Understanding access to HIV-related and gender-affirming healthcare for trans women with HIV in Canada: A mixed methods study

by

Ashley Lacombe-Duncan

A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy

Factor-Inwentash Faculty of Social Work

University of Toronto

ProQuest Number: 10936443

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10936443

Published by ProQuest LLC (2018). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code Microform Edition © ProQuest LLC.

ProQuest LLC. 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106 – 1346

Understanding access to HIV-related and gender-affirming healthcare for trans women with HIV in Canada: A mixed methods study

Ashley Lacombe-Duncan

Factor-Inwentash Faculty of Social Work

University of Toronto

2018

Abstract

Background: Trans women living with HIV (WLWH) have lower access to HIV care compared to cisgender (cis) people living with HIV. US-based research describes barriers (e.g., trans stigma) and facilitators (e.g., integration of gender-affirming and HIV care) to HIV care engagement among trans WLWH. Scant research has explored factors associated with HIV or gender-affirming care access among trans WLWH in Canada. This three-paper dissertation aims to expand an intersectional and social ecological understanding of the experiences of trans WLWH in Canada accessing HIV, gender-affirming, and other types of healthcare.

Methods: A transformative, convergent parallel, mixed methods design was used whereby quantitative and qualitative data were rigorously collected and analyzed, then purposefully merged. Quantitative data was drawn from baseline cross-sectional survey data collected 2013-2015 from the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS) (n=54 trans WLWH/n=1422 participants) and analyzed using descriptive statistics and bivariate analyses. In-depth semi-structured individual interviews (25-100 minutes) were conducted with a purposive sub-set of trans WLWH (n=11) 2017-2018 who completed the

baseline CHIWOS survey, analyzed using framework analysis. Qualitative and quantitative results were merged by comparing data and considering how results converged, diverged, or expanded understanding. Inequities were highlighted and recommendations made, consistent with a transformative design.

Results: Three empirically-based chapters report on: (1) the HIV care cascade and factors associated with HIV care cascade outcomes (ever accessed HIV care, received any HIV care in the past year, currently use antiretroviral treatment (ART), ART adherence, and virological suppression); (2) transition and gender-affirming healthcare experiences of trans WLWH; and (3) resilience and empowerment exhibited by trans WLWH as they navigate intersecting stigmas in healthcare settings.

Conclusions: Findings suggest a need for multi-level interventions to address barriers to accessing care. Intersecting stigmas were a pervasive barrier to accessing multiple types of healthcare. Trans WLWH resist and reduce stigma in healthcare settings; however, widespread stigma-reduction training for providers, administrators, and students is recommended. These findings inform a trajectory of social work research, theory development, and practice at policy, organizational, and individual levels, all of which may further contribute to health equity for trans WLWH in Canada.

Acknowledgements

This dissertation is first and foremost dedicated the participants of the Canadian HIV Women's Sexual and Reproductive Health Cohort Study. Thank you for trusting me with your stories. I carry them with me, and I will not stop fighting for your rights and for your access to the safety, health, and wellbeing that you deserve.

To my supervisor, Dr. Peter Newman, I am grateful for your ongoing mentorship throughout the dissertation process and the many projects we have completed together. I am where I am today because you saw my potential and you pushed me to become the best scholar I could be. I look forward to continuing my journey, knowing I have been instilled with the skillset to conduct theoretically and methodologically sound research and with the value of striving for perfection.

I would also like to thank each of my committee members. To Dr. Carmen Logie, throughout our work together you have challenged me to critically reflect on the process of research, to engage with theory, and to learn new methods. You have done so while also expressing a constant belief in me. Thank you to Dr. Greta Bauer for your thoughtful feedback on my manuscripts, which challenged me to think critically, engage deeply, and learn new skills. Your thoroughness showed your deep commitment to health and social research that improves the lives of trans people, and I look forward to continuing to work together to advance trans health.

Thank you also to my examiners, Dr. Charmaine Williams and Dr. James Martin, for taking time during your summer to critically appraise my thesis and to attend my defense. Your thorough review and thoughtful comments helped me to strengthen my critical reflection, analytic approach, and attention to detail.

Thank you to Yasmeen Persad, for your passion for and dedication to this work. You are an inspiration. I cannot wait to continue and see what else we can accomplish together. Thank you to Dr. Mona Loutfy, for being an ever present mentor, supporting me in making many right decisions, providing an indescribable amount of opportunities, and being a champion for the rights of women living with HIV. To the CHIWOS team, including Dr. Angela Kaida, Dr. Alexandra de Pokomandy, Mina Kazemi, Angela Underhill, Rebecca Gormley, Karène Proulx-

Boucher and the entire Peer Research Associate Team, this study would not be possible without you all. Thank you for trusting me with your data, connecting me with your participants, and supporting me in sharing the stories of those we care so much about.

I am grateful to Roz Spafford for your editorial support throughout the writing process from my comprehensive paper to my dissertation. Thank you to the Faculty of Social Work administration, Angela Umbrello, Sharon Bewell, Kay Ramdass, Julita Javier, Lily Wong, and Joanne Daciuk. Thank you for always having the answers, for your calming presence, and for your enthusiasm about my process. Thank you to Dr. Barbara Fallon, Dr. Faye Mishna, and Dr. Esme Fuller-Thomson for your mentorship throughout the PhD process.

Thank you to my PhD cohort, Dr. Philip Baiden, Dr. Stephanie Baird, Sarah Tarshis, Deng-Min Chuang, Natasha Brien, Roxanne Ramjattan, Manaal Fahim, and Farid Asey. Celebrating life and supporting each other made the arduous PhD process not only more bearable, but much more fun. To my extended PhD student family, Dr. Sophia Fantus, Dr. Kristina Nikolova, Dr. Rusty Sourleymanov, Dr. Lauren McInroy, Bethany Good, and Leslie McCallum – thank you for being part of fostering a collaborative and supportive community. Dr. Jenna VanDraanen, thank you for always being there for me, since that first day of our undergraduate program through to completing our doctoral degrees.

I would also like to acknowledge support from the Social Sciences and Humanities Research Council (SSHRC) of Canada and the Royal Bank of Canada (RBC) Graduate Fellowship in Applied Social Work Research at the Factor-Inwentash Faculty of Social Work, for providing me with funding that enabled me complete my PhD.

To my family, thank you for your enduring support, particularly during the last year. To my social worker friends, thank you for keeping me grounded, and for reminding me that our profession is only as strong as the students we are graduating. Thank you to my partner, for loving me unconditionally. That you are proud of me for completing my PhD, while at the same time your pride in me has nothing to do with me having my PhD, is freeing.

Table of Contents

Acknowledgements	iv
Table of Contents	vi
List of Tables	X
List of Figures	xi
List of Abbreviations	xii
Prologue	xiii
Chapter 1	1
1.1 Introduction	1
1.1.1 The Problem	1
1.2 Theoretical Frameworks	5
1.2.1 Social Ecological Theory	5
1.2.2 Intersectionality Theory	8
1.3 Literature Review: An Intersectionality-informed Social Ecological Context of	of Healthcare
Access for Trans WLWH	11
1.4 Aims of the Three-Paper Dissertation	20
1.5 Social Location and Experiences in Relation to the Research Topic	23
1.6 Research Design	
1.6.1 Convergent Parallel, Transformative, Mixed Methods Design	24
1.6.2 Data Collection	
1.6.3 Data Analyses	
1.6.4 Role within the Research Team and Community-Based Participatory Res	
Practices	28
1.7 Summary	30
1.8 References	32
Chapter 2	
2.1 Abstract	
2.2 Manuscript	
2.2.1 Introduction	
Gaps in the Literature and Research Questions	
2.2.2 Methods	
Study Design	57
Study Sub-sample	
Measures	58
Data Analysis	
2.2.3 Results	
Participant Characteristics	
Cascade of HIV Care among a Sample of Trans Women in Canada	
2.2.4 Discussion	
Limitations and Strengths	
2.2.5 Conclusions and Implications	
2.3 References	84

Chapter 3	97
3.1 Abstract	
3.2 Manuscript	99
3.2.1 Introduction	99
Gaps in the Literature and Research Questions	105
3.2.2 Methods	106
Study Design	106
Quantitative Study Sample and Data Collection	106
Qualitative Study Sample and Data Collection	110
Quantitative Data Analysis	112
Qualitative Data Analysis	113
Mixed Methods Data Analysis	117
3.2.3 Results	117
Sociodemographic and Clinical Characteristics of Quantitative and Qualitative	Study
Participants	117
Transition Experiences	
Barriers and Facilitators to Gender-affirming Care Access	127
Interpersonal Relationship Between Trans WLWH and HIV Care Providers	133
Recommendations	137
3.2.4 Discussion	137
Limitations and Strengths	
3.2.5 Conclusions and Implications	144
3.3 References	146
Chapter 4	158
4.1 Abstract	
4.2 Manuscript	
4.2.1 Introduction	
Gaps in the Literature and Research Questions	
4.2.2 Methods	
Researcher Self-Reflexivity	
Study Setting	
Study Design	
Study Sample and Data Collection	167
Data Analysis	
4.2.3 Findings.	
Responses to Stigma and Discrimination in Healthcare	173
Motivations, Benefits, and Consequences of Responding to Stigma and Discrin	
Healthcare	
Recommendations to Address Stigma and Discrimination in Healthcare	180
4.2.4 Discussion	
Strengths and Limitations	191
4.2.5 Conclusions and Implications	
4.3 References	
Chapter 5	207
5.1 Three-paper Dissertation Overview	

5.2 Synthesis and Interpretation of Findings	208
5.2.1 Key Finding #1	
5.2.2 Key Finding # 2	213
5.2.3 Key Finding # 3	
5.2.4 Key Finding # 4	
5.3 Study Limitations	
5.4 Ethical Considerations: A Community-Based Participatory Research Informed	
Dissertation	224
5.5 Implications and Recommendations	227
5.5.1 Research	227
5.5.2 Theory	232
5.5.3 Practice	235
5.6 Conclusion	242
5.7 References	243
Appendices	261
Appendix A. Characteristics of Studies Focused on HIV-related Healthcare Access for Transfer	
Women Living with HIV (n=26)	
Appendix B. Research Ethics Approvals and Data Sharing Agreements	
B1: Data Agreement with Women's College Hospital	
B2: University of Toronto Research Ethics Approval	
B3: University of Toronto Research Ethics Amendment # 1 Approval	
B4: University of Toronto Research Ethics Amendment # 2 Approval	
B5: University of Toronto Research Ethics Annual Approval	
B6: University of Poronto Research Ethics Annual Approval	
Appendix C. Study Recruitment Materials	
C1: Peer Research Associate Recruitment Script (Toronto)	
C2: Peer Research Associate Recruitment Script (Vancouver)	
C3: Recruitment Flyer (Vancouver)	
Appendix D. Study Consent Forms	
D1: Interview Consent Form (Toronto and Montreal, English)	
D2: Interview Consent Form (Toronto and Montreal, French)	
Appendix E. Community Resource Guides	
E1: Toronto Resource Guide	
E2: Montreal Resource Guide	
E3: Vancouver Resource Guide	
Appendix F. Confidentiality Agreement with Transcriptionist	
Appendix G. Data Collection Instruments	
G1: CHIWOS Baseline Survey	
G2: English Interview Guide	
G3: French Interview Guide	
Appendix H. CHIWOS Engagement and Dissertation Process Timeline	
Appendix I. Community Feedback	
Incorporated into Thesis Proposal	
Appendix J. Quantitative Data Supplementary Files	
J1. Scaling of Continuous Measures from CHIWOS Wave 1 Survey and Missing Data	
Analyses	314

