participants identified working independently and therefore may not have been aware of what others are doing for this population. However, nurses seemed to have a good understanding and were able to describe others’ roles within the CHC and FHT.

“[Patients] come in through the intake worker, and they get a file started . . . .

From there, they go to triage by the social workers, and they have an intake with the counsellors . . . . And they then have a visit with the nurse first, and we do an intake where we complete their profile, including family history, their current problem list and past problem list like their past medical history, their current medications, their immunizations, and their vitals. And it’s all understood that there are no bad answers and that we’re just making sure that they’re safe to proceed to visit number two, which is a physical exam by the physician or the nurse practitioner and start in on hormones” (CHC Nurse 1).

**Theme: Lack of access to primary care services for transgender individuals.**

Participants identified a lack of primary care services specifically for transgender individuals, which motivated them to provide these services within their individual roles. “Well, there’s not much out there. It’s crazy” (CHC Counsellor 2). Similar sentiments were identified in all three cases, highlighting the lack of services for transgender individuals in their respective locations. Participants identified the main factor for implementing the delivery of transgender primary care into their practice was the lack of services and unmet needs in the community. “The main thing was just that it [primary care services] wasn’t available” (FFS Physician).

**Collective Action**

Collective action is the work that people do to enact a set of practices (May & Finch, 2009). Participants agreed that it was easy to integrate the delivery of transgender primary care into their existing work ( $M=4.41$ ,  $SD=0.51$ ) and that management supported the care delivery ( $M=4.39$ ,  $SD=0.85$ ). Participants had confidence in other team members’ ability to deliver care ( $M=4.11$ ,  $SD=0.68$ ) and felt that work was assigned to those with the appropriate skills to deliver the primary care ( $M=3.83$ ,  $SD=0.71$ ). Participants were equivocal that enough training was provided by the organization ( $M=3.67$ ,  $SD=0.84$ ) and that sufficient resources were available ( $M=3.56$ ,  $SD=1.04$ ). Question 3.1 was reverse coded: participants agreed that the delivery of transgender care did not disrupt working relationships ( $M=4.18$ ,  $SD=1.02$ ). The collective action construct was normally distributed and there was no statistically significant difference between the

CHC ( $M=3.60$ ,  $SD=0.40$ ) and FHT ( $M=3.81$ ,  $SD=0.44$ );  $t=1.05$ ,  $p=0.31$ . Option B, *not relevant to my role* was selected by one participant (5.5%) for question 3.1.

**Theme: The need for more specific training about primary care for transgender individuals.** Qualitative data supported the survey results for this construct. Participants in all cases identified that they received very little training about primary care for transgender individuals in their professional education. Across all practitioners' roles, a lack of formal education was identified. Physicians in all cases identified lack of appropriate training. "Looking back at training in both medical school and residency, realised we had absolutely nothing" (FHT Physician), and "I can say there was no training at all" (FFS Physician). One physician, CHC Physician 1 identified a brief lecture in medical school which was in the psychiatry section stating that,

"someone living in the community who was transgender actually did come and talk to us about what it was like to go through the process, which was interesting, but unfortunately there was no focus on prescribing hormones and surgery. None of the medical process was addressed at that time."

Similarly, nurses and NPs acknowledged limited training in their respective programs. "There was some, but there was very little" (CHC NP 2) and "I probably encountered two patients, but otherwise none" (CHC Nurse 2). Counsellors also received little formal education, stating "if there was, it was quite minimal" (CHC Counsellor 1) and "I realised that I had no experience, no knowledge when it came to trans care" (FHT Counsellor). However, two counsellors did identify that they chose to explore transgender health

issues further in their graduate studies. “I did my practicum with a specialist in transgendered health... that really helped me deepen my knowledge” (CHC Counsellor 3), and “I did my thesis on trans issues. I did training with [my supervisor] around writing hormone letters, and counselling with trans folks” (CHC Counsellor 2).

**Theme: Resources to improve care for transgender individuals.** All participants stated that they received training from Rainbow Health Ontario on lesbian, gay, bisexual and transgender healthcare and specifics regarding transgender primary care. While some participants obtained training independently as part of their post educational professional development, all cases provided Rainbow Health Ontario training to their staff either on-site or by supporting staff to attend training sessions. Participants in all cases also identified attending transgender healthcare conferences as a source of their continuing education.

Participants in the FHT and CHC cases identified a need for further training and education in order to deliver transgender primary care. Self-identification of learning needs was evident among participants: “overall, I do still have a lot of questions about primary care in transgender individuals” (FHT Physician) and “everyone’s kind of just doing what we can; kind of learning as we go. So, it would be great to have more training” (CHC Nurse 2). Furthermore, a lack of available education was identified as a barrier to addressing this learning need. “I think there needs to be more education available” (CHC Nurse 2).

All practitioners identified the Rainbow Health Ontario and Sherbourne Health Centre *Guidelines and Protocol for Hormone Therapy and Primary Health Care for Trans Clients* (LGBT Health Program, 2015) as their primary resource used to support the delivery of primary care to transgender individuals. “I have the Sherbourne guidelines pretty much on my desk at all times” (CHC Physician 2). “It’s a great assessment tool for looking at asking appropriate questions, evaluating readiness, being able to talk about gender and that exploration” (FHT Counsellor). These clinical practice guidelines have also been identified as a resource that easily integrates transgender care into practice, “having the guidelines that Rainbow Health Ontario provide me makes it fairly easy” (FFS Physician). Participants also identified other key resources including the Rainbow Health Ontario weekly mentorship teleconference and website and the World Professional Association for Transgender Health clinical practice guidelines.

“Rainbow Health Ontario has a weekly teleconference in which providers can participate and ask questions... specific questions or general questions or reach out to the group for information or just hear what’s going on in the community in general. So, it’s another really excellent resource” (FFS Physician).

Participants acknowledged the importance of providing care in a safe space for transgender individuals in their organization, including using an individual’s preferred pronoun and name, displaying safe space signs, using non-binary forms, having gender-neutral washrooms, and providing safe space training to all employees. Key elements to providing a safe place among the cases included ensuring that the organization was

inclusive and non-discriminatory, “a welcoming, inclusive place for people to access healthcare” (CHC Nurse 1). Ensuring an organization without discrimination for their patients was vital to the creation of a safe space. “There is no discrimination. There’s no anything. It’s just each person is treated as an individual” (FHT Nurse). Field observations revealed that in all cases the individual’s preferred name and pronoun were used, safe-space signage was displayed, gender-neutral washrooms were provided, and gender-neutral clinic forms were utilized. Additionally, the CHC had internal resources to support practitioners providing care to transgender individuals. They developed a visit template form specific for transgender patients to guide appointments, ensuring that all the appropriate information was collected. These forms were used by physicians, NPs, nurses, and counsellors.

### **Reflexive Monitoring**

Reflexive monitoring involves individuals’ understanding of the ways new practices affect them and those around them (May & Finch, 2009). Participants were somewhat aware of reports about the effects of care delivery for transgender individuals ( $M=3.88$ ,  $SD=1.05$ ). They all agreed that transgender primary care was worthwhile ( $M=4.72$ ,  $SD=0.46$ ), and they value the effects it has on their work ( $M=4.76$ ,  $SD=0.44$ ). Participants also strongly agreed they could modify the way they deliver transgender primary care ( $M=4.47$ ,  $SD=0.62$ ). Participants strongly agreed that they valued the effects of delivering primary care to transgender individuals had on their work ( $M=4.76$ ,  $SD=0.44$ ). However, there was a statistically significant difference in the value the

effects of delivering the care had on their work identified by the CHC ( $M=4.90$ ,  $SD=0.32$ ) compared to the FHT ( $M=4.50$ ,  $SD=0.55$ ). The reflexive monitoring construct was normally distributed and there was no statistical significance between the CHC ( $M=4.53$ ,  $SD=0.41$ ) and FHT ( $M=4.38$ ,  $SD=0.33$ );  $t=-0.74$ ,  $p=0.44$ . Option B, *not relevant to my role* was selected by three individuals (16.6%) for question 4.1, 4.3 and 4.4. Option B, *not relevant at this stage* was selected by one individual (5.5%) for question 4.5 (see Table 4 for questions associated with this construct).

Qualitative data supported the Reflexive Monitoring survey results. Participants in the CHC and FHT cases acknowledged that generalized patient care surveys are distributed to all patients who attend appointments within the organization. No formal method for obtaining patient satisfaction was obtained by the FFS case; however, it was noted by both FFS participants that informal feedback has been positive. “There has been informal feedback, and it’s all been sort of good, but we haven’t looked at it in any more direct kind of way” (FFS Physician).

**Theme: “It’s not really that difficult” to provide primary care to transgender individuals.** Overall participants in all cases acknowledge that providing primary care to transgender individuals is not difficult. “I don’t think that it’s difficult at all. So, I don’t see it as anything different than any other concern that we have” (FHT NP). Physicians agreed that the medical aspects of care were not difficult and no different than providing medical care to cisgender individuals. “It’s pretty straightforward to integrate primary care and transgender care, I think, because...the medicine is pretty straightforward. It’s



not really that difficult” (CHC Physician 1). “The medical aspects of care are not all that complicated. They’re not outside the scope of practice of a family practitioner” (FFS Physician).