J2. Descriptive Statistics of All Variables Used in Paper 1 Analyses	328
J3. Full Bivariate Analyses of Factors Associated with HIV Care Cascade Outcomes	. 332
Appendix K. Qualitative Data Supplementary Files	. 348
K1. COREQ 32-Item Checklist	. 348
K2. Final Coding Frameworks	350
K3. Sample Charting of Themes and Sub-themes	. 354

List of Tables

Chapter 2
Table 1. Sociodemographic Characteristics of a Sample of Trans Women with HIV in Canada
(n=50)
Table 2. Socioecological Factors Significantly Associated with Each HIV Care Cascade
Outcome among Trans Women with HIV in Canada
Chapter 3
Table 1. Sociodemographic and Clinical Characteristics of the Full Quantitative Sample
(n=48)
Table 2. Transition Experiences Qualitative Findings
Table 3. Barriers and Facilitators to Access to Gender-Affirming Care Joint Display130
Table 4. Experiences Accessing Gender-affirming Care from HIV Physicians Joint Display135
Chapter 4
Table 1. Additional Exemplary Quotes for Sub-themes
Chapter 5
Table 1. Recommendations for Future Research by Key Dissertation Finding231

List of Figures

Chapter 1	
Figure 1. Intersectionality-Informed Social Ecological Context of Healthcare Access for Trans	
Women Living with HIV	2
Figure 2. Study Diagram Depicting Convergent Parallel, Transformative, Mixed Methods	
Design	:6
Chapter 2	
Figure 1. Flowchart of Nested HIV Care Cascade Outcomes and Sample Sizes6	50
Figure 2. Proportion of Trans Women with HIV at Each Step in the HIV Care Cascade	72
Chapter 3	
Figure 1. Transition Experiences Among A Sample of Trans WLWH (n=48)	21
Chapter 4	
Figure 1. Trans WLWH's Responses to Intersecting Types of Stigma and Discrimination in	
Healthcare and Recommendations for Systemic Change	'2
Chapter 5	
Figure 1. Expanded Intersectionality-informed Social Ecological Context of Healthcare Access	
for Trans Women Living with HIV	19
Figure 2. Proposed Integrated Model of Care for Trans Women Living with HIV23	6

List of Abbreviations

ART Antiretroviral Treatment

BACS Barriers to Access to Care Scale

BC British Columbia

CHIWOS Canadian HIV Women's Sexual and Reproductive Health Cohort Study

CAD Canadian Dollars

CI Confidence Interval

Cis Cisgender

CBPR Community-based Participatory Research

CCHS Canadian Community Health Survey

COREQ Consolidated Criteria for Reporting Qualitative Research

DDIs Drug-drug Interactions

EI Employment Insurance

GIPA Greater Involvement of People with HIV

HIV Human Immunodeficiency Virus

HLM Hierarchical Linear Modelling

HR-QoL Health-related Quality of Life

LGBT Lesbian, Gay, Bisexual, Transgender

PLWH People Living with HIV

PRAs Peer Research Associates

PTSD Post-traumatic Stress Disorder

QCA Qualitative Content Analysis

SD Standard Deviation

SDoH Social Determinants of Health

TasP Treatment as Prevention

Trans Transgender

US United States

WCBI Worker's Compensation Board Insurance

WLWH Women Living with HIV

WPATH World Professional Association for Transgender Health

Prologue

This three-paper dissertation aims to expand an intersectional and social ecological understanding of the experiences of trans women living with HIV (WLWH) in Canada within HIV, gender-affirming, and other types of healthcare. Chapter 1 presents the overarching dissertation introduction, with a high-level overview of the problem of study, its relevance to social work, and a description of literature and theory relevant to understanding the problem. Chapter 1 also briefly reviews the dissertation aims, the social location and experiences of the researcher, and the research design.

The following three chapters (Chapters 2, 3, and 4) should be read as separate empirically-based manuscripts, each including a literature review with a specific focus (Chapter 2: HIV care cascade; Chapter 3: gender-affirming care; Chapter 4: intersectionality, resilience, and empowerment). The overarching discussion (Chapter 5) ties the findings of the three papers together and reveals broader implications of the work for social work research, theory, and practice.

Chapter 1 Introduction

1.1 Introduction

In Canada, approximately 75,500 people were estimated to be living with HIV at the end of 2014 (Public Health Agency of Canada, 2015). It is widely recognized that HIV inequitably affects people experiencing social and structural marginalization, including men who have sex with men (MSM), transgender (trans)¹ women, sex workers, people who use injection drugs, people of colour, and people at the intersections of these identities and experiences (Watkins-Hayes, 2014). For example, MSM constitute almost 50% of those living with HIV in Canada (Public Health Agency of Canada, 2015). Indigenous peoples are also disproportionately affected, representing 8.9% of all prevalent HIV infections in 2011 (Public Health Agency of Canada, 2014) while only 4.3% of the population (Statistics Canada, 2015). While these numbers provide compelling evidence about disparities in HIV acquisition based on sexual orientation and race, it is also important to consider who is not counted. Similar to other countries worldwide, there is neither a population-based estimate of the size of the trans population in Canada, nor of the prevalence of HIV among trans people in Canada (Public Health Agency of Canada, 2014), rendering the HIV prevention, treatment, care, and support needs of this population largely invisible.

1.1.1 The Problem

Globally, trans women – particularly trans women of colour and trans women who are sex workers – experience a high prevalence HIV (Baral et al., 2013b; Herbst et al., 2008;

Trans is an umbrella term referring to people with a shared experience of incongruence between their gender identity and sex labeled-at-birth (Sevelius, 2013). Trans women are people labeled male at birth who identify as girls/women, or people of transfeminine experience, including those who have or have not chosen to socially or medically transition (Scheim & Bauer, 2015; Wylie et al., 2016). *Cisgender* (cis) refers to people who experience congruence between their gender identity and their sex labeled at birth (Serano, 2007).

Operario, Soma, & Underhill, 2008). A recent meta-analysis including studies from across 15 countries identified that trans women had almost 49 times the odds of laboratory-confirmed HIV, compared to all adults of reproductive age (Baral et al., 2013b). Limited Canadian data includes archival work, which estimated that over half of deaths of trans women in Montreal, Canada in the 1980s and 1990s were related to HIV (Namaste, 2015). Additionally, a community-based study of trans Ontarians estimated a self-reported HIV prevalence of 2.9%, lower than global estimates, yet substantially higher than the provincial prevalence of 0.006% (Bauer, Travers, Scanlon, & Coleman, 2012; Public Health Agency of Canada, 2015).

Disparities in trans people's health, and specifically in HIV prevalence, can be contextually viewed through a social determinants of health (SDoH) lens that recognizes that the conditions necessary for health are shaped by one's immediate, social, and political context (Mikkonen & Raphael, 2010). Social and economic marginalization fostered through a lack of social support, stigma and discrimination including violence, and a lack of access to income, employment, housing, and healthcare, have been well-documented among trans people through community-based studies in the United States (US) (Bradford, Reisner, Honnold, & Xavier, 2013; Clements-Nolle, Marx, Guzman, & Katz, 2001; Clements-Nolle, Marx, & Katz, 2006; Factor & Rothblum, 2008; Reisner, Gamarel, Nemoto, & Operario, 2014). These findings are echoed in the TransPULSE project, a large, respondent-driven sampling study of almost 400 trans people in Ontario, Canada, conducted prior to the inception of Canada-wide human rights protections based on gender identity (Bauer et al., 2011; Bauer et al., 2009; Bauer & Scheim, 2015; Bauer, Scheim, Pyne, Travers, & Hammond, 2015; Scanlon, Travers, Coleman, Bauer, & Boyce, 2010). These social and structural inequities lead to the marginalization of trans women and contribute to contexts of HIV acquisition risk.

Most of the HIV research pertaining to trans women discusses HIV prevention, while there has been less focus on engagement of trans women living with HIV (WLWH)² in the HIV care cascade. The *HIV care cascade* is conceptualized as a series of steps from HIV diagnosis, through linkage to HIV care, initiation of antiretroviral treatment (ART), adherence to ART, and achievement of positive HIV clinical outcomes such as virological suppression (Mugavero et al., 2013; Nosyk et al., 2014). Since the advent of antiretroviral therapy (ART), HIV has been transformed from a deadly illness to a largely manageable chronic condition (Deeks, Lewin, & Havlir, 2013; Trickey et al., 2017). Access and adherence to ART is critical to prevent virologic failure and death at an individual level (Ulett et al., 2009), as well as to prevent new HIV infections at a community level (Cohen et al., 2016; Rodger et al., 2016).

A small but growing body of quantitative research conducted in the US shows that trans WLWH have lower HIV care access relative to comparison groups of cis people living with HIV (PLWH), including lower: prevalence of past-year and lifetime HIV testing (Pitasi, Oraka, Clark, Town, & DiNenno, 2017); linkage to care (Fennie, Trepka, Maddox, Lutfi, & Lieb, 2016); retention in care (Yehia, Fleishman, Moore, & Gebo, 2013); ART use (Melendez et al., 2006); ART adherence (Baguso, Gay, & Lee, 2016; Dowshen et al., 2016; Mizuno, Frazier, Huang, & Skarbinski, 2015; Sevelius, Carrico, & Johnson, 2010); and viral suppression (Mizuno et al., 2015; Wiewel, Torian, Merchant, Braunstein, & Shepard, 2016). Some studies describe factors associated with ART adherence (Baguso et al., 2016; Mizuno, Beer, Huang, & Frazier, 2017; Sevelius et al., 2010; Sevelius, Saberi, & Johnson, 2014b) and viral suppression (Dowshen et al., 2016; Santos et al., 2014; Sevelius et al., 2014b) among trans WLWH in the US. On the contrary, there is a dearth of published, peer-reviewed studies of trans WLWH's engagement in

⁻

² It is important to be aware of the body of work that critiques the use of these acronyms (Dilmitis et al., 2012). Consciousness of the production of power through language is an essential part of anti-oppressive social work research.

the HIV care cascade and correlates of HIV care cascade outcomes among trans WLWH in Canada.

The small body of research published to date in the US hypothesizes that genderaffirming healthcare is a key facilitator in access to HIV care for trans WLWH (Schilder et al., 2001; Schilder et al., 1998; Sevelius, Patouhas, Keatley, & Johnson, 2014a). Gender-affirming healthcare refers to medical treatment including hormone therapy and/or surgery to change primary and/or secondary sex characteristics with the aim of aligning one's physical characteristics with one's gender (World Professional Association for Transgender Health [WPATH], 2012). Physicians within primary care and/or trans-specific care settings often provide gender-affirming healthcare. Integration of gender-affirming care and HIV care has been described as a best practice by leading US trans healthcare organizations (e.g., Fenway health) (Reisner, Radix, & Deutsch, 2016). However, studies suggest that trans WLWH may experience lower access to gender-affirming healthcare compared to HIV-negative trans women (Wilson, Chen, Arayasirikul, Wenzel, & Raymond, 2014). Moreover, no published data could be identified that explores factors that may impact trans WLWH's access to gender-affirming care differentially than trans women, generally. This information is necessary for the success of integrated gender-affirming and HIV care.

The US and Canada are different with respect to healthcare organization and human rights protections for trans people. Of particular importance is that Canada has a universal healthcare system that is designed, in theory, to reduce socioeconomic barriers to healthcare access (Williams et al., 2017). Studies are urgently needed in a Canadian context of universal access to understand and address gaps in the HIV care cascade and factors correlated with access

to HIV as well as access to gender-affirming care, in order to inform contextually-relevant interventions to address any disparities and increase access to care.

1.2 Theoretical Frameworks

Social ecological and intersectionality theories account for how access to healthcare is influenced by contextually-specific barriers and facilitators (Mugavero, 2013) that operate at the nexus of multiple intersecting oppressions (Logie, James, Tharao, & Loutfy, 2011). As such, these two theories combined support a comprehensive exploration of access to care among trans WLWH in Canada.

1.2.1 Social Ecological Theory

Ecological theory emerged from systems thinking and a recognition of the interdependence of people and their environment (Bronfenbrenner, 1979; Gitterman & Germain, 2008b). The ecological environment is described as a set of nested structures, ranging from the microsystem to the macrosystem (Bronfenbrenner, 1979).

A *microsystem* is "a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics" (Bronfenbrenner, 1979, p. 22). At the heart of the microsystem is the dyad – a two person system (Bronfenbrenner, 1979, 1994; Bronfenbrenner, 2005). Bronfenbrenner (1979) also discusses the importance of n+2 systems (larger interpersonal structures) in shaping the experience and actions of individuals through reciprocal interaction. It is not only the existence of these relationships that is important, but their quality (e.g., supportive versus disruptive). Microsystems are characterized by *molar activities*, *relationships*, and *roles*. A *molar activity* is "an ongoing behaviour possessing a momentum of its own and perceived as having meaning or intent by the

participants in the setting" (Bronfenbrenner, 1979, p. 45). *Observational dyads* allow for the modeling of molar activities when two people are involved in a mutually supportive relationship.

A *mesosystem* can be described as a connection between two microsystems within which the person interacts (Bronfenbrenner, 1979, 1994, 2005). The mesosystem is characterized by different types of interconnections, including *dual links* which are the formation of a three person system upon entry into the new setting. Dual links enhance integration into new settings.

The *exosystem* can be viewed similarly as involving interconnections between two microsystems, one of which the person does not interact but which has an impact on someone or some environment within which they interact (Bronfenbrenner, 1979, 1994, 2005). *Settings of power* operate in the exosystem. These settings are ones in which participants control the allocation of resources and make decisions affecting what happens in other settings in the community or in the society at large. The *macrosystem* includes overarching ideology and the organization of social institutions common to a particular culture or subculture (Bronfenbrenner, 1979, 1994). The macrosystem serves to dictate the position of persons and roles within society, creating a hierarchy whereby certain persons or position are seen as more legitimate and authoritative than others (Bronfenbrenner, 1979). The *chronosystem* refers to changes over time, not only in the characteristics of the person but also of the environment in which that person lives (Bronfenbrenner, 1994), and includes, for example, environmental events and transitions that occur throughout a person's life.

1.2.1.1 Contemporary applications of an ecological approach: HIV and trans peoples' health

Since Bronfenbrenner's (1979, 1994, 2005) initial conceptualization of an Ecological

Model of Human Development, several scholars have applied the theory to various HIV topics,

particularly contexts of HIV exposure (Baral, Logie, Grosso, Wirtz, & Beyrer, 2013a;

Poundstone, Strathdee, & Celentano, 2004). These conceptual models seek to describe how structural factors (e.g., laws criminalizing substance use) indirectly influence social level factors (e.g., marginalization of people who use drugs) and promote or constrain individual practices (e.g., safe injection). A social ecological approach has also been applied to understanding nuanced topics relevant to the health and well-being of trans youth and adults (Newman & Fantus, 2015; Newman, Roungprakhon, & Tepjan, 2013; White Hughto, Reisner, & Pachankis, 2015) as well as in explaining HIV healthcare access (Berben, Dobbels, Engberg, Hill, & De Geest, 2012; Castro, Santiago, Jiménez, Dávila-Vargas, & Rosal, 2015). Recent conceptualizations of ecological theory employ a post-positivist and interpretive paradigm which positions the experiences of people and the meaning of their experiences within specific social contexts as most pertinent to understanding social phenomena (Devers, 1999; Hirsch & Smith, 2002). Thus the aim is not to develop 'objective' understandings of social phenomena that can be applied regardless of context, but to describe phenomena from a particular location in place and time with a particular history (Hirsch & Smith, 2002).

1.2.1.2 Application of ecological theory to social work practice

The ecological perspective has also been used often in social work practice to understand how stressors within an individual's environment can be altered through adaptive changes at multiple levels, such as enhancing coping, building social support, or advocating for changes to negative social structures that impinge on individual wellbeing (Bronfenbrenner, 1979; Gitterman & Germain, 2008a; Robbins, 2011).

Most prolifically, Gitterman and Germain (2008) have applied an ecological perspective to social work theory in developing their life model of social work practice. These scholars take an applied approach to addressing poor *person and environment fit*, discussing how individuals

who perceive an unfavourable fit between their needs and the environment engage in adaptive behaviours until *adaptedness*, or a "favourable person and environment fit that supports human growth and well-being and enriches the environment" (p.55) is achieved. *Adaptive behaviours* include changing oneself (e.g., learning new skills), changing the environment, or changing the person and environment transactions (e.g., relationships). Moreover, these scholars build on our understanding that not all environments are growth-supporting *niches*, and that many negative niches exist and are sustained through the use of power which places stress on individuals and communities (Gitterman & Germain, 2008b).

Within an ecological perspective, stress is viewed as a transactional process that results from poor person and environment fit (Gitterman & Germain, 2008b; Robbins, 2011). *Life stressors* challenge the fit between a person and their environment, lead to emotional or psychological stress and require the employment of coping resources (Gitterman & Germain, 2008b; Lazarus, 1984). *Coping resources* can be internal, such as a positive outlook including hope and optimism. Coping resources can also be external, such as environmental resources including availability and accessibility of formal and informal supports such as health or social service agencies or friends. Coping can be adaptive (e.g., resilience) or maladaptive (e.g., substance use) (Gitterman & Germain, 2008). Social ecological perspectives allow for assessment of social processes whereby people both adapt to and transform their environment. As such, the multilevel, reciprocal and dynamic elements of ecological perspectives are congruent with an intersectional perspective.

1.2.2 Intersectionality Theory

Intersectionality is a *critical social theory* born of Black feminism that allows for an understanding of how multiple social identities such as HIV status, gender identity, race,

sexuality, class, and (dis)ability intersect at the micro level of an individual's experience to enact systems of privilege and oppression such as cisnormativity, heterosexism, sexism, racism, and classism that are operating at the macro level of society (Bowleg, 2008, 2012; Crenshaw, 1989; Hill Collins, 2000; McCall, 2005). Long before being termed intersectionality by critical race legal scholar Kimberlé Crenshaw (1989), Black women were describing their everyday experiences at the intersection of gender, race, and class (Bowleg, 2008; Hancock, 2007). Since its definition, intersectionality has been applied in various disciplines, including social work (Logie et al., 2011; Mehrotra, 2010), epidemiology (Bauer, 2014), political science (Hancock, 2007), public policy (Hankivsky, 2012), and public health (Bowleg 2008, 2012), among others. Regardless of discipline, intersectionality is underpinned by the idea that social identities and social processes are multiple, interdependent, and mutually constitutive (Bowleg, 2008, 2012; Bowleg & Bauer, 2016). Intersectionality is a theoretical approach that addresses the inadequacy of using one source of oppression as the singular cause of health inequity (Dhamoon & Hankivsky, 2011); contrary to unitary approaches which describe on one category of social position (e.g., gender identity) (Hancock, 2007). As a critical social theory, intersectionality can be used to advance social justice by highlighting the voices of people who experience oppression and the manifold structures that perpetuate and maintain inequality (Bowleg, 2008, 2012; Hill Collins, 2000; Mehrotra, 2010). Hill Collins (2000) describes power as an "intangible entity that circulates within a particular matrix of domination and to which individuals stand in varying relationships" (p. 274), which suggests that people are not oppressed in all social contexts, across all times and place. Acknowledging how trans WLWH shift power relations within institutional contexts is critical in intersectionality work with this population.

Intersectionality is rooted in a social constructionist viewpoint whereby objective "truth" does not exist, privileging the multiple viewpoints and subjectivities of people who experience marginalization (Hill Collins, 2000). Additionally, as a post-positivist structural approach to gaining knowledge, intersectionality positions the researcher as rooted in the everyday and not distanced from it. Due to this, in this chapter and the fourth chapter of this dissertation, I discuss my own social location and how it connects to my understanding of trans WLWH's experiences of and access to healthcare.

1.2.2.1 Application of intersectionality theory to social work practice

Overall, intersectionality is congruent with social work's focus on advancing social justice and is intimately connected to social work theory, research, and practice. In terms of theory, intersectional theorizing is aligned with feminist social work scholarship (Mehrotra, 2010). Studies conducted through an intersectional lens support an anti-oppressive and community-based participatory approach to understanding phenomena, which includes trans WLWH as researchers best positioned to understand their own lived experiences (Dhamoon & Hankivsky, 2011). Lastly, intersectionality provides "a way to express, theorize, and act in social struggles" (Dhamoon & Hankivsky, 2001, p. 31). This can include use of intersectional self-reflexivity (Mattsson, 2013) to challenge the (re)production of inequality through social work research.

The following section applies these theories to the peer-reviewed, published literature on access to HIV care for trans WLWH (Appendix A). This literature review focused on studies from Canada and the US, where trans women experience a similar socio-political climate and where concentrated HIV epidemics occur across specific populations (e.g., trans women) who experience socioecological contexts of disadvantage (e.g., multiple types of stigma and

discrimination, lack of access to income, employment, and safety). It draws on qualitative studies (n=10) and quantitative studies that examined correlates of different points along the HIV care continuum for trans WLWH (n=16).