Qualitative and quantitative data demonstrated no differences in the delivery and implementation of primary care services for transgender individuals across cases. Data supports that the delivery of primary care services for transgender individuals has become normalized as part of routine work within the cases.

### **Discussion**

Understanding outcomes is key to evaluating healthcare interventions; however equally important is understanding effective strategies to implement a new intervention and how well the intervention was implemented (Hiltrop, Rabin, & Glasgow, 2018). Exploring delivery of primary care for transgender individuals supported by a determinant implementation framework, such as NPT, allows for an understanding of the barriers and enablers encountered by organizations and primary care practitioners (Nilsen, 2015). Additionally, it is important to comprehend the extent to which team members develop common practices and goals to work towards the desired outcome.

Implementation of healthcare interventions is a complex process. Using NPT facilitated the understanding of how participants individually and collectively made sense of, invested in, contributed to, and evaluated the delivery of primary care services for transgender individuals. NPT served as a useful framework to guide the development of the interview questions and focus for data analysis.

The NoMAD tool was adapted for use in this study by substituting the word “intervention” with “delivery of transgender primary care.” Overall the tool was easy to administer. Currently, recommendations on the analysis of the NoMAD tool are limited; its authors suggest summarizing the frequencies of responses (Finch et al., 2015). Further guidance on the analysis of the tool’s results, including reporting and addressing the single negative question (3.2), would strengthen the ease of use of the tool. Validity and reliability of the NoMAD tool have not been published by the developers, however outcomes were consistent with qualitative study results.

The normalization of primary care delivery for transgender individuals was present in all cases. Participants confirmed that providing primary care to transgender individuals was part of their routine, everyday practice. Results demonstrate that providing primary care was easily integrated into their work and that they valued the effect of providing this service. When asked what the meaning of primary care for transgender individuals means to them, participants across all cases and disciplines echoed the theme “primary care is primary care.” Further sentiments expressed sum up their perceptions of implementation of services for the transgender population in primary care: “I think primary care for all individuals means the same. As far as transgender, to me that’s just an individual” (FHT Nurse), and “primary care for transgender individuals means primary care for people” (CHC NP 2).

Transgender individuals deserve access to primary care from their primary care practitioner, but they also deserve tailored support based on their unique needs. This

tailored support will require some specialized knowledge to enhance practitioners' understanding of transgender health needs. Participants in all cases echoed that additional training and resources were needed to develop their capacity to provide primary care for this population. Although there are aspects of primary care for transgender individuals that are specialized knowledge, that does not mean that it cannot and should not be managed in primary care. As the scope of primary care practitioners has increased, they have had to develop specialized knowledge to care for a variety of patient populations with complex healthcare needs, such as addiction support (Rasyidi, Wilkins, & Danovitch, 2012), chronic pain in cancer survivors (Chow, Saunders, Burke, Belanger, & Chow, 2017), and diabetes management (Thepwongsa, Kirby, Paul, & Piterman, 2014). Developing specialized knowledge related to transgender health is no different.

### **Recommendations**

Improving access to primary care services is vital to eliminate barriers to healthcare access within the transgender population. Key recommendations for implementing these services are based on the findings from the study and organized by NPT construct.

**Coherence.** Practitioners need to understand the value of providing primary care services specific to transgender individuals. The benefits to patients include improved access to care and receiving care in a safe and non-discriminatory environment. Implementing a safe space within the organization is a key responsibility of practitioners and the organization. Providing safe-space training to staff members is the first step.

Formal training programs are available on making organizations positive safe spaces, such as the training module *Removing the barriers: Making your organization LGBT2SQ friendly* provided throughout Ontario by Rainbow Health Ontario (Rainbow Health Ontario, 2018b).

**Cognitive participation.** Practitioners need to collectively define and contribute to the work and procedures needed to sustain the healthcare services provided to transgender individuals. Personal awareness of the individual practitioner roles is vital in providing primary care services. Understanding practitioners' individual roles will highlight the strengths and limits of each role. Constant opportunity for frequent, informal shared communication is key in achieving and sustaining effective interdisciplinary collaboration and practice (Morgan, Pullon, & McKinlay, 2015). Ensuring practitioners are working to full scope of practice optimizes healthcare services. Additionally, by having an awareness of their different roles, practitioners can identify situations where collaboration, consultation, and referral are needed to ensure quality care is delivered by the right person at the right time. Furthermore, identifying a lack of services in the community allows practitioners to develop new services to address a gap which may be deemed a priority in the area.

**Collective action.** A key theme identified in the literature and through this study is the need for more training for practitioners. This includes training both in professional education and continuing educational opportunities for all practitioners. Medical, nursing and allied health education programs need to improve LGBT curriculum content

(Alegria, 2011; Lim, Brown, & Jones, 2013; Safer & Pearce, 2013; Strong & Folse, 2015). Providing education on general terminology, healthcare needs specific to the transgender population, and practitioners' role in providing healthcare for this population will better prepare new practitioners for serving this community. Increased access to continuing education with LGBT content will help to increase the knowledge and skill of current practitioners. Embedding LGBT content within current programs of continuing education may increase awareness more than having specific LGBT courses (Carabez, Pellegrini, Mankovitz, Eliason, & Dariotis, 2014; Kelley, Chou, Dibble, & Roberston, 2008). Embedding it in current programs may bring awareness to the concepts and highlight the need for practitioners to seek out more specific training to address their learning gaps Rainbow Health Ontario offers a variety of training workshops for practitioners to develop understanding of healthcare issues and to improve their skills in providing equitable and comprehensive services for this population (Rainbow Health Ontario, 2018b). Furthermore, clinical practice guidelines and resources from Rainbow Health Ontario can be used to enhance current curricula.

Ensuring the organization is safe and welcoming for transgender individuals is recommended. This can include having gender-neutral washrooms (Markwick, 2016), using individuals' preferred names and pronouns, and updating clinic forms and records to remove binary gender (Bauer et al., 2009; Markwick, 2016; Roberts & Fantz, 2014).

**Reflexive monitoring.** For implementation to be assessed, formal evaluations need to be conducted. Ensuring patient satisfaction, meeting community needs, and

eliminating barriers to access are key points that need to be evaluated to ensure successful implementation and continuation of service delivery. Generalized patient care surveys can be useful; however more personalized surveys to explore the healthcare needs of transgender individuals would help to develop and expand current and future programming. Additionally, building awareness within the healthcare community that primary care for transgender individuals is not difficult—it is just primary care—may help to engage and encourage practitioners to open their practices to this vulnerable population.

### **Limitations**

The scope of this study explored the implementation and delivery of transgender primary care as a snapshot in Ontario, Canada. A limitation of this study is that only three cases were explored and therefore results may not be generalizable to all primary care settings in Ontario. However, the purposeful selection of cases from three delivery models can help with the transferability to similar models of care delivery in other provinces and nations. Results may not be generalizable to organizations that do not have any transgender patients, or practitioners who do not have specialized knowledge of transgender health issues. Additionally, practitioners who may have been instrumental in the initial implementation may no longer be with the organization, therefore potentially limiting the understanding of implementation. This study's cases were in urban areas of the province, therefore affecting the generalizability to northern or rural areas. The process of implementation was explored retrospectively which may limit the

understanding over time and responses may potentially have been impacted by recall bias.

### **Areas for Future Research**

Further research is needed to expand the scope of the study and explore the implementation of transgender primary care services in other models of care delivery such as NP-led clinics and Aboriginal Health Centres and rural contexts. Furthermore, it is important to explore the prospective implementation of primary care services in organizations currently not providing service to transgender individuals. Further research on all models of primary care and delivery of services for transgender individuals is needed, both from a Canadian and international perspective. Exploring the delivery of care from the perspective of transgender individuals will improve our knowledge of factors which influence access and utilization of primary care services in this population.

### **Conclusion**

Using the NPT framework, this study explored the implementation of primary care services to transgender individuals. It provided a window into understanding how primary care services can be implemented in Ontario for transgender individuals. Providing appropriate specialized practitioner training is key to increasing practitioners' awareness of the transgender population's primary care needs and building their capacity to provide for them. More practitioners and organizations need to embed and normalize care for transgender individuals into their routine practice to ensure this populations' access to quality primary care services. "Primary care is primary care"—whether for the

general population or transgendered individuals—is a philosophy that is within the scope of general primary care practitioners to provide.



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## **Chapter 6**

### **Discussion and Recommendations**

Using a case study design, the purpose of this study was to explore the implementation and delivery of primary care services for transgender individuals in Ontario. This sandwich thesis consists of four manuscripts prepared for or submitted to academic journals, including 1) synthesis of the literature; 2) the protocol for the study; and; 3) two papers reporting on findings from the study. This final chapter highlights new contributions this study has made, as well as provides suggestions and recommendations for practice, practitioner education, policy, and areas for future research. This chapter will also include overall strengths and limitations of the study and provide concluding thoughts. To the author's knowledge, this is the first study examining the implementation and delivery of primary care services for transgender individuals. Therefore, this study contributes to advancing our knowledge of the implementation of primary care services for this vulnerable population.

Findings from Chapter 4 highlighted how primary care services are being delivered to transgender individuals within different models of primary care in Ontario and provided evidence that practitioners clearly understood their roles and activities in the delivery of that care. Two distinct approaches were identified in the provision of hormone therapy to transgender clients: embedding transgender-specific care, including hormone therapy, into routine primary care services; and providing rapid access to hormone therapy through a specialty clinic linked to primary care for individuals whose

primary care practitioner was unable to initiate it. Both approaches improved access to hormone therapy for transgender individuals, thereby addressing a known barrier to care.

This research explored how teams' function and practitioners collaborate within the delivery of primary care services to transgender individuals. Despite literature emphasizing the importance of interdisciplinary teams in the delivery of healthcare to the transgender population (Deutsch, 2011; Esteva de Antonio, Gomez-Gil, & GIDSEEN Group, 2013; Reisner et al., 2015; Thornhill & Klein, 2010), this study found no evidence that suggests the optimal mix of roles within an interdisciplinary team for the provision of primary care to the transgender population. Furthermore, in a solo practice model, the medical practitioner was able to deliver care effectively without an interdisciplinary team.

Findings from Chapter 5 demonstrated that provision of routine primary care services for transgender individuals can and should be embedded and normalized into primary care practice. Previous literature has identified that practitioners' lack of knowledge about providing care to this population is a barrier to care delivery (Alegria, 2011; Roberts & Fantz, 2014; Snelgrove, Jasudavicius, Rowe, Head, & Bauer, 2012), and that the limited formal education of practitioners contributes to this barrier (Beagan et al., 2013; Craig, Iacono, Pacey, Dentato, & Boyle, 2017; Lim, Johnson, & Eliason, 2015; Rondahl, 2009; White et al., 2015). Results from this study also support the conclusion that formal educational programs have not effectively prepared primary care practitioners to provide care to transgender individuals. Findings highlight the need for improved

curricula and more opportunity for professional development and continuing education to address this gap.

### **Integration of Results and Recommendations for Practice, Practitioner Education, and Policy**

This section will integrate results and identify key recommendations for primary care practice, practitioner education, and policy, as well as highlight recommendations for nursing in each of these areas. Finally, the strengths and limitations of this study will be discussed.

#### **Primary Care Practice**

Findings demonstrated that providing primary care to transgender individuals was part of routine, everyday primary care practice within the cases studied. Participants in the study valued their work and easily integrated care for transgender individuals into what they do. Recent literature and clinical practice guidelines further support the provision of healthcare for transgender individuals as part of primary care and not as specialized care (Bourns, 2015; Coutin, Wright, Li, & Fung, 2018; Reisner et al., 2015; Shires, Stroumsa, Jaffee, & Woodford, 2018; Wylie et al., 2016).

Organizational supports highlighted by participants in this study included the importance of providing care that was safe, inclusive, and non-discriminatory to transgender individuals in an organization. This included using an individual's preferred pronoun and name, displaying safe space signs, using non-binary forms, having gender-neutral washrooms, and providing safe space training to all employees. Lack of gender-

neutral washrooms (Markwick, 2016; McCann & Sharek, 2016; Vermeir, Jackson, & Marshall, 2018), using binary gender documentation (Roberts & Fantz, 2014; Vermeir et al., 2018), and electronic medical records which may not accommodate information that is different from the government documentation, such as name and gender (Deutsch et al., 2013), have been previously identified as barriers transgender individuals encounter when accessing healthcare.

In the two cases which included interdisciplinary teams, participants discussed how case conferences and/or team meetings provided an opportunity to discuss patient-care needs and to collaborate in developing care plans. Literature supports the need for ongoing shared communication to support interdisciplinary collaboration and care coordination (Heale, Dickieson, Carter, & Wenghofer, 2014; Morgan, Pullon, & McKinlay, 2015; Reisner, Radix, & Deutsch, 2016). Despite the evidence supporting collaboration, in one of the cases a barrier was encountered involving access to services from practitioners working in other programs within the same organization. An internal policy caused a separation between the primary care and rapid access clinics in the Community Health Centre case. This division interrupted collaboration between practitioners and made care coordination difficult.

**Key recommendations for practice.** An important recommendation for practice is that the provision of care for transgender individuals should be normalized and embedded into primary care services. This can be achieved through enhanced practitioner education and organizational support. In normalizing the provision of care, primary care

practitioners to be aware of the inequalities and health disparities experienced by the lesbian, gay, bisexual and transgender (LGBT) population (Ard & Makadon, 2011; Institute of Medicine, 2011). These inequalities must be considered when providing primary care to this vulnerable population. Findings from this study also highlight the need to define the activities that are necessary for practitioners to provide quality, evidence-informed primary care services to transgender individuals. Clarifying team member roles and activities will further validate everyone's contribution to the delivery of primary care to transgender individuals. Role clarity may help to ensure care coordination and that patients' needs are being addressed. Furthermore, having set competencies for practitioners will provide a framework to assess their activities, learning needs, and contribution to care delivery. Role clarity and competencies will also ensure that practitioners are working to full scope of practice to optimize care delivery. Current competency frameworks for practitioners solely focus on the development of cultural competence when interacting with the LGBT population (Felsenstein, 2018; Gay and Lesbian Medical Association, 2005; Makadon, Potter, Mayer, & Goldhammer, 2015; The Joint Commission, 2011; Toronto Long-Term Care Homes and Services, 2008; Turner, Wilson, & Shirah, 2006). Although cultural competency is necessary to provide care to transgender individuals, further competencies are needed, such as prescribing and monitoring transgender hormone therapy and writing surgical support letters, which are directly related to care delivery and the unique healthcare needs of transgender individuals.

Primary care practitioners working within interdisciplinary teams should engage in regular team meetings which can support effective collaboration among disciplines. Team meetings and case conferencing can help with care coordination for transgender patients (Reisner et al., 2016), and provide opportunities for communication which is important for effective interdisciplinary collaboration (Heale et al., 2014; Morgan et al., 2015). Findings from this study identify organizational engagement as a requirement to ensure successful implementation and delivery of primary care services for transgender individuals within that organization. Lau et al. (2016) conducted a systematic review which identified key facilitators that ensured successful implementation of new interventions into primary care, include developing a strategic plan, identifying key internal and external leaders to promote the intervention, fostering collaboration between team members, and determining necessary resources that include staff training and funding.

Strong, committed, and engaging leadership from administration and supervisors has been recognized as a facilitator for successful implementation of interventions in primary care (Kadu & Stolee, 2015). Leadership within primary care teams can support teamwork and collaboration by ensuring appropriate supports are in place, such as policies, allocating work hours to support collaboration, and having clear descriptions of team members' activities and responsibilities (Heale et al., 2014). Furthermore, having shared goals, engaging members to feel part of the team, and having formal quality processes can improve team collaboration (Mulvale, Embrett, & Razavi, 2016).



**Key recommendations for nursing practice.** Nurses play an important role in the delivery of primary care services for transgender individuals. Participants in this study included nurse practitioners (NP), registered nurses (RN), and registered practical nurses (RPN). Based on participants' self-identified roles and activities, nursing roles were grouped as NP or nurse (which included both RNs and RPNs). It is important to note that in this study there were no differences found between RN and RPN activities. Both RNs and RPNs self-identified as clinic nurses, and despite differences in their scope of practice, they had similar responsibilities and activities, including assessment, health promotion and education, preventative care, and medication teaching and administration. In Ontario, RPNs can provide autonomous care to individuals with conditions considered less complex with a low risk for negative outcomes, however more complex care requirements necessitate an RN to provide the full spectrum of care (College of Nurses of Ontario, 2018 ).

As results highlighted that RNs were not working to full scope of practice, it is recommended that RN activities be fully optimized, which has been shown to improve continuity of care, healthcare access, and patient satisfaction (Canadian Nurses Association, 2013; Health Council of Canada, 2009; Keleher, Parker, Abdulwadud, & Francis, 2009). It is also recommended that RN activities include case management and care coordination, which have been identified as vital roles for primary care RNs (Norful, Martsof, de Jacq, & Poghosyan, 2017; Smolowitz et al., 2015). Care coordination and case management were not recognized as nursing activities in this study. It is possible

that RNs in this study were engaged in care coordination and case management but did not identify it as part of their activities. Care coordination is vital to transgender healthcare delivery (Esteva de Antonio et al., 2013; Mayer, Mimiaga, vanDerwarker, Goldhammer, & Bradford, 2007; Reisner et al., 2016) and nursing is a key profession to take on this aspect of care. Primary care RNs should be encouraged to establish a leadership role (Smolowitz et al., 2015) in the care of transgender individuals. Optimizing the role of nurses will improve the delivery of primary care in Ontario and to transgender individuals.