1.3 Literature Review: An Intersectionality-informed Social Ecological Context of Healthcare Access for Trans WLWH

Based on an ecological approach, when a woman experiences a lack of access to healthcare, she is experiencing a poor person and environment fit between herself and her healthcare environment (Gitterman and Germain, 2008). The person and environment fit is influenced by stress processes and is altered through the adoption of personal and environmental coping resources as well as altered by environmental changes operating at multiple levels. This literature review describes factors of potential importance to influencing healthcare at the level of the macrosystem, exosystem, mesosystem, and microsystem (Figure 1)

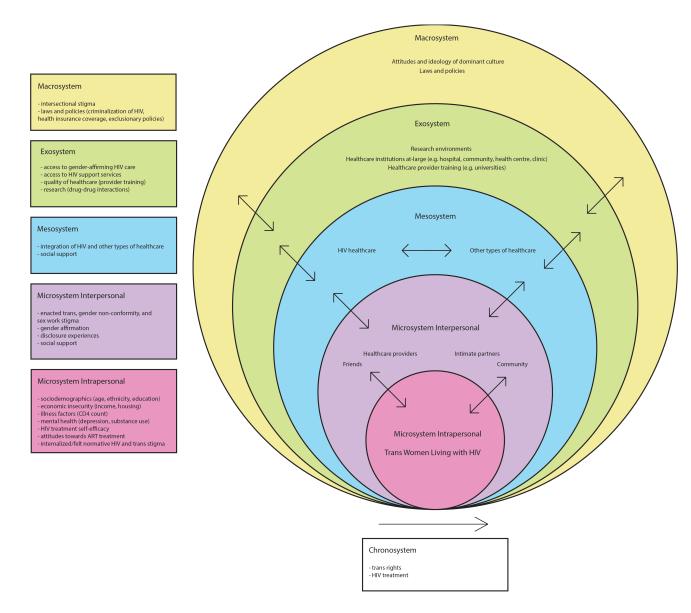


Figure 1. Intersectionality-Informed Social Ecological Context of Healthcare Access for Trans Women Living with HIV

Macrosystem. Macrosystem factors include the dominant ideology as it pertains to cisnormativity, societal ideas about WLWH, and other intersecting forms of oppression. Cisnormativity describes the "sociocultural assumptions and expectations that all people are cissexual and/or have a cisgender body" (Bauer et al., 2009, p. 356). Cisnormativity is reproduced through laws and policies. For example, cisnormativity is reinforced organizationally through only having binary gender options on forms (e.g., intake questionnaires) and in systems (e.g., electronic medical records) (Bauer et al., 2009). Later conceptualizations of an ecological approach applied to HIV (Baral et al., 2013a; Poundstone et al., 2004) and trans populations (White Hughto et al., 2015) highlight the importance of specific macro-level laws and policies, similarly sustained through negative societal attitudes and enacted through structures of power (e.g., law, healthcare) which may serve to disadvantage trans WLWH with regard to accessing and utilizing quality HIV care. For example, in Canada, the criminalization of HIV nondisclosure contributes to distrust between WLWH and their providers (Patterson et al., 2015). Policies may restrict access to gender-affirming healthcare for trans WLWH by reducing access to health insurance and/or coverage of gender-affirming healthcare (Khan, 2011), which can be compounded by geographic differences in coverage in Canada (Bauer, 2013) or Medicaid restrictions in the US (Gehi & Arkles, 2007).

Qualitative studies have described how widespread community stigma and discrimination shape access to HIV care for trans WLWH across the care continuum (Logie et al., 2011; Logie, James, Tharao, & Loutfy, 2012; Melendez & Pinto, 2009; Schilder et al., 2001; Schilder et al., 1998; Sevelius et al., 2014a; Wilson, Arayasirikul, & Johnson, 2013). Stigma is a social process of exerting social control, which involves labeling, stereotyping, and subsequent discrimination against a person or group of people (Link & Phelan, 2001). It is perpetuated at a structural level

through the institutionalization of discriminatory and exclusionary policies, at an interpersonal level through enacted stigma in interpersonal interactions, and at an individual level through internalized and/or felt normative stigma, whereby people adopt society's negative attitudes towards them as their own and/or perceive that others hold negative attitudes towards them (White Hughto et al., 2015). Specific manifestations of stigma and discrimination at a structural level include exclusion of trans WLWH from programs and services (e.g., exclusion from women-specific services, exclusion from queer-friendly services which typically focus on the needs of gay, bisexual, and other MSM); and at the program level through lack of access to accurately tailored prevention messages (e.g., lack of safer sex materials available specific to the diversity of trans identities, bodies, and experiences).

Stigma and discrimination against trans WLWH exist in relation to the convergence of multiple forms of marginalization beyond HIV stigma and trans stigma (Logie et al., 2011; Schilder et al., 2001; Schilder et al., 1998). Most research that explores HIV care has either excluded trans women, grouped their experiences with people living with HIV, women, men who have sex with men, or lesbian, gay, bisexual, trans (LGBT) people broadly (Carter et al., 2014; Christopoulos et al., 2013; Logie et al., 2011, 2012; Tanner et al., 2014). Future studies that focus specifically on trans WLWH hold promise of demonstrating the complexity of trans women's experiences based on intersecting systems of oppression (Lacombe-Duncan, 2016), including: transmisogyny³ (Serano, 2007), gender non-conformity stigma⁴ (Cruz, 2014), classism (Lombardi, Wilchins, Priesing, & Malouf, 2001), sex work stigma (Logie et al., 2011; Schilder et al., 2001), substance use stigma (Logie et al., 2011; Schilder et al., 2001), and racism (Bradford

_

Transmisogyny refers to "the ridiculing or dismissal of a transgender person not merely for failing to live up to gender norms, but for their expressions of femaleness or femininity" (Serano, 2007, p.14). "Gender-nonconformity stigma is defined as stigmatization of those who do not conform to societally constructed and eexpected gender norms; with respect to trans women, this may refer to stigmatization of trans women who have a masculine/masculine-of-center gender presentation (Gordon & Meyer, 2007).

et al., 2013; Kenagy, 2005; Logie et al., 2011). Other areas of oppression have also been overlooked, such as the experiences of sexual minority trans WLWH, trans WLWH with (dis)abilities, and trans WLWH who have immigrated to Canada, limiting our understanding of the impact of sexual stigma, ableism, and xenophobia on trans WLWH's access to care (Lacombe-Duncan, 2016).

Exosystem. The exosystem constitutes environments within which trans WLWH do not interact, but which may have a significant impact on their experiences accessing and utilizing HIV healthcare, such as administrative settings of healthcare institutions within which care is delivered (e.g., hospitals), and university settings, where research is conducted and providers are trained. Bronfenbrenner (1979, 1994, 2005) referred to settings at this level as settings of power, suggesting that the closer the linkage between trans WLWH and these settings, and the greater their ability to influence these settings, the greater their ability to optimize their HIV healthcare experiences and health outcomes. A few studies have shown that how healthcare is organized influences access, including the availability of: population (LGBT) specific care (Melendez & Pinto, 2009), culturally-competent care, including care in other languages and HIV care that incorporates gender-affirming care (Melendez & Pinto, 2009; Schilder et al., 2001), and access to other types of care which address the SDoH (Sevelius et al., 2014a; Wilson et al., 2013). However, trans WLWH's perspectives regarding the organization and delivery of HIV and gender-affirming care within a Canadian context is underexplored.

Access to and quality of healthcare for trans women with HIV may be limited by the lack of knowledge and skill of healthcare providers regarding trans women's needs and experiences (Logie et al., 2012; Lombardi, 2001; Munro et al., 2017; Remien et al., 2015; Schilder et al., 1998; Sevelius et al., 2010; Thornhill & Klein, 2010; Wilson et al., 2009). In particular,

qualitative studies have shown that a lack of information about potential drug-drug interactions (DDIs) between ART and feminizing hormones is a barrier to uptake of ART for this population, due to perceived or fear of DDIs (Melendez & Pinto, 2009; Sevelius et al., 2014a). Furthermore, studies show that gender-affirming healthcare may be prioritized among trans WLWH above HIV care (Schilder et al., 2001; Schilder et al., 1998; Sevelius et al., 2014a) and physician support of women's hormone use is a facilitator of ART initiation and adherence (Melendez & Pinto, 2009; Sevelius et al., 2014a). Scant published peer-reviewed literature explores DDIs between ART and feminizing hormones (Radix, Sevelius, & Deutsch, 2016).

Mesosystem. The mesosystem constitutes the interconnections between systems within which women interact, such as HIV healthcare and other types of healthcare. The integration of HIV care and other types of care, particularly gender-affirming care, is suggested to increase linkage to and retention in HIV care among trans WLWH (Melendez & Pinto, 2009; Santos et al., 2014; Schilder et al., 1998; Sevelius et al., 2014a; Wilson et al., 2013). Linkage between health care settings may be optimized by having social support (Dowshen et al., 2016; Hines, Draucker, & Habermann, 2017; Remien et al., 2015), which may be lacking for trans WLWH who may experience a loss of family support due to trans stigma and loss of support from the trans community due to HIV stigma (Sevelius et al., 2014a). More research is necessary to understand how social support may influence trans women's access to HIV healthcare.

Microsystem, Sociodemographics and Clinical Factors. Identified sociodemographic correlates of higher levels of adherence include Black/African race (Baguso et al., 2016) and older age (Mizuno et al., 2017; Sevelius et al., 2014b). Studies have shown that trans WLWH are more likely than cis PLWH to experience lower income (Melendez et al., 2006; Mizuno et al., 2015) and a qualitative study of trans WLWH in the US (n=38) found that competing needs in

relation to economic insecurity (e.g., lack of access to income, stable housing, safety, and food) was a significant barrier to engagement and retention in HIV care (Wilson et al., 2013). Housing instability is associated with lower odds of being on ART (Santos et al., 2014) and being virologically suppressed (Dowshen et al., 2016; Santos et al., 2014). Clinically, current CD4 count is associated with access to care among general populations of PLWH (World Health Organization, 2015), though it is underexplored among trans WLWH.

Microsystem, Intrapersonal Factors. Several intrapersonal factors have been found to be associated with lower adherence among trans WLWH in cross-sectional quantitative studies, including depression (Mizuno et al., 2017) and lower self-efficacy to take medication as prescribed (Mizuno et al., 2017; Sevelius et al., 2010). Similarly, Dowshen et al. (2016) found that depression increased the predicted probability of having a detectable viral load to a greater extent among young trans WLWH (n=66) relative to young cis PLWH (n=1,584). Similarly to cis WLWH, trans WLWH experience emotional reactions post-diagnosis including shock, anger, and self-blame, which can delay their access to HIV care (Hines et al., 2017) and many experience depression (Mizuno et al., 2017). Mental health issues (e.g., depression) that impede access to HIV care may stem from both intrapersonal processes (e.g., internalized stigma) and interpersonal experiences of violence (Lacombe-Duncan, 2016). Internalized stigma, in addition to violence—an interpersonal factor—is associated with increased substance use (Bockting, Robinson, & Rosser, 1998), which may directly decrease adherence among trans WLWH (Sevelius et al., 2014b). Qualitative studies have demonstrated substance use as a barrier to adherence (Schilder et al., 2001; Schilder et al., 1998; Sevelius et al., 2014a). The ongoing violence experienced by many trans women, including trans WLWH, may also lead to the

intrapersonal experience of trauma (Wilson et al., 2013), which is shown to negatively impact access ART adherence and virological suppression among PLWH (Mugavero et al., 2009).

Microsystem, Interpersonal Factors. Enacted trans stigma and discrimination within the context of interpersonal relationships in healthcare settings (e.g., misuse of pronouns, denial of service) are described as highly pervasive barriers to healthcare access for trans WLWH (Logie et al., 2011, 2012; Melendez & Pinto, 2009; Schilder et al., 2001; Schilder et al., 1998; Sevelius et al., 2014a; Wilson et al., 2013). Anticipated and enacted trans stigma may prevent women from disclosing their trans identity to healthcare providers – limiting their access to gender-affirming care (Sperber, Landers, & Lawrence, 2005). Gender non-conformity stigma also influences women's experiences whereby healthcare provider insensitivity is associated with not "passing" (Xavier et al., 2013). It may be surmised that intersecting oppression influences enacted discrimination perpetuated in healthcare settings. However, there is a dearth of published peer-reviewed studies conducted among trans WLWH that explore how multiple types (e.g., HIV, trans) and forms (e.g., structural, enacted) of stigma manifest in patient-provider interactions within a variety of care settings (e.g., HIV care, gender-affirming care).