The advanced scope of practice for NPs allows them to be key participants in the delivery of primary care services for the transgender population. Findings from this study show that NPs were working to full scope of practice. NPs and physicians had similar roles and contributed the most to the delivery of care. The advanced scope of NP practice allowed them to diagnose, prescribe therapy, and monitor patients as well as provide acute episodic and preventive care. These key components in the provision of care for transgender individuals further support and recommend the continual involvement of NPs in caring for this population.

### **Practitioner Education**

As previously discussed, participants agreed that primary care for transgender individuals should be normalized into routine practice. An important first step to achieve this is to improve healthcare practitioners' capacity to care for this vulnerable population. All practitioners acknowledged receiving minimal to no formal education about

transgender healthcare needs, which aligns with what is presented in the literature (Alegria, 2011; Roberts & Fantz, 2014; Snelgrove et al., 2012). Practitioners identified the need for improved undergraduate and graduate education, as their formal education left them feeling unprepared to care for this population. Research supports the lack of transgender healthcare concepts in practitioner education. Often these concepts have been grouped under the larger context of LGBT health (Obedin-Maliver et al., 2011), which can be a challenge as the concepts of sexuality and gender are different and therefore require different foci. Furthermore, LGBT content within formal education is minimal. In Canada and the United States of America (USA) medical students receive approximately five hours of LGBT content (White et al., 2015) while there is a generalized lack of content in social workers' education (Craig et al., 2017). A national survey in the USA demonstrated that undergraduate nursing students receive approximately two hours of LGBT content (Lim et al., 2015). The LGBT content within college or graduate nursing education programs has not been studied. Additionally, the Ontario Primary Health Care Nurse Practitioner program has limited curriculum content with only a half module dedicated to LGBT content in the final course (Ontario Primary Health Care Nurse Practitioner Program, 2019).

Practitioners in all cases acknowledged key clinical practice guidelines, resources, mentorship, and continuing educational opportunities that supported the development of their capacity to provide primary care to transgender individuals. The *Guidelines and Protocols for Hormone Therapy and Primary Health Care for Trans Clients* (LGBT

Health Program, 2015), an Ontario clinical practice guideline, was identified by all practitioners as the main resource used in practice. All participants attended transgender-specific continuing education sessions through Rainbow Health Ontario. Some attended the bi-annual conferences provided by both Rainbow Health Ontario and the Canadian Professional Association for Transgender Health. Mentorship, both internal and external to their organization, provided practitioners with an opportunity to develop capacity. Participants in all cases identified the weekly Rainbow Health Ontario *Trans Care Mentorship Call* as an occasion to network, ask clinical questions, and learn from case examples, which was key in developing their capacity. No literature was found that identified resources practitioners have used to develop and support their capacity in caring for this population. Therefore, findings from this study highlight key strategies and recommendations regarding effective methods of providing continuing education and resources for practitioners.

**Key recommendations for education.** The educational curricula for NPs, nurses, physicians, and other allied health professionals need to include content specific to transgender healthcare that is outside of the LGBT content currently provided, with particular focus on the specialized healthcare needs of the population. Additionally, intersectionality needs to be addressed in curricula. Including content specific to the social and political discrimination experienced by this vulnerable population and its effects on health inequalities is needed (Ard & Makadon, 2012; Institute of Medicine, 2011). Educational initiatives, such as learning modules and case studies, can be used to

introduce important concepts related to transgender healthcare needs which may enhance the knowledge of primary care practitioners and develop their competency in providing primary care services for this population (Kelley, Chou, Dibble, & Roberston, 2008; Safer & Pearce, 2013; Strong & Folse, 2015). Learning modules often have clear learning objectives and contain educational content, activities, and additional learning resources. Incorporating learning modules on transgender health early in formal professional education (Safer & Pearce, 2013) and providing clinical experiences with transgender individuals (Shires et al., 2018) are needed to improve the educational preparedness of practitioners providing healthcare to the transgender population. Studies have shown that even brief interventions and learning modules in generalized LGBT health (Kelley et al., 2008; Strong & Folse, 2015) or ones specific to transgender health (Safer & Pearce, 2013) have demonstrated a statistically significant improvement in educational preparedness and increased practitioners' comfort and willingness to care for the transgender population. However, there is currently no formal recognition of key competencies needed by healthcare practitioners to care for this population and therefore there is no consensus on the content required in formal education programs to address these topics (Coutin et al., 2018).

Findings from this study support that increasing access to continuing education and mentorship opportunities which focus on transgender-specific content would benefit primary care practitioners. Continuing education sessions, conferences, and resources through Rainbow Health Ontario provide transgender-related cultural competence and

clinical care training for healthcare practitioners (Giblon & Bauer, 2017; Rainbow Health Ontario, 2017). Furthermore, additional national and international resources such as transgender clinical practice guidelines from British Columbia (Trans Care BC, 2017), the World Professional Association for Transgender Health (Coleman et al., 2012), and the Center for Excellence for Transgender Health (Deutsch, 2016a) can be used by practitioners to guide their practice. Continuing education opportunities including learning modules and resources from the Fenway Institute (National LGBT Health Education Center, 2018), the Transgender Health Learning Center (Center for Excellence in Transgender Health, 2019) and Cardea (2017), which specifically focus on transgender healthcare, can be used to further primary care practitioners' capacity to care for this population. More education around transition-related surgeries was identified as a learning need in this study. The Ontario Trans Health Expansion partnership has recently been developed to improve access to transition-related surgeries and post-surgical care and includes web-based resources for practitioners (Rainbow Health Ontario, 2017) that will help to address this learning need.

However, these continuing education opportunities may only be sought by practitioners wanting to increase their knowledge and competency in caring for transgender individuals. Practitioners who do not have any transgender patients may not be aware of their learning needs and may not readily seek out continuing education related to transgender healthcare as it could be perceived as not relevant to their practice. However, it could become relevant in the future and they may not be prepared to care for

these patients. To address this concern, it is recommended that transgender-specific content, including case examples, be embedded within current, generalized, primary care, continuing education programs as this may increase awareness more than offering specific transgender courses. As an example, a transgender patient could be used in a case study for a chronic disease learning module. A practitioner with an interest in learning more about that specific chronic disease would be likely to take advantage of that educational opportunity and therefore also be exposed to some transgender-specific content. Embedding transgender healthcare content in current programs may bring awareness to transgender specific concepts and highlight the need for practitioners to seek out more specific training to address their learning requirements.

**Key recommendations for nursing education.** The aforementioned recommendations for improving education can and should be integrated specifically into nursing education. There is a dearth of transgender content in nursing education. Studies exploring undergraduate education for registered nurses demonstrate minimal transgender content (Eliason, Dibble, & DeJoseph, 2010; Lim et al., 2015; Rondahl, 2009; Walsh Brennan, Barnsteiner, De Leon Siantz, Cotter, & Everett, 2012). To the authors' knowledge, there are no studies that examine the curriculum content related to transgender healthcare in nursing university graduate or college diploma programs; therefore, the amount of content taught to RPNs and NPs is unknown. As discussed in this thesis, the advanced roles and scopes of practice of NPs have situated them in key positions in the delivery of primary care services for transgender individuals. However,

without basic education that addresses transgender healthcare needs, such as hormone therapy, NPs are left with a noteworthy gap in their knowledge base when caring for this vulnerable population. Findings from this study support the need for more transgender-specific content to be embedded into undergraduate and graduate nursing curricula and professional development opportunities to advance the body of knowledge and increase the ability of nurses to care for transgender individuals.

### **Policy**

In this study, no organizational policies specific to transgender individuals were found in any of the cases examined. Organizational policies are a set of rules or principles which serve as a resource for staff, facilitate adherence to practice standards, and influence decision-making and activities within the organization (Irving, 2014). Documentary evidence, including relevant policies, was requested from each organization; however, none was obtained. The lack of policies to accommodate transgender individuals has been identified as evidence of institutional erasure in the Ontario healthcare system (Bauer et al., 2009). While participants in the study acknowledged the importance of their organization having gender-neutral bathrooms and using individuals' preferred names and/or gender, there were no policies in place to ensure this was occurring and to guide staff on proper procedures. Additionally, a barrier was identified in the Community Health Centre case that involved difficulties encountered when trying to access services in another program in the organization. The separation between the primary care program and rapid access program caused issues in



care coordination within the organization. Perhaps the existence of a policy to address this issue outlining steps to ensure successful integration and transition of patients across and between programs and services would have mediated this barrier.

All three organizations had developed clinic forms which incorporated the use of non-binary gender, preferred name, and pronouns. Although not identified in this study as a barrier, electronic medical records are often a barrier to care as most are unable to accommodate information different than what is on an individual's government identification (Deutsch et al., 2013; Markwick, 2016; Roberts & Fantz, 2014). Sex designation on provincial identification and health documents is also a known barrier to healthcare access for transgender individuals as it can affect billing and eligibility for sex-specific diagnostics or procedures (Bauer et al., 2009). To address this barrier related to sex designation on health documents, Ontario residents are able to make their Ontario Health Insurance Plan (OHIP) cards gender-neutral (Ministry of Government and Community Services, 2016), which is a step in the right direction; however it is not instituted federally and therefore still a barrier in other provinces. Despite this step, there are still some barriers in sex-specific services such as a transgender female getting prostate-related blood work covered when their OHIP card does not have a male gender marker. Another sex-specific barrier is the laboratory reference ranges which are reported based on the gender marker on the OHIP card, making monitoring blood work a challenge for practitioners. As an example, the testosterone range for men versus women

is significantly different and results therefore need to be reinterpreted by the practitioner based on the individuals' preferred gender and not the gender marker.

**Key recommendations for policy.** To ensure that transgender individuals are visible within the healthcare setting, it is recommended that organizations develop appropriate policies. Organizational policies related to the content of forms, electronic medical records, staff training, and ensuring the organization is a safe space will help to eliminate many barriers to accessing healthcare. Advocating for provincial and federal policies that support coverage of sex-specific services and procedures, and removal of gender markers from health insurance cards is needed in Canada. Additionally, there are no consistent methods for collecting population estimates for the transgender population nationally. National census and health data sets must be inclusive of transgender individuals by incorporating questions that pertain to gender identity and allow for gender options other than male or female (Collin, Reisner, Tangpricha, & Goodman, 2016; Stroumsa, 2014). Accurate estimates of the transgender population are necessary to inform policy, funding priorities, and healthcare decisions (Deutsch, 2016b; Winter et al., 2016).

Policies that ensure increased provincial and federal support and funding are needed to improve access to healthcare for transgender individuals and support the development of capacity for practitioners. Currently in Canada, provincial funding is provided in Ontario and British Columbia for the implementation and delivery of province-wide programs which promote the health of LGBT communities, support the

creation of educational resources and training, and work to inform public policy (Provincial Health Services Authority, 2019; Rainbow Health Ontario, 2018). Many provincial clinical practice guidelines and resources provided by Rainbow Health Ontario and Trans Care BC are web-based, however continuing education sessions and mentorship are not easily accessible for practitioners outside of these provinces. It is recommended that other provinces support a professional development and continuing education initiative specific to LGBT healthcare within their jurisdictions. Additionally, the Ontario Ministry of Health and Long-Term Care has funded the Trans Health Connection program to provide transgender-related cultural competence and clinical care training for healthcare providers across the province (Giblon & Bauer, 2017; Rainbow Health Ontario, 2017). Expanding this program federally will help to improve practitioner capacity across Canada.

**Key recommendations related to policy for nursing.** A key component of the nursing role is patient advocacy. Nurses can advocate for the previously mentioned policy recommendations within organizations and at a provincial or national level. As leaders, nurses should work collaboratively with healthcare practitioners and policy-makers to improve the Canadian healthcare system (Canadian Nurses Association, 2009) and advocate for policies to improve access to healthcare services for transgender individuals.

Recently policy changes within Canada's *Controlled Drugs and Substances Act* have expanded the prescriptive scope of practice for NPs to include controlled substances (Government of Canada, 2018). Testosterone, a controlled substance, is the medication

needed in hormone therapy for transgender males. Before this policy change, NPs in Canada were not able to prescribe testosterone to their patients, requiring them to consult or refer to a physician for the prescription, causing a delay in transgender individuals obtaining their medication. Advocacy is needed to ensure that NPs in other countries can prescribe testosterone, further reducing this barrier to healthcare access.

### **Strengths and Limitations of the Study**

The following discussion addresses strengths and limitations of the study overall. Participants in this study had a great deal to say about their work and how they were delivering primary care to transgender individuals. They spoke freely about their roles and activities, the implementation process, delivering primary care services, and the barriers and facilitators experienced. The small number of participants from each professional group limits the generalizability of the roles and activities. Also, it is important to note that data was collected at one point in time, participants were asked to describe the process of implementation retrospectively as well as how care was delivered at that time. Implementation enablers and challenges can change over time. Assessing the sustainability of an implementation requires long periods of observation (Proctor et al., 2015), therefore pointing to the need for a longitudinal study.

Transgender patients did not participate in this research given that the purpose of this study was to understand how primary care was implemented and delivered by primary care practitioners. The decision to select practitioners and organizational staff members as sources of information was both strategic and appropriate given the focus of

this study. However, knowing the opinions of transgender individuals concerning the delivery of care would have provided another important viewpoint into how care is delivered and could be improved in Ontario. Questions about barriers to service access may have been more credibly answered by transgender individuals themselves than by practitioners and staff.

### **Areas for Future Research**

Recommendations for research have been discussed in each chapter where relevant. Expanding the scope of this study to include other models of primary care delivery such as NP-led clinics and Aboriginal Health Centres, as well having more cases, would enhance our understanding of primary care delivery for this population in Ontario. Exploring this phenomenon from other models of care, both from a Canadian and international perspective, is needed to fully understand the delivery of care to this population.

This study explored the implementation of primary care services in organizations in Ontario that were known to provide primary care services to transgender individuals. It is important to explore the implementation and delivery of primary care services in organizations that are currently not providing services to transgender individuals. Examining how organizations begin to develop, implement, and deliver primary care services over time to a transgender population would provide valuable insight for others interested in building this capacity in their practices. Further research that examines how healthcare teams providing primary care to transgender individuals collaborate is

important in understanding the activities of team members and the role of teams in the delivery of care.

Research is needed to identify key practice and educational competencies that are required by healthcare practitioners to provide effective, evidenced-based care to this population. Understanding the key competencies needed will provide direction for educators to incorporate transgender-specific content into healthcare practitioners' educational programs. Furthermore, research is needed to examine the role of nurses in the delivery of healthcare to transgender individuals in other practice settings such as acute care, public health and long-term care.

Research has suggested that the numerous health disparities experienced by lesbian, gay, bisexual and transgender individuals may stem from structural factors, social discrimination and lack of culturally sensitive healthcare (Ard & Makadon, 2012; Institute of Medicine, 2011). Therefore, suggesting that intersectionality should be considered in future research.

### **Conclusion**

This multiple case study provided insight into how primary care services are implemented and delivered to transgender individuals in Ontario, practitioners' roles and activities, and the barriers and enablers to delivery of this care. Normalized Process Theory was an ideal framework from which to explore this phenomenon. Findings supported the normalization of healthcare services for transgender individuals into primary care, which led to important recommendations for primary care practice,

education, and policy. Nurses are well positioned to develop their capacity and provide primary care to this vulnerable population, therefore improving their access to healthcare services. Although the focus of this study was on primary care, there is opportunity for nurses in other practice settings, such as acute care, long-term care and public health, to develop capacity to care for transgender individuals. Nursing faculty need to incorporate transgender specific content into all levels of nursing education. Findings from this study highlight that “primary care is primary care” no matter who the patient is and care for transgender individuals should be embedded and normalized into current primary care delivery.

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## Appendix A

### Characteristics of the Primary Studies

Study	Location of Study	Purpose of Study	Sample	Design and Methods	General Findings
Asscheman, et al. (2011)	Netherlands	To describe all-cause and cause-specific mortality rates in individuals receiving cross sex hormones	1331 transsexual individuals	Cohort study with median follow up of 18.5 years	-MTF group mortality 51% higher than the general population -FTM mortality was not significantly different from the general population
Bauer et al. (2009)*	Canada	To understand how erasure impacts healthcare for transgender people	85 Transgender patients in Ontario	Descriptive – Focus Groups	Key concerns about health include barriers to access trans-inclusive care, lack of relevant information, social service barriers, mental health and challenges finding help
Bauer et al (2012)*	Canada	To describe self-reported HIV prevalence and HIV-related sexual risk among transgender individuals	433 transgender individuals from Ontario	Descriptive using cross-sectional design Instrument - Trans PULSE survey	Self-reported HIV prevalence was 10 times the estimate baseline prevalence for Ontario
Bauer et al. (2014)*	Canada	To describe transgender patient's, need for and ability to obtain emergency department (ED) care and to describe ED avoidance by transgender patients	433 transgender individuals from Ontario	Descriptive using cross-sectional design Instrument - Trans PULSE survey	- 21% of transgender individuals reported avoiding ED care -52% experienced trans-specific negative ED experiences