Dyads, N+2 systems, molar activities, observational dyads, relationships, and roles. Within the microsystem of trans WLWH, several people are noted to be of key importance, including healthcare providers, friends, significant others, and other women trans community members (Melendez & Pinto, 2009; Schilder et al., 2001; Schilder et al., 1998; Sevelius et al., 2014a). At the microsystem level, one may consider how these various dyads and n+2 systems influence, for example, HIV treatment self-efficacy – a critical factor in ART adherence for trans WLWH (Melendez et al., 2006; Sevelius et al., 2010). ART adherence can be considered a molar activity. Bronfenbrenner (1979, 1994, 2005) suggests that the development of molar activities

occurs through the reciprocal relationship between an individual and another person, through the development of an observational dyad. An observational dyad, in this case, is a relationship between a trans WLWH and other women in her community and/or her healthcare provider, whereby women learn about HIV care and build self-efficacy to integrate ART treatment into their lives. However, as Bronfenbrenner (1979) also suggests, mutual antagonism between the observer and the observed interferes with observational learning. This speaks to how trans stigma within the context of an interpersonal relationship between a woman and her provider may disrupt health-promoting practices such as remaining retained in care, initiating ART treatment, and adhering to ART. Given the importance of the patient-provider relationship in the context of HIV care, studies are urgently needed that describe trans WLWH's relationship with their HIV care providers.

Chronosystem. The chronosystem includes historical time and life history. Consistent with an intersectionality-informed construction of the chronosystem, it is fundamental to understand multiple identities within a social-structural context (Sevelius, 2013). For example, trans people's experiences within the healthcare system are shaped by their historical and ongoing labeling through psychiatry and the use of these labels to prevent access to care (American Psychiatric Association, 2013).

Multilevel coping, resilience, and empowerment. An emerging body of resilience research focuses on how intrapersonal (e.g., inner strength) and interpersonal (e.g., social support) resources can contribute positively to a person's wellbeing (Ungar, 2011; Ungar et al., 2008). Moreover, empowerment is a process whereby people transform themselves, their communities, and/or oppressive social structures through recognizing the linkage between personal problems and political structures (conscientization). These processes of change may

occur at multiple levels: intrapersonal (e.g., moving from internalized stigma to self-worth), interpersonal (e.g., shifting from enacted stigma and violence to safety), and structural (e.g., shifting from structural stigma to entrenched human rights and policies that promote access) (Carr, 2003; Freire, 1970). One study conducted by Logie et al. (2011) showed how WLWH, inclusive of trans WLWH, utilize coping resources to navigate everyday experiences of intersecting types of stigma and discrimination. Some scholars have brought attention to resilience among people with multiple marginalized identities, such as trans people of colour and trans people with mental health issues (Mizock & Mueser, 2014; Rood et al., 2016; Singh, 2013; Singh & McKleroy, 2011). One of these studies, conducted by Mizock and Mueser (2014), showed how trans people with mental health issues exhibit resilience and empowerment in relation to navigating discrimination in employment settings. However, almost no studies highlight resilience and empowerment among trans WLWH, and none do so in relation to navigating discriminatory healthcare settings. More research is needed that is attuned to trans WLWH's resilience and empowerment, in order to guide the development of strengths-based interventions to address access disparities.

Taken together, this literature review shows that trans WLWH may experience some overlapping and some unique barriers and facilitators to access to care that must be attended to through social work research and intervention development.

1.4 Aims of the Three-Paper Dissertation

This three-paper dissertation is organized into five Chapters. **Chapter 1** introduces the overall research problem to be addressed, theories informing conceptualization of the problem, and, briefly, the research methodology. In accordance with the three-paper dissertation, the

subsequent three chapters can be considered as independent manuscripts. Each manuscript contains an introduction, methods, results, and discussion section.

Chapter 2 is the first paper titled *Characterizing the HIV Care Cascade Among Trans*Women with HIV in Canada. This exploratory quantitative study utilized cross-sectional baseline survey data collected from the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS) to comprehensively explore HIV care access for trans WLWH. The research questions for this paper are: 1) What is the proportion of trans WLWH participating in a Canadian cohort study of WLWH who: (a) ever accessed care, (b) received any HIV care in the past year, (c) were currently using antiretroviral therapy (ART), (c) reported ≥ 95% of ART in the past month (adherence), and (d) had a self-reported an undetectable viral load of < 50 copies/mL?; and, 2) What sociodemographic (e.g., age), clinical (e.g., current CD4 count), intrapersonal (e.g., depression), interpersonal (e.g., social support), structural (e.g., HIV stigma), and trans-specific (e.g., access to gender-affirming care, trans stigma) factors are associated with each step of access along the HIV care cascade for this sample of trans WLWH?

Chapter 3 is the second paper titled *Transition and Gender-affirming Care Experiences* among *Trans Women with HIV in Canada: A Mixed Methods Study*. This study used a mixed methods approach to understand experiences of gender-affirming care for trans WLWH, drawing on cross-sectional baseline survey data from CHIWOS, as well as in-depth semi-structured individual interviews conducted with a sub-set of trans WLWH who completed the baseline CHIWOS survey (purposively selected based on diverse identities/experiences and different levels of healthcare engagement). The research questions for this paper are: 1) What are the transition experiences of trans WLWH participating in a Canadian cohort study of WLWH (quantitative and qualitative)?; 2) Among a sample of trans WLWH in Canada, what are the

barriers and facilitators to reporting medically/surgically transitioning (quantitative) and what do women perceive as barriers and facilitators to accessing gender-affirming care (qualitative)?; 3) What are the experiences of trans WLWH accessing gender-affirming care from HIV care providers (quantitative and qualitative)?; and, 4) To what extent do quantitative results on transition and gender-affirming care experiences for trans WLWH converge, diverge, and/or expand upon the interview data (convergent mixed methods)?

Chapter 4 is the third paper titled Resilience, Resistance, and Transformation: A

Qualitative Study of How Trans Women with HIV Respond to Intersecting Stigmas in

Healthcare. Drawing on the same qualitative sample described in reference to Chapter 2, the
third paper qualitatively explores how trans WLWH exhibit resiliency and empowerment in
relation to intersecting types of stigma and discrimination in healthcare settings. The research
questions for this paper are: 1) How do trans WLWH exhibit resilience and empowerment in
relation to intersecting types of stigma and discrimination in healthcare settings?; and, 2) What
are trans WLWH's recommendations to improve stigmatizing healthcare settings?

Lastly, **chapter 5** is an integrated discussion and summary of the three papers with implications for social work research, theory, and practice. The introduced theoretical framework (Figure 1) is reconsidered and redeveloped in light of the dissertation findings. Consistent with a transformative mixed methods design, quantitative (Chapter 2), mixed methods (Chapter 3), and qualitative (Chapter 4) study findings will be merged to highlight convergence, divergence, and expansion across the different types of data. The discussion will be used to highlight inequities and make recommendations to improve healthcare access for trans WLWH.

1.5 Social Location and Experiences in Relation to the Research Topic

Consistent with an intersectional approach, it is important to consider who I am in relation to the research and what experiences I bring to the research process. Aspects of my history, professional identity, and positionalities shape my beliefs in relation to this dissertation topic. Growing up in a small rural city in Southwestern Ontario, I came to believe that universality – the principle of Canada's Health Act that suggests that all Canadians are entitled to the same level of healthcare (Government of Canada, 1984) – is an aspiration and not a reality experienced by all Canadians. In response to my longstanding interest in healthcare, I pursued an undergraduate degree in Health Studies at the University of Waterloo, where I became captivated by research on the social determinants of health. I broadened my understanding of factors contributing to health and wellbeing of people from beyond healthcare specifically to factors such as poverty, employment, education, and social inclusion, later pursing my Master of Social Work (MSW) at the University of Toronto. These early experiences contributed to my belief that healthcare is a fundamental right, and my conviction that we, as a society, have a responsibility to ensure that healthcare is available and accessible to those who need it.

Three formative experiences during the MSW shaped my interest in the social determinants of health and in particular healthcare access for PLWH and LGBT people. First, I started volunteering at Casey House, Canada's first and only stand-alone HIV hospital (Casey House, 2018). When I started at Casey House, I carried with me many of the stigmatizing assumptions about PLWH that are pervasive in society. This process of unlearning and challenging my own assumptions showed me how knowledge and exposure can reduce HIV stigma. Second, I had an MSW practicum with the Regent Park Community Health Centre, a community health centre situated in Toronto's Downtown South East side, home to Canada's

largest social housing project and a large concentration of services for people who are experiencing homelessness and substance use issues, and who are engaged in sex work (Regent Park Community Health Centre, 2018). Here I learned that beyond HIV stigma, trans stigma, sexual stigma, racism, and classism, as well as stigma based on sex work and substance use forced women to the margins of our society. Finally, I came out as a queer person. While gaining academic privilege, beginning to recognize my white, able-bodied, and cis privilege, among many others, I simultaneously began to experience sexual stigma, and learned how privilege and oppression are shaped by context. These experiences further entrenched a desire to understand how intersecting forms of marginalization shape the experiences of LGBT persons and PLWH.

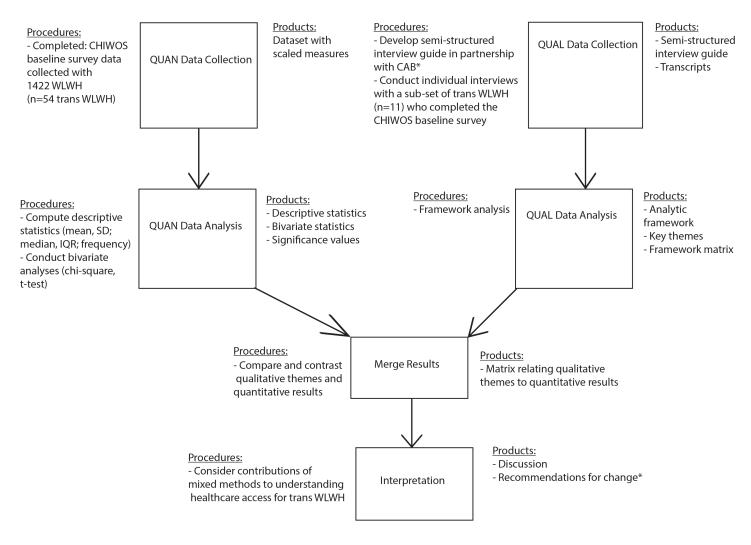
As a queer woman navigating a heteronormative and sexist world, I bring my own experiences of oppression to this work; as a social worker, I bring a passion for social justice; and, as a Canadian, I bring my belief in the importance of universal access to healthcare.

1.6 Research Design

Mixed methods is a methodology that involves the rigorous collection and analysis of both quantitative and qualitative data, as well as the purposeful integration of the two forms of data using a pre-specified mixed methods typology, which allows for converging, comparing, validating, and corroborating results (Creswell & Plano Clark, 2011; Fetters & Freshwater, 2015; Guetterman, Fetters, & Creswell, 2015). As a methodology, it has several advantages including complementing quantitative data by providing context and giving voice directly to research participants, reducing biases, allowing for triangulation, and explaining unexpected results (Bryman, 2006; Creswell & Plano Clark, 2011).