Bauer et al. (2015)* A	Canada	To examine factors associated with patient discomfort in discussing trans health with a family physician	433 transgender individuals from Ontario	Descriptive using cross-sectional design Instrument - Trans PULSE survey	-Half of participants reported discomfort discussing trans health issues - Greater physician knowledge reduced likelihood of discomfort
Bauer et al. (2015)* B	Canada	To identify intervenable factors associated with suicide risk reduction for transgender individuals	433 transgender individuals from Ontario	Descriptive using cross-sectional design Instrument - Trans PULSE survey	-31% had seriously considered and 11% had attempted suicide in the past year -Reduced social isolation and increased access to medical transition reduced risk
Beagan et al. (2013)	Canada	To explore physician and RN experiences with transgender and extend the insight to inform occupational therapy (OT) practice	9 physicians 12 RN's	Phenomenology – Interviews	-Participants wanted more specialized knowledge and collaboration. Best practices identified included advocacy, providing holistic care and ensuring an inclusive system
Chan, Skocylas & Safer (2016)	Canada	To assess the roles medical schools, play in transgender health education, and students' knowledge and attitudes	365 medical students	Descriptive using cross-sectional design	-24% of students felt that transgender health was proficiently taught -6% felt they had sufficient knowledge to care for transgender individuals
Conron, et al. (2012)	USA	To examine health status and socioeconomic status of transgender individuals in Massachusetts	131 transgender individuals	Descriptive using cross-sectional design Instrument – Massachusetts Behavioral Risk Factor Surveillance System	-Few health differences were noted between transgender and non-transgender individuals -Higher rates of unemployment and poverty noted in transgender men

Craig et al. (2017)	Canada and USA	To explore how the educational experiences of LGBT social work students in the United States and Canada influenced their professional and personal identities	1,018 social work students from Canada and USA	Descriptive using cross-sectional design Instrument - Survey	-Social work programs need to better promote LGBT identity -There is a lack of LGBT content in the curriculum
Cruz (2014)	USA	To explore transgender and gender nonconforming people's access to primary care	6,456 transgender individuals	Descriptive using cross-sectional design Instrument - National Transgender Discrimination Survey	-Over 50% of transgender individuals delayed accessing care due to fear of discrimination
Deutsch (2011)	USA	To survey practice characteristics of clinics using the informed consent model	12 clinics, representing 1,944 transgender patients	Descriptive using cross-sectional design	-Clinic practice types included community/not-for-profit, academic and private practice -75% of clinics were in urban areas
Dhejne, et al. (2011)	Sweden	To estimate mobility, mortality and criminal rate after sex reassignment surgery	324 transsexuals who have had sex reassignment surgery between 1973 and 2003	Population-based, matched-cohort study	-Mortality was higher for sex-reassigned individuals, particularly suicide. -FTM had higher risk for criminal convictions
Eyssel, et al. (2017)	Germany	To investigate the needs and concerns of transgender individuals concerning	415 trans identified individuals	Participatory Instrument – online survey	-96% of individuals wanted high decision-making power regarding treatment decisions

		healthcare in interdisciplinary teams			-Results demonstrate the importance of patient-centered transgender healthcare
Flores et al. (2016)	USA	To provide an up-to-date accurate estimate of the transgender population in the USA	151,456 residents of the USA	Descriptive - Population Based Instrument – Behavioral Risk Factor Surveillance System	-0.6% of adults in the USA identify as transgender, therefore there is a estimate of 1.4 million transgender adults living in the USA
Giblon & Bauer (2017)*	Canada	To examine healthcare inequalities between transgender and cisgender individuals living in Ontario	TransPulse (n=433) Canadian Community Health Survey (n=39,980)	Probability study Instrument – TransPulse Survey and Canadian Community Health Survey	- 33% of trans individuals reported unmet healthcare needs. -Availability of services were rated as poor or fair
Gorin-Lazard, et al. (2012)	France	To assess the relationship between hormone therapy and quality of life in transsexuals in France	-61 transsexual individuals	Descriptive using cross-sectional design Instrument - Short Form 36 Beck Depression Inventory -Interviews	-72% of participants were on hormone therapy -Hormone therapy was significantly associated with higher quality of life
Grant et al (2010)	USA	To explore the frequency of discrimination experienced by transgender and gender non-confirming individuals while accessing healthcare	7000 transgender individuals	Descriptive using cross-sectional design Instrument - National Transgender Discrimination Survey	-High levels of postponing healthcare access due to discrimination -High rates of refusal of care and lack of practitioner knowledge



Hyde et al. (2014)	Australia	To investigate the mental health and well-being of transgender people living in Australia	946 transgender individuals	Descriptive using cross-sectional design Instruments -PHQ-9, Short Form Health Survey, Body Image QOL Inventory	-Trans people experience high level of mental health concerns -Experiences of harassment and discrimination were high
Heinz & MacFarlane (2013)	Canada	To identify the health and social needs of trans people on Vancouver Island	54 transgender individuals from British Columbia	Descriptive using cross-sectional design Instrument - Vancouver Island Survey (adapted from Trans PULSE survey)	-Top needs of trans people include healthcare, social support and public acceptance. -Healthcare included quick access to surgeries and local access to trans-specific medical expertise
Lim, Johnson & Eliason (2015)	USA	To assess the knowledge of faculty in baccalaureate nursing programs and their readiness to teach about LGBT health	1,231 nursing faculty members	Descriptive using cross-sectional design Instrument -Survey	-Estimated median time devoted to teaching LGBT health is 2.12 hours -Knowledge, experience and readiness for teaching LGBT health was limited among faculty
McInroy et al. (2014)	Canada	To explore curriculum content, faculty knowledge and support of gender minority topics in Canadian social work education	112 social work students in Canada	Mixed method study Instrument – Survey Qualitative short opened ended questions	-Social work students demonstrated a perception that adequate gender minority topics was lacking in their education

Moll et al. (2014)	USA	To perform a needs assessment to determine to what degree LGBT health is taught in emergency medicine residency programs	124 emergency medical residents	Descriptive using cross-sectional design Instrument -Survey	- 26% of programs provided a specific LGBT lecture -Emergency medical resident programs averaged 45 minutes of LGBT Health
Obedin-Maliver, et al. (2011)	Canada and USA	To characterize LGBT-related medical curricula and to determine dean's assessment of their institution's LGBT content	150 medical school deans	Descriptive using cross-sectional design Instrument – Internet Survey	-Median reported combined hours dedicated to LGBT content was 5 hours. 44 schools reported no content. Deans reported their institutions' coverage of LGBT health "fair"
Rondahl (2009)	Sweden	To examine medical and nursing student's knowledge about LGBT individuals	71 nursing students and 53 medical students	Descriptive, comparative design Instrument – modified Knowledge about Homosexuality Questionnaire	-Students demonstrated inadequate knowledge about LGBT individuals
Roller et al. (2015)	USA	To construct a theoretical framework which depicts the process by which transgender individuals engage in healthcare	25 transgender patients	Grounded Theory – Interviews	-Theory can be used to provide healthcare providers a way to understand how transgender individuals engage in healthcare, with a better understanding of their healthcare journey
Rotondi et al. (2013)*	Canada	To examine the extent of nonprescribed hormone use and self-performed	402 transgender individuals from Ontario	Descriptive using cross-sectional design Instrument - Trans PULSE survey	-Estimated 43% of trans people in Ontario are using hormones, a quarter of which had received them from a nonprescribed source.

		surgeries among transgender people in Ontario			-Five individuals had performed or attempted to perform surgical procedures on themselves
Saewyc et al. (2017)	Canada	To examine the experience of transgender youth in Ontario	268 transgender youth in Ontario	Descriptive using cross-sectional design Instrument – Canadian Trans Youth Health Survey	-80% of youth reported living in their felt gender, but only half lived full-time -Mental health issues were a key concern -Only 7% reported feeling safe at school -Majority of participants felt uncomfortable with their family doctor
Sanchez et al. (2009)	USA	To examine healthcare utilization, barriers to care and hormone use in MTF persons	101 MTF persons in New York City	Descriptive using cross-sectional design Instrument -Survey	-Main barriers include cost of medical care, access to specialists and lack of trans-friendly and knowledgeable providers
Scheim & Bauer (2015)	Canada	To describe the Ontario population of transgender individuals who have undergone various degrees of transition, and timing of 1 <sup>st</sup> awareness of transgender identity	433 transgender individuals from Ontario	Descriptive using cross-sectional design Instrument - Trans PULSE survey	-30% of transgender individuals had not taken any steps towards gender transition -42% were using hormone therapy -15% of MTF had vaginoplasty and 0.4% of FTM had phalloplasty
Snelgrove et al. (2012)	Canada	To examine physicians' perceptions of barriers to healthcare provision for transgender patients	13 physicians	Grounded Theory – Interviews	-Practitioner identified barriers included issues accessing resources, medical knowledge deficits, ethics of trans-care, diagnosing transgender patients and health system determinates

Sperber, Landers & Lawrence (2005)	USA	To identify the health needs and barriers to obtaining healthcare services of transgender individuals	34 transgender individuals	Descriptive – Focus groups	-Lack of knowledgeable providers is a barrier encountered by transgender individuals
White et al. (2015)	USA	To examine medical students' level of preparedness and comfort caring for LGBT patients	4,262 completed survey -29 students in focus groups	Sequential mixed methods design Instrument – Survey Focus groups	-Students felt their LGBT curriculum was fair -Students felt least prepared to discuss gender transition and surgery -Students have significant concerns in addressing transgender health

## Appendix B

### Focus of Conceptual Literature

<b>Author &amp; Date</b>	<b>Purpose/Focus of the Paper/Report</b>
Alegria, C (2011)	Clinical Practice Paper
Center for Excellence in Transgender Health (2012)	Clinical Practice Paper
Collier (2015)	Editorial
Daniel & Butkus (2015)	Position Paper
Deutsch, et al. (2013)	Clinical Practice Paper
Deutsch (2016)	Perspective Paper
Esteva de Antonio & Gomez-Gil (2013)	Clinical Practice Paper
Feldman & Goldburg (2006)	Clinical Practice Guideline
Feldman, et al. (2016)	Review Article
Gardner & Safer (2013)	Review Article
Government of Canada (2017)	Government Document
Institute of Medicine (2011)	Discussion Paper
Jenner (2010)	Clinical Practice Paper
LGBT Health Program (2015)	Clinical Practice Guideline
Lee (2000)	Review Article
Markwick (2016)	Clinical Practice Paper
Mayer, et al. (2008)	Call to Action Paper
Ministry of Government and Community Services (2016)	Government Report
Ministry of Health and Long-Term Care (2016)	Government Report
Ministry of Health and Long-Term Care (2016)	Government Report
Ranji, Beamesderfer, Kates & Salganicoff (2014)	Executive Summary Paper
Roberts & Fantz (2014)	Discussion Paper
Thomas et al. (2017)	Perspective Paper
Wichinski (2015)	Clinical Practice Paper
Williamson (2010)	Clinical Practice Paper
Winter et al. (2016)	Review Article
Wylie, et al. (2016)	Review Article

## Appendix C

### Demographic Questionnaire for Interview Participants

1. Name

First

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Last

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2. Age

- 20-29 years
- 30-39 years
- 40-49 years
- 50-59 years
- > 60 years
- I prefer not to answer

3. What is the name of the organization you work for?

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4. What is your role/position?

---

5. For how long have you worked in your current role/position?

Months \_\_\_\_\_ Years \_\_\_\_\_

6. How long have you been involved in the provision of primary health care to transgender individuals?

Months \_\_\_\_\_ Years \_\_\_\_\_

## Appendix D

### NoMAD Tool

#### **Survey Instructions**

**This survey is designed to help get a better understanding of how to apply and integrate new technologies and complex interventions in health care.**

The survey asks questions about the implementation of the primary health care services for transgender individuals. We understand that people involved in the delivery of primary health care have different roles, and that people may have more than one role.

From the statements below, please choose an option that best describes *your main role* in relation to the *delivery of primary health care to transgender individuals*:

- I am involved in managing or overseeing the delivery of primary health care to transgender individuals
- I am involved in the delivery of primary health care for transgender individuals

For this survey, please answer all the statements from the perspective of this role. Depending on your role or responsibilities in the delivery of primary health care, some statements may be more relevant than others.

The survey is in 3 parts. Part A asks some brief questions about yourself and your role. Part B includes three general questions about the delivery of primary health care to transgender individuals. Part C contains a set of more detailed questions about the delivery of primary health care to transgender individuals. For each statement in Part C there is the option to agree or disagree with what is being asked. However, if you feel that the statement is not relevant to you, there is also options to tell us why.

Please take some time to decided which answer **best suits your experience for each statement and tick the appropriate box.**

Adapted from Finch, T., Girling, M., May, C., Mair, F., Murray, E., Treweek, S., Steen, I., McColl, E., Dickinson, C. & Rapley, T. (2015). NoMAD: Implementation measure based on Normalization Process Theory. [Measurement instrument]. Retrieved from <http://www.normalizationprocess.org>

### Part A: About yourself

1. How many years have you worked for this organization? (If your organization has merged with another or changed its name, please include in your answer all the time you have worked with this organization and its predecessors).

- Less than one year       1-2 years       3-5 years       6-10 years  
 11-15 years       More than 15 years

2. How would you describe your professional job category?

- Executive Director       Physician Lead       Physician       Nurse Practitioner  
 Nurse       Social Worker       Psychologist       Pharmacist  
 Clinical Support Staff       Other – please describe \_\_\_\_\_





**Part C: Detailed questions about the delivery of primary health care to transgender patients**

For each statement please select the answer that best suits your experience using Option A. If the statement is not relevant to you, please select an answer from Option B.

Section C1	Option A					Option B		
	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Not Relevant to my role	Not Relevant at this stage	Not Relevant to the delivery of care
1. I can see how the delivery of primary care to transgender patients differs from usual primary care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Staff in this organization have a shared understanding of the purpose of primary care for transgender patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I understand how the delivery of primary care to transgender patients affects the nature of my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I can see the potential value of primary care for transgender individuals for my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section C2	Option A				Option B			
	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Not Relevant to my role	Not Relevant at this stage	Not Relevant to the delivery of care
1. There are key people who drive the delivery of primary care for transgender patients forward to get others involve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I believe that participating in the delivery of primary care to transgender patients is a legitimate part of my role	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I'm open to working with colleagues in new ways to deliver primary care to transgender patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I will continue to support the delivery of primary care services for transgender patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section C3	Option A				Option B			
	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Not Relevant to my role	Not Relevant at this stage	Not Relevant to the delivery of care
1. I can easily integrate the delivery of transgender primary care into my existing work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The delivery of transgender primary care disrupts working relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I have confidence in other people’s ability to deliver transgender primary care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Work is assigned to those with skills appropriate to the delivery of transgender primary care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Sufficient training is provided to enable staff to deliver transgender primary care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Sufficient resources are available to support the delivery of transgender primary care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Management adequately supports the delivery of transgender primary care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section C4	Option A				Option B			
	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Not Relevant to my role	Not Relevant at this stage	Not Relevant to the delivery of care
1. I am aware of reports about the effects of the delivery of transgender primary care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The staff agree that the delivery of transgender primary care is worthwhile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I value the effects that delivering transgender primary care has had on my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feedback about the delivery of transgender primary care can be used to improve it in the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I can modify how I deliver transgender primary care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Survey Complete

Thank you for completing our survey

## Appendix E

### Hamilton Integrated Research Ethics Board Approval



Hamilton Integrated Research Ethics Board

August 30 2017

**Project Number:** 3751

**Project Title:** Exploring the delivery and implementation of primary health care services for transgender individuals: An Ontario Case Study

**Principal Investigator:** Dr Ruta Valatis

This will acknowledge receipt of your letters dated August 22, 2017 and August 29, 2017 which enclosed revised copies of the Information/Consent Forms, Inter Guide, Invitation Emails, Protocol and the Application Form along with a response to the additional queries of the Board for the above-named study. These issues raised by the Hamilton Integrated Research Ethics Board at their meeting held on August 15, 2017. Based on this additional information, we wish to advise you that you have had been given *final* approval from the full HiREB.

The following documents have been approved on both ethical and scientific grounds:

Document Name	Document Date	Document Version
Consent - Organization V3 Aug 29, 2017	Aug-29-2017	3
Consent - Participants V3 Aug 29 2017	Aug-29-2017	3
Demographic Survey for participants	Jul-20-2017	1
Encryption protocol	Jul-24-2017	1
Semi-Structured Individual Interview Guide – Health Care Practitioner - V2	Aug-23-2017	2
Semi-Structured Individual Interview Guide – Organizational Staff Members V2 Aug 2017	Aug-23-2017	2
Thesis - Invitation to participate email V2	Aug-23-2017	2
Thesis - Invitation to participate follow up phone script	Jul-20-2017	1
Ziegler - NoMAD tool	Jul-24-2017	1
Ziegler PhD Proposal 2017 V2 Aug	Aug-23-2017	2

The following documents have been acknowledged:

Document Name	Document Date	Document Version
tcps2-epic2-certificate	Feb-12-2012	1

**Please Note:** All consent forms and recruitment materials used in this study must be copies of the above referenced documents.

We are pleased to issue final approval for the above-named study for a period of 12 months from the date of the HiREB meeting on August 15, 2017. Continuation beyond that date will require further review and renewal of HiREB approval. Any changes or revisions to the original submission must be submitted on a HiREB amendment form for review and approval by the Hamilton Integrated Research Ethics Board.

**PLEASE QUOTE THE ABOVE REFERENCED PROJECT NUMBER ON ALL FUTURE CORRESPONDENCE**

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Inman".

Dr. Mark Inman, MD, PhD  
Chair, Hamilton Integrated Research Ethics Board

## Appendix F

### Organization Consent Form

**Title of Study:** Exploring the delivery and implementation of primary health care services for transgender individuals: An Ontario Case Study

**Principal Investigator:** Erin Ziegler, RN(EC), MN, PhD Student, School of Nursing, McMaster University

Thesis Supervisor: Dr. Ruta Valaitis, RN, PhD, School of Nursing, McMaster University

#### **Purpose of the Study**

This research will explore how health care services for transgender individuals are delivered and implemented through family physician offices in Ontario. The student researcher will explore how primary health care programs for transgender individuals are implemented in different settings in Ontario. Your organization is being invited to participate in this study because it provides primary health care in Ontario to transgender patients.

#### **What will happen during the study?**

If you agree for your organization to participate in this study, the following will occur.