1.6.1 Convergent Parallel, Transformative, Mixed Methods Design

For this dissertation, a transformative, convergent parallel, mixed methods design is used, drawing on a post-positivist worldview consistent with quantitative data analysis and an advocacy/participation worldview consistent with community-based participatory research (CBPR) (Creswell, 2009). A convergent parallel mixed methods design is a study in which qualitative and quantitative data are collected in parallel, analyzed separately, and then merged (Creswell & Plano Clark, 2011). A transformative design occurs when the mixed methods study uses a social justice-oriented framework, such as intersectionality, and the research is focused on advancing the needs of an underrepresented population through remaining connected with and sensitive to the needs of the population and providing recommendations for specific changes (Creswell & Plano Clark, 2011). Figure 2 is a study diagram depicting the data gathering and analysis processes across this convergent parallel, transformative, mixed methods study. The documentation related to the data gathering processes are provided in the appendices as follows: B) research ethics approvals and data sharing agreements; C) study recruitment materials; D) study consent forms; E) community resource guides; F) confidentiality agreement with transcriptionist; and G) data collection instruments.



^{*}Denotes transformative element

Figure 2. Study Diagram Depicting Convergent Parallel, Transformative, Mixed Methods Design

1.6.2 Data Collection

Chapters 2 and 3 of this dissertation use quantitative cross-sectional survey data collected from 2013-2015 in the first wave of the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS), a national (Ontario, Quebec, British Columbia) cohort study focused on health resource utilization and physical and emotional health outcomes among 1,422 WLWH in total, including 54 trans WLWH (Loutfy et al., 2017). Further details of the quantitative data collection process, including participant recruitment, development and delivery of the survey, and survey measures can be seen in Chapters 2 and 3.

Chapters 3 and 4 of this dissertation use qualitative interview data collected 2017-2018. To increase comparability of the data, qualitative data were collected from the same sample (Creswell & Plano Clark, 2011). A sub-set of trans WLWH across the three provinces (n=11) who completed the baseline CHIWOS survey participated in an open-ended, semi-structured, individual interview focused on their experiences accessing different types of health care (HIV, gender-affirming, other types of healthcare) including experiences of barriers and facilitators to access to care at individual, interpersonal, and structural levels. Participants were also asked about their responses to negative experiences within healthcare. Participants were purposively chosen to include those with various experiences with respect to healthcare access (more engaged, less engaged). Additionally, consistent with an intersectional approach, participants were purposively chosen to reflect various identities, including those highlighted in the literature as experiencing pervasive barriers to accessing care (e.g., racialized trans WLWH) and those identified by the CHIWOS Trans Community Advisory Board (CAB) as understudied in a Canadian context (e.g., trans WLWH who are sex workers). Further details of the qualitative data

collection process, including participant recruitment, development of the interview guide, and details pertaining to conducting the interviews, can be seen in Chapters 3 and 4.

1.6.3 Data Analyses

Data analyses specific to each paper are presented in detail in Chapters 2, 3, and 4. Briefly, quantitative analyses included assessing and addressing data quality issues and internal consistency of measures, conducting analyses of missing data, computing descriptive statistics (frequency; mean, standard deviation) for all variables, and conducting bivariate analyses to factors associated with outcome of interest. All analyses were conducted using SPSS 22.0 (Armonk, NY: IBM Corp.). Qualitative data was analyzed using framework analysis, a form of qualitative content analysis (QCA), which has become increasingly popular in health research (Gale, Heath, Cameron, Rashid, & Redwood, 2013). Framework analysis involves a series of six steps from familiarization with the data at the initial stage through to mapping and interpretation at the final step (Ritchie & Spencer, 1994). Mixed methods data analysis consists of both analytic techniques applied to quantitative and qualitative data analysis, as well as the mixing of two forms of data concurrently (Creswell & Plano Clark, 2011). More specifically, qualitative and quantitative data are compared across pre-specified dimensions, and combined results are interpreted as to how they answer the research questions, and, specific to the transformative design, uncover inequities (Creswell & Plano Clark, 2011).

1.6.4 Role within the Research Team and Community-Based Participatory Research Practices Appendix H shows a detailed timeline of my dissertation process mapped onto my CHIWOS engagement over time. After beginning as a doctoral student in social work (September 2013) I was invited by Dr. Loutfy to participate as a co-applicant on a grant to support targeted recruitment of marginalized sub-populations of WLWH (October 2013). I became a CHIWOS student (August 2014) and a CHIWOS co-investigator (January 2015). From then onwards, I led and participated on Data Request Forms (DRFs) related to the health and wellbeing and healthcare access of diverse WLWH in CHIWOS, co-authoring five publications with CHIWOS co-investigator and committee member Dr. Carmen Logie.

The summer of 2015 I began meeting regularly with a CHIWOS team member who is a recognized leader in the trans community about our potential to work together to address issues affecting trans WLWH. These meetings informed the development of my comprehensive paper proposal (October 2015). With an established community partnership and established trust between the CHIWOS research team, and myself, I was subsequently invited to complete a transpecific data request form (January 2016) and initiated the process of crafting my thesis project (June 2016).

Consistent with CHIWOS' approach to community-based participatory research (CBPR), this dissertation engaged from the outset with trans community members to understand community needs and to increase the potential impact of this research on improving care (Israel, Schulz, Parker, & Becker, 1998; Loutfy et al., 2016; Travers et al., 2013). The Trans CAB, built into CHIWOS' structure, provided an opportunity to present potential analyses, receive feedback, and to critically reflect on my positionality in relation to the research. Feedback of the Trans CAB was incorporated at the proposal stage (Appendix I). I also consulted with the Trans CAB and additional trans community members and CHIWOS team members (and community CHIWOS team members) during the development of the REB (data collection processes, resource guides, interview guide). I later discussed study findings with members of the Trans CAB. Balancing the CBPR approach with the purpose of the dissertation (e.g., to be able to

independently conceptualize and conduct original and impactful social work research) (Factor-Inwentash Faculty of Social Work, 2017), I completed all data analysis and writing for this dissertation.

Beyond engaging community throughout the research process, CBPR also requires thoughtfully considering and attending to power sharing and capacity building, as well as to maintaining a careful balance of research and action, sharing findings with key stakeholders, and moving forward on key recommendations (Israel et al., 1998; Travers et al., 2013). From November 2016 to present, trans-specific CHIWOS data has been accepted for 11 peer-reviewed poster or oral presentations; 5 of which were co-presented between myself and our community collaborator, 3 presented solely by our community collaborator, and 3 presented solely by me. As a co-investigator on a CHIWOS-related grant funding a PRA-led Knowledge Translation and Exchange process, and an academic mentor, I also had the opportunity to work with our community partner to develop a research snapshot, develop a program website, and host a conference with predominantly health and social service providers. I reflect further on the challenges and successes of this CBPR-informed dissertation in Chapter 5.

1.7 Summary

There is a dearth of published peer-reviewed literature documenting the healthcare experiences of trans WLWH in Canada. This three-paper dissertation utilizes mixed methods to explore (1) the HIV care cascade and factors associated with HIV care cascade outcomes; (2) transition and gender-affirming healthcare experiences of trans WLWH; and (3) resilience and empowerment exhibited by trans WLWH as they navigate intersecting types of stigma and discrimination in healthcare settings. The research draws upon social ecological and

intersectionality theory as two key theoretical perspectives that inform a holistic and critical conceptualization of healthcare access for trans WLWH, and draws upon a robust mixed methods methodology to allow for a rigorous and in-depth exploration of the focal topic. This dissertation seeks to inform social work practice at individual, organizational, and policy levels. Social workers have a responsibility to contribute to research and advocacy with respect to access to HIV care for marginalized populations (Martin, 2011). Consistent with social work's core values (Canadian Association of Social Workers, 2005), ultimately this dissertation aims to advance health equity and social justice for trans WLWH.

1.8 References

- American Psychiatric Association. (2013). Gender dysphoria. Retrieved from http://www.dsm5.org/documents/gender dysphoria fact sheet.pdf
- Baguso, G. N., Gay, C. L., & Lee, K. A. (2016). Medication adherence among transgender women living with HIV. *AIDS Care*, 28(8), 976-981. doi:http://dx.doi.org/10.1080/09540121.2016.1146401
- Baral, S., Logie, C. H., Grosso, A., Wirtz, A. L., & Beyrer, C. (2013a). Modified social ecological model: a tool to guide the assessment of the risks and risk contexts of HIV epidemics. *BMC Public Health*, *13*, 482. doi:10.1186/1471-2458-13-482
- Baral, S. D., Poteat, T., Stromdahl, S., Wirtz, A. L., Guadamuz, T. E., & Beyrer, C. (2013b).

 Worldwide burden of HIV in transgender women: a systematic review and meta-analysis. *Lancet Infectious Diseases*. *13*(3), 214-222. doi:10.1016/s1473-3099(12)70315-8
- Bauer, G. R. (2014). Incorporating intersectionality theory into population health research methodology: challenges and the potential to advance health equity. *Social Science and Medicine*, 110, 10.
- Bauer, G. (2013). Chapter 7: It's all in the context: structural and psychosocial challenges to HIV prevention with transgender women. In J. Gahagan (Ed.), *Women and HIV prevention in Canada: Implications for research, policy, and practice* (pp. 157-174). Toronto, ON: Women's Press.
- Bauer, G., Nussbaum, N., Travers, R., Munro, L., Pyne, J., & Redman, N. (2011). We've got work to do: workplace discrimination and employment challenges for trans people in Ontario. *Trans PULSE e-Bulletin*, 2. Retrieved from http://transpulseproject.ca/wp-content/uploads/2011/05/E3English.pdf

- Bauer, G. R., Hammond, R., Travers, R., Kaay, M., Hohenadel, K. M., & Boyce, M. (2009). "I don't think this is theoretical; this is our lives": how erasure impacts health care for transgender people. *Journal of the Association of Nurses in AIDS Care*, 20(5), 348-361. doi:10.1016/j.jana.2009.07.004
- Bauer, G. R., & Scheim, A. I. (2015). Statistics from Trans PULSE to inform human rights policy. Retrieved from http://transpulseproject.ca/research/statistics-from-trans-pulse-to-inform-human-rights-policy/
- Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: a respondent driven sampling study in Ontario, Canada. *BMC Public Health*, *15*, 525. doi:10.1186/s12889-015-1867-2
- Bauer, G. R., Travers, R., Scanlon, K., & Coleman, T. A. (2012). High heterogeneity of HIV-related sexual risk among transgender people in Ontario, Canada: a province-wide respondent-driven sampling survey. *BMC Public Health*, *12*, 292. doi:http://dx.doi.org/10.1186/1471-2458-12-292
- Berben, L., Dobbels, F., Engberg, S., Hill, M. N., & De Geest, S. (2012). An ecological perspective on medication adherence. *Western Journal of Nursing Research*, *34*(5), 635-653. doi:10.1177/0193945911434518
- Bockting, W. O., Robinson, B. E., & Rosser, B. R. S. (1998). Transgender HIV prevention: a qualitative needs assessment. *AIDS Care*, 10(4), 505-525.
- Bowleg, L. (2008). When Black + Lesbian + Woman ≠ Black Lesbian Woman: the methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles*, 59(5-6), 312-325. doi:http://dx.doi.org/10.1007/s11199-008-9400-z

- Bowleg, L. (2012). The problem with the phrase women and minorities: intersectionality—an important theoretical framework for public health. *American Journal of Public Health*, 102(7), 1267-1273. doi:10.2105/AJPH.2012.300750
- Bradford, J., Reisner, S. L., Honnold, J. A., & Xavier, J. (2013). Experiences of transgender-related discrimination and implications for health: results from the Virginia Transgender Health Initiative Study. *American Journal of Public Health*, 103(10), 1820-1829. doi:10.2105/AJPH.2012.300796
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, Mass: Harvard University Press.
- Bronfenbrenner, U. (1994). Ecological models of human development. *International Encyclopedia of Education* (2nd ed., Vol. 3, pp. 1643-1647). Oxford, England: Elsevier Sciences, Ltd.
- Bronfenbrenner, U. (2005). The bioecological theory of human development. In U.

 Brofenbrenner (Ed), *Making human beings human: Bioecological perspectives on human development* (pp. 3-15). Thousand Oaks, CA: SAGE Publications.
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6, 97-113.
- Canadian Association of Social Workers. (2005). CASW Code of Ethics. Ottawa.
- Carr, E. (2003). Rethinking empowerment theory using a feminist lens: the importance of process. *Affilia*, 18(1), 8-20. doi:10.1177/0886109902239092
- Carter, A., Min, J. E., Chau, W., Lima, V. D., Kestler, M., Pick, N., . . . Kaida, A. (2014). Gender inequities in quality of care among HIV-positive individuals initiating antiretroviral

- treatment in British Columbia, Canada (2000-2010): e92334. *PLoS ONE*, *9*(3). doi:http://dx.doi.org/10.1371/journal.pone.0092334
- Casey House. (2018). About Casey House. Retrieved from https://www.caseyhouse.com/about-casey-house/
- Castro, E. M., Santiago, L. E., Jiménez, J. C., Dávila-Vargas, D., & Rosal, M. C. (2015). A social-ecological view of barriers and facilitators for HIV treatment adherence: interviews with Puerto Rican HIV patients. *PLoS ONE*, *10*(9).
- Christopoulos, K. A., Massey, A. D., Lopez, A. M., Geng, E. H., Johnson, M. O., Pilcher, C. D., Dawson-Rose, C. (2013). "Taking a half day at a time:" patient perspectives and the HIV engagement in care continuum. *AIDS Patient Care and STDs*, 27(4), 223-230. doi:http://dx.doi.org/10.1089/apc.2012.0418
- Clements-Nolle, K., Marx, R., Guzman, R., & Katz, M. (2001). HIV prevalence, risk behaviors, health care use, and mental health status of transgender persons: implications for public health intervention. *American Journal of Public Health*, 91(6), 915-921.
- Clements-Nolle, K., Marx, R., & Katz, M. (2006). Attempted suicide among transgender persons: The influence of gender-based discrimination and victimization. *Journal of Homosexuality*, 51(3), 53-69. doi:10.1300/J082v51n03_04
- Cohen, M. S., Chen, Y. Q., McCauley, M., Gamble, T., Hosseinipour, M. C., Kumarasamy, N., .

 . . Fleming, T. R. (2016). Antiretroviral therapy for the prevention of HIV-1 transmission.

 The New England Journal of Medicine, 375(9), 830-839.
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex:aA Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum*, 1989(1), 139-167.

- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methdos approaches (3rd Edition). New Delhi: SAGE Publications.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods* research: 2nd edition. Thousand Oaks, CA: SAGE Publications.
- Cruz, T. M. (2014). Assessing access to care for transgender and gender nonconforming people: a consideration of diversity in combating discrimination. *Social Science & Medicine*, *110*, 65-73. doi:10.1016/j.socscimed.2014.03.032
- Deeks, S. G., Lewin, S. R., & Havlir, D. V. (2013). The end of AIDS: HIV infection as a chronic disease. *Lancet*, 382(9903), 1525-1533. doi:10.1016/s0140-6736(13)61809-7
- Devers, K. J. (1999). How will we know "good" qualitative research when we see it? Beginning the dialogue in health services research. *Health Services Research*, *34*(5 Pt 2), 1153-1188.
- Dhamoon, R. K., & Hankivsky, O. (2011). Why the theory and practice of intersectionality matter to health research and policy. In O. Hankivsky (Ed.), *Health inequities in Canada: Intersectional frameworks and practices* (pp. 16-50). Vancouver, BC: UBC Press.
- Dilmitis, S., Edwards, O., Hull, B., Margolese, S., Mason, N., Namiba, A., . . . Zakowics, A. (2012). Language, identity and HIV: why do we keep talking about the responsible and responsive use of language? Language matters. *Journal of the International AIDS Society*, 15(Suppl 2), 17990. doi:10.7448/IAS.15.4.17990
- Dowshen, N., Matone, M., Luan, X., Lee, S., Belzer, M., Fernandez, M. I., . . . Adolescent Medicine Trials Network for HIV/AIDS Interventions. (2016). Behavioral and health outcomes for HIV+ young transgender women (YTW) linked to and engaged in medical care. *LGBT Health*, *3*(2), 162-167. doi:10.1089/lgbt.2014.0062

- Factor, R., & Rothblum, E. D. (2008). A study of transgender adults and their non-transgender siblings on demographic characteristics, social support, and experiences of violence.

 **Journal of LGBT Health Research*, 3(3), 11-30. doi:10.1080/15574090802092879*
- Factor-Inwentash Faculty of Social Work. (2017). *PhD Program Manual*, 2017-2018 Edition.

 Retrieved from Toronto: http://socialwork.utoronto.ca/wp-content/uploads/2017/09/

 PhDManual_FINAL_September2017-UPDATED.pdf
- Fennie, K. P., Trepka, M. J., Maddox, L. M., Lutfi, K., & Lieb, S. (2016). Comparison of individual and area level factors between HIV-infected cisgender and transgender individuals in Florida (2006-2014). AIDS and Behavior, 20(10), 2186-2191. doi:10.1007/s10461-016-1308-y
- Fetters, M. D., & Freshwater, D. (2015). The 1 + 1 = 3 integration challenge. *Journal of Mixed Methods Research*, 9(2), 115-117. doi:10.1177/1558689815581222
- Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.
- Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, *13*, 117. doi:http://dx.doi.org/10.1186/1471-2288-13-117
- Gehi, P. S., & Arkles, G. (2007). Unraveling injustice: race and class impact of medicaid exclusions of transition-related health care for transgender people. *Sexuality Research & Social Policy*, 4(4), 7-35. doi:http://dx.doi.org/10.1525/srsp.2007.4.4.7
- Gitterman, A., & Germain, C. B. (2008a). The ecological perspective. *The life model of social work practice, Third edition* (pp. 51-70). New York: Columbia University Press.

- Gitterman, A., & Germain, C. B. (2008b). Helping individuals, families, and groups with stressful life transitions and traumatic events. *The life model of social work practice*, *Third edition* (pp. 191-239). New York: Columbia University Press.
- Gordon, A. R., & Meyer, I. H. (2007). Gender nonconformity as a target of prejudice, discrimination, and violence against LGB individuals. *Journal of LGBT Health Research*, 3(3), 55-71.
- Government of Canada. (1984). *Canada Health Act*. Retrieved from http://lawslois.justice.gc.ca/eng/acts/c-6/.
- Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and qualitative results in health science mixed methods research through joint displays.

 Annals of Family Medicine, 13(6), 554-561. doi:10.1370/afm.1865
- Hancock, A.-M. (2007). When multiplication doesn't equal quick addition: examining intersectionality as a research paradigm. *Perspectives on Politics*, 5(1), 63-79.
- Hankivsky, O., & Grace, D. (2015). Understanding and emphasizing difference and intersectionality in multimethod and mixed methods research *The Oxford handbook of multimethod and mixed methods research inquiry*.
- Herbst, J. H., Jacobs, E. D., Finlayson, T. J., McKleroy, V. S., Neumann, M. S., & Crepaz, N. (2008). Estimating HIV prevalence and risk behaviors of transgender persons in the United States: a systematic review. AIDS and Behavior, 12(1), 1-17. doi:10.1007/s10461-007-9299-3
- Hill Collins, P. (2000). Black feminist thought: knowledge, consciousness, and the politics of empowerment. New York: Routledge.

- Hines, D. D., Draucker, C. B., & Habermann, B. (2017). HIV testing and entry to care among trans women in Indiana. *Journal of the Association of Nurses in AIDS Care*, 28(5), 723-736. doi:10.1016/j.jana.2017.05.003
- Hirsch, M., & Smith, V. (2002). Feminism and cultural memory: An introduction. *Signs*, 28(1), 1.
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: assessing partnership approaches to improve public health. *Annual Review of Public Health*, 19, 173-202. doi:10.1146/annurev.publhealth.19.1.173
- Kenagy, G. P. (2005). Transgender health: findings from two needs assessment studies in Philadelphia. *Health & Social Work*, 30(1), 19-26.
- Khan, L. (2011). Transgender health at the crossroads: legal norms, insurance markets, and the threat of healthcare reform. *Yale Journal of Health Policy, Law and Ethics*, 11(2), 375-418.
- Lacombe-Duncan, A. (2016). An intersectional perspective on access to HIV-related healthcare for transgender women. *Transgender Health*, *I*(1), 137-141.
- Lazarus, R., Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27(1), 363-385. doi:10.1146/annurev.soc.27.1.363
- Logie, C. H., James, L., Tharao, W., & Loutfy, M. R. (2011). HIV, gender, race, sexual orientation, and sex work: a qualitative study of intersectional stigma experienced by HIV-positive women in Ontario, Canada. *PLoS Med*, 8(11), e1001124. doi:10.1371/journal.pmed.1001124

- Logie, C. H., James, L., Tharao, W., & Loutfy, M. R. (2012). "We don't exist": a qualitative study of marginalization experienced by HIV-positive lesbian, bisexual, queer and transgender women in Toronto, Canada. *Journal of the International AIDS Society*, *15*(2), 17392. doi:10.7448/IAS.15.2.17392
- Lombardi, E. (2001). Enhancing transgender health care. *American Journal of Public Health*, 91(6), 869-872.
- Lombardi, E. L., Wilchins, R. A., Priesing, D., & Malouf, D. (2001). Gender violence: transgender experiences with violence and discrimination. *Journal of Homosexuality*, 42(1), 89-101.
- Loutfy, M., de Pokomandy, A., Kennedy, V. L., Carter, A., O'Brien, N., Proulx-Boucher, K., . . . Kaida, A. (2017). Cohort profile: The Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS). *PLoS One*, *12*(9), e0184708.
- Loutfy, M., Greene, S., Kennedy, V. L., Lewis, J., Thomas-Pavanel, J., Conway, T., . . . Kaida, A. (2016). Establishing the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS): operationalizing community-based research in a large National quantitative study. *BMC Medical Research Methodology*, *16*(1), 101. doi:10.1186/s12874-016-0190-7
- Martin, J. I. (2011). HIV/AIDS among gay men: The current and future role of social workers.

 **Journal of Gay & Lesbian Social Services, 23(3), 317-321. doi:10.1080/10538720.2011

 .588929
- Mattsson, T. (2013). Intersectionality as a useful tool: anti-oppressive social work and critical reflection. *Affilia*. doi:10.1177/0886109913510659
- McCall, L. (2005). The complexity of intersectionality. Signs, 30(3), 1771-1800.

- Mehrotra, G. (2010). Toward a continuum of intersectionality theorizing for feminist social work scholarship. *Affilia*, 25(4), 417-430. doi:10.1177/0886109910384190
- Melendez, R. M., Exner, T. A., Ehrhardt, A. A., Dodge, B., Remien, R. H., Rotheram-Borus, M.-J., . . . Hong, D. (2006). Health and health care among male-to-female transgender persons who are HIV positive. *American Journal of Public Health*, 96(6), 1034-1037. doi:10.2105/AJPH.2004.042010
- Melendez, R. M., & Pinto, R. M. (2009). HIV prevention and primary care for transgender women in a community-based clinic. *Journal of the Association of Nurses in AIDS Care*, 20(5), 387-397. doi:10.1016/j.jana.2009.06.002
- Mikkonen, J., & Raphael, D. (2010). Social determinants of health: The Canadian facts.

 Retrieved from http://thecanadianfacts.org/The_Canadian_Facts.pdf
- Mizock, L., & Mueser, K. T. (2014). Employment, mental health, internalized stigma, and coping with transphobia among transgender individuals. *Psychology of Sexual Orientation and Gender Diversity*, 1(2), 146-158. doi:http://dx.doi.org/10.1037/sgd0000029
- Mizuno, Y., Beer, L., Huang, P., & Frazier, E. L. (2017). Factors associated with antiretroviral therapy adherence among transgender women receiving HIV medical care in the United States. *LGBT Health*, *4*(3), 181-187. doi:http://dx.doi.org/10.1089/lgbt.2017.0003
- Mizuno, Y., Frazier, E. L., Huang, P., & Skarbinski, J. (2015). Characteristics of transgender women living with HIV receiving medical care in the United States. *LGBT Health*, 2(3), 228-234. doi:http://dx.doi.org/10.1089/lgbt.2014.0099

- Mugavero, M. J., Amico, K.R., Horn, T., Thompson, M.A. (2013). The state of engagement in HIV care in the United States: from cascade to continuum to control. *Clinical Infectious Diseases*, 57(8), 1164-1171. doi:10.1093/cid/cit420
- Mugavero, M. J., Raper, J. L., Reif, S., Whetten, K., Leserman, J., Thielman, N. M., & Pence, B. W. (2009). Overload: Impact of incident stressful events on antiretroviral medication adherence and virologic failure in a longitudinal, multisite human immunodeficiency virus cohort study. *Psychosomatic Medicine*, 71(9), 920-926. doi:http://dx.doi.org/10.1097/PSY.0b013e3181bfe8d2
- Munro, L., Marshall, Z., Bauer, G., Hammond, R., Nault, C., & Travers, R. (2017).

 (Dis)integrated care: barriers to health care utilization for trans women living with HIV. *Journal of the Association of Nurses in AIDS Care*, 28(5), 708-722. doi:10.1016/j.jana.

 2017.06.001
- Namaste, V. (2015). Oversight: Critical reflections on feminist research and politics. Toronto,
 Ontario: Canadian Scholar's Press, Inc.
- Newman, P. A., & Fantus, S. (2015). A social ecology of bias-based bullying of sexual and gender minority youth: toward a conceptualization of conversion bullying. *Journal of Gay & Lesbian Social Services*, 27(1), 46-63. doi:http://dx.doi.org/10.1080/10538720. 2015.988315
- Newman, P. A., Roungprakhon, S., & Tepjan, S. (2013). A social ecology of rectal microbicide acceptability among young men who have sex with men and transgender women in Thailand. *Journal of the International AIDS Society*, 16, 18476. doi:http://dx.doi.org/10.7448/IAS.16.1.18476

- Nosyk, B., Montaner, J. S. G., Colley, G., Lima, V. D., Chan, K., Heath, K., . . . Hogg, R. S. (2014). The cascade of HIV care in British Columbia, Canada, 1996-2011: a population-based retrospective cohort study. *Lancet Infectious Diseases*, *14*(1), 40-49.
- Operario, D., Soma, T., & Underhill, K. (2008). Sex work and HIV status among transgender women: systematic review and meta-analysis. *Journal of Acquired Immune Deficiency Syndromes*, 48(1), 97-103. doi:10.1097/QAI.0b013e31816e3971
- Patterson, S. E., Milloy, M. J., Ogilvie, G., Greene, S., Nicholson, V., Vonn, M., . . . Kaida, A. (2015). The impact of criminalization of HIV non-disclosure on the healthcare engagement of women living with HIV in Canada: a comprehensive review of the evidence. *Journal of the International AIDS Society*, 18(1), 20572. doi:10.7448/ias.18.1. 20572
- Pitasi, M. A., Oraka, E., Clark, H., Town, M., & DiNenno, E. A. (2017). HIV testing among transgender women and men 27 States and Guam, 2014-2015. MMWR Morbidity and Mortality Weekly Report, 66(33), 883-887. doi:10.15585/mmwr.mm6633a3
- Poundstone, K. E., Strathdee, S. A., & Celentano, D. D. (2004). The social epidemiology of human immunodeficiency virus/acquired immunodeficiency syndrome. *Epidemiologic Reviews*, 26, 22-35. doi:10.1093/epirev/mxh005
- Public Health Agency of Canada. (2014). HIV and AIDS in Canada: Surveillance report to December 31st, 2013. Retrieved from http://www.phac-aspc.gc.ca/aids-sida/publication/survreport/2013/dec/assets/pdf/hiv-aids-surveillence-eng.pdf
- Public Health Agency of Canada. (2015). HIV and AIDS in Canada: Surveillance Report to December 31, 2014. Retrieved from https://www.canada.ca/en/public-health/services/publications/diseases-conditions/hiv-aids-canada-surveillance-report-

- december-31-2014.html?_ga=2.158215802.1108066476.1516034868-1421040438.1505393165
- Radix, A., Sevelius, J., & Deutsch, M. B. (2016). Transgender women, hormonal therapy and HIV treatment: a comprehensive review of the literature and recommendations for best practices. *Journal of the International AIDS Society*, 19(3 Suppl 2), 20810. doi:http://dx.doi.org/10.7448/IAS.19.3.20810
- Regent Park Community Health Centre. (2018). Welcome to the Regent Park Community Health Centre. Retrieved from http://www.regentparkchc.org/about-us
- Reisner, S. L., Gamarel, K. E., Nemoto, T., & Operario, D. (2014). Dyadic effects of gender minority stressors in substance use behaviors among transgender women and their non-transgender male partners. *Psychology of Sexual Orientation and Gender Diversity*, *1*(1), 63-71. doi:10.1037/0000013
- Reisner, S. L., Radix, A., & Deutsch, M. B. (2016). Integrated and gender-affirming transgender clinical care and research. *Journal of Acquired Immune Deficiency Syndromes*, 72(Suppl 3), S235-242. doi:10.1097/qai.00000000000001088
- Remien, R. H., Bauman, L. J., Mantell, J. E., Tsoi, B., Lopez-Rios, J., Chhabra, R., . . . Warne, P. (2015). Barriers and facilitators to engagement of vulnerable populations in HIV primary care in New York City. *Journal of Acquired Immune Deficiency Syndromes*, 69 Suppl 1, S16-24. doi:10.1097/QAI.000000000000000077
- Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. B.

 R. G. Burgess (Eds.), *Analyzing Qualitative Data* (pp. 173-194). London, UK: Routledge.

- Robbins, S. P., Chatterjee, P., Canda, E.R. (2011). Systems theory (Chapter 2). *Contemporary human behavior theory: A critical perspective for social work (3rd ed.)* (pp. 25-58).

 Boston, MA: Allyn & Bacon.
- Rodger, A. J., Cambiano, V., Bruun, T., Vernazza, P., Collins, S., van Lunzen, J., . . . Lundgren, J. (2016). Sexual activity without condoms and risk of HIV transmission in serodifferent couples when the HIV-positive partner is using suppressive antiretroviral therapy. *JAMA*, 316(2), 171-181. doi:10.1001/jama.2016.5148
- Rood, B. A., Reisner, S. L., Surace, F. I., Puckett, J. A., Maroney, M. R., & Pantalone, D. W. (2016). Expecting rejection: understanding the minority stress experiences of transgender and gender-nonconforming individuals. *Transgender Health*, *1*(1), 151-164. doi:10.1089/trgh.2016.0012
- Santos, G. M., Wilson, E. C., Rapues, J., Macias, O., Packer, T., & Raymond, H. F. (2014). HIV treatment cascade among transgender women in a San Francisco respondent driven sampling study. *Sexually Transmitted Infections*, 90(5), 430-433. doi:10.1136/sextrans-2013-051342
- Scanlon, K., Travers, R., Coleman, T., Bauer, G., & Boyce, M. (2010). Ontario's trans communities and suicide: transphobia is bad for our health. *Trans PULSE e-Bulletin*, 1.
- Scheim, A. I., & Bauer, G. R. (2015). Sex and gender diversity among transgender persons in Ontario, Canada: results from a respondent-driven sampling survey. *Journal of Sex Research*, 52(1), 1-14. doi:10.1080/00224499.2014.893553
- Schilder, A. J., Kennedy, C., Goldstone, I. L., Ogden, R., Hogg, R. S., & O'Shaughnessy, M. V. (2001). "Being dealt with as a whole person." Care seeking and adherence: the benefits of

- culturally competent care. *Social Science and Medicine*, *52*(11), 1643-1659. doi:10.1016/S0277-9536(00)00274-4
- Schilder, A. J., Laframboise, S., Hogg, R. S., Trussler, T., Goldstone, I., Schechter, M. T., & O'Shaughnessy, M. V. (1998). "They don't see our feelings." The health care experiences of HIV-positive transgendered persons. *Journal of the Gay and Lesbian Medical Association*, 02(3), 103-111. doi:10.1023/B:JOLA.0000004052.12136.1b
- Serano, J. (2007). Whipping girl: A transsexual woman on sexism and the scapegoating of femininity. Berkeley, CA: Seal Press.
- Sevelius, J. M. (2013). Gender affirmation: a framework for conceptualizing risk behavior among transgender women of color. *Sex Roles*, 68(11-12), 675-689. doi:10.1007/s11199-012-0216-5
- Sevelius, J. M., Carrico, A., & Johnson, M. O. (2010). Antiretroviral therapy adherence among transgender women living with HIV. *Journal of the Association of Nurses in AIDS Care*, 21(3), 256-264. doi:10.1016/j.jana.2010.01.005
- Sevelius, J. M., Patouhas, E., Keatley, J. G., & Johnson, M. O. (2014a). Barriers and facilitators to engagement and retention in care among transgender women living with human immunodeficiency virus. *Annals of Behavioral Medicine*, 47(1), 5-16. doi:10.1007/s12160-013-9565-8
- Sevelius, J. M., Saberi, P., & Johnson, M. O. (2014b). Correlates of antiretroviral adherence and viral load among transgender women living with HIV. *AIDS Care*, 26(8), 976-982. doi:10.1080/09540121.2014.896451

- Singh, A. A. (2013). Transgender youth