- The student researcher will negotiate a time which is convenient for your organization to be on-site for the data collection, approximately 1-4 days.
- The student researcher will ask you as the executive director and/or physician lead to complete a paper-based survey.
- You will also be asked to identify health care professionals, including physicians, nurse practitioners, nurses or other allied health care professional who provide primary health care services in your organization to transgender patients. These individuals will be invited to participate in the study by the student researcher. They will be asked to complete a paper-based survey and participating in a semi-structured interview that will be conducted in person. The paper-based survey will take about 20-30 minutes to complete.
- The interviews will ask questions about the delivery of primary health care for transgender patients within your organization and their role in the provision of the care. The interview will take about 90 minutes. It will take place at your organization or by telephone depending on individual preference.

- The executive director and/or physician lead will also provide the student researcher with documents pertaining to the delivery of primary health care for transgender patients in your organization. These documents may include administrative reports, proposals, evaluations or other internal records.

### **Funding Source**

This research is funded by the Vivian Wood Scholarship, the Dorothy C. Hall Primary Health Care Nursing Doctoral Scholarship and TUTOR-PHC fellowship.

### **Are there any risks to doing study?**

The risks involved in your organization participating in this study are minimal. Individuals do not need to answer questions that they do not want to answer or that make them feel uncomfortable. You can withdraw your organization at any time. The steps to protect your organizational privacy are described below.

### **Are there any benefits to doing this study?**

The research will not benefit your organization directly. The researchers hope to learn more about the implementation and delivery of primary health care services for transgender individuals in Ontario. The researchers hope that what is learned as a result of this study will help us to better understand the complexities of implementing and delivering primary health care to this population. This information will be useful to others who are considering offering similar transgender services.

### **Who will know what I said or did in the study?**

Every effort will be made to protect (guarantee) your organizations confidentiality and privacy. The student researcher will not use your organizations name or any information that would allow you to be identified. However, we are often identifiable through the stories we tell. Given that transgender service delivery in Ontario is not common, there is a greater chance that results may be identifiable. Aggregate data will be reported to protect confidentiality of individuals. The information your organization provides will be kept in a locked filing cabinet where only the researchers will have access to it. Information kept on a computer will be protected by a password. The data and files will also be password protected. The data will be shared with members of the thesis committee. The data will be destroyed 5 years after the study is completed.



**What if I change my mind about my organization being in the study?**

Your organizations participation in this study is voluntary. It is your choice to be part of the study or not. If you decide to be part of the study, you can decide to stop (withdraw), at any time. This can be done even after signing the consent form or partway through the study. If you decide to withdraw, there will be no negative consequences to you. In cases of withdrawal, any data you have provided will be used unless you indicate otherwise.

**How do I find out what was learned in this study?**

The student researcher expects to have this study completed by December 2019. If you would like a summary of the results, please let us know how you would like this shared with you.

**Questions about the Study**

If you have questions or need more information about the study itself, please contact

Student researcher - [zieglere@mcmaster.ca](mailto:zieglere@mcmaster.ca)

Supervisor – Dr. Ruta Valaitis 905.525.9140 Ext. 22298

This study has been reviewed by the Hamilton Integrated Research Ethics Board and received ethics clearance. If you have concerns or questions about your rights as a participant or about the way the study is conducted, please contact:

Office of the Chair of the Hamilton Integrated Research Ethics Board Telephone: (905)  
521-2100 Ext. 42013

## Organization Consent

I have read the information presented in the information letter about a study being conducted by Ms. Erin Ziegler of McMaster University.

I have had the opportunity to ask questions about my organization's involvement in this study and to receive additional details I requested. I understand that if I agree for my organization to participate in this study, I may withdraw from the study at any time. I will be given a copy of this information letter and consent form. I agree for my organization to participate in the study.

Name of Organization (Printed) \_\_\_\_\_

Signature: \_\_\_\_\_

Name of Participant (Printed) \_\_\_\_\_

1.  Yes, I would like to receive a summary of the study's results.

Please send them to this email address \_\_\_\_\_

or to this mailing address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

No, I do not want to receive a summary of the study's results.

2. I agree to be contacted about a follow-up interview, and understand that I can always decline the request.

Yes. Please contact me at: Phone: \_\_\_\_\_

No.

## **Appendix G**

### **Participant Consent**

**Title of Study:** Exploring the delivery and implementation of primary health services for transgender individuals: An Ontario Case Study

**Principal Investigator:** Erin Ziegler, RN(EC), MN, PhD Student, School of Nursing, McMaster University

Thesis Supervisor: Dr. Ruta Valaitis, RN, PhD, School of Nursing, McMaster University

#### **Purpose of the Study**

This research will explore how transgender health care services are delivered and implemented through family physician offices in Ontario. The student researcher will explore how primary health care programs for transgender individuals are implemented in different settings in Ontario. You are being invited to participate in this study because of your professional experience and knowledge of primary health care and delivery for transgender individuals in Ontario.

#### **What will happen during the study?**

If you agree to participate in this study, you will be invited to complete an anonymous paper-based survey and participate in an interview that will be conducted in person. The survey will take about 20-30 minutes to complete and will be done prior to your interview. The student researcher will interview you and ask questions about the delivery of primary health care for transgender individuals within your organization and your role in this. The interview will take about 90 minutes for health care providers and about 45 minutes for clinical support staff. It will take place at your organization, an alternate community location, or by telephone depending on your preference. The student researcher will audiotape and take handwritten notes during the interview.

At the end of the interview you will be asked to complete a questionnaire to gather some information about you such as your years of experience in primary care, your discipline, etc. If you agree, the student researcher may contact you when the study is near completion to share our initial results with you to check if you feel the results are reflective of your perceptions have been correctly captured.

### **Funding Source**

This research is funded by the Vivian Wood Scholarship, the Dorothy C. Hall Primary Health Care Nursing Doctoral Scholarship and TUTOR-PHC fellowship.

### **Are there any risks to doing study?**

The risks involved in participating in this study are minimal. You do not need to answer questions that you do not want to answer or that make you feel uncomfortable. You can withdraw (stop taking part) at any time. You are not required as an employee of the organization to participate in this study even if your name was put forward by your director or physician lead. Study participation is voluntary. The steps to protect your privacy are outlined below.

### **Are there any benefits to doing this study?**

The research will not benefit you directly. The researchers hope to learn more about the implementation and delivery of primary health care services for transgender individuals in Ontario. The researchers hope that what is learned as a result of this study will help us to better understand the complexities of implementing and delivering a program of primary health care for transgender individuals. This information will be useful to others who are considering offering similar transgender services.

### **Who will know what I said or did in the study?**

Every effort will be made to protect (guarantee) your confidentiality and privacy. The student researcher will not use your name or any information that would allow you to be identified. However, we are often identifiable through the stories we tell. Given that transgender service delivery in Ontario is not common, there is a greater chance that results may be identifiable. Aggregate data will be reported to protect confidentiality of individuals. Please keep this in mind in deciding what to tell me.

The information you provide will be kept in a locked filing cabinet where only the researchers will have access to it. Information kept on a computer will be protected by a password. The data and files will also be password protected. The data will be shared with members of the thesis committee. The data will be destroyed 5 years after the study is completed.

### **What if I change my mind about being in the study?**

Your participation in this study is voluntary. It is your choice to be part of the study or not. If you decide to be part of the study, you can decide to stop (withdraw), at any time. This can be done even after signing the consent form or partway through the study. If you decide to withdraw, there will be no negative consequences to you. In cases of withdrawal, any data you have provided will be used unless you indicate otherwise. If you do not want to answer some of the questions you do not have to but you can still be in the study.

### **How do I find out what was learned in this study?**

The student researcher expects to have this study completed by December 2019. If you would like a summary of the results, please let me know how you would like this shared with you.

### **Questions about the Study**

If you have questions or need more information about the study itself, please contact

Student researcher - [zieglere@mcmaster.ca](mailto:zieglere@mcmaster.ca)

Supervisor – Dr. Ruta Valaitis 905.525.9140 Ext. 22298

This study has been reviewed by the Hamilton Integrated Research Ethics Board and received ethics clearance. If you have concerns or questions about your rights as a participant or about the way the study is conducted, please contact:

Office of the Chair of the Hamilton Integrated Research Ethics Board Telephone: (905)  
521-2100 Ext. 42013

## Consent

I have read the information presented in the information letter about a study being conducted by Ms. Erin Ziegler of McMaster University.

I have had the opportunity to ask questions about my involvement in this study and to receive additional details I requested. I understand that if I agree to participate in this study, I may withdraw from the study at any time. I will be given a copy of this information letter and consent form. I agree to participate in the study.

Signature: \_\_\_\_\_

Name of Participant (Printed) \_\_\_\_\_

1.  Yes, I would like to receive a summary of the study's results.

Please send them to this email address \_\_\_\_\_

or to this mailing address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

No, I do not want to receive a summary of the study's results.

2. I agree to be contacted about a follow-up interview and understand that I can always decline the request.

Yes. Please contact me at: Phone: \_\_\_\_\_

No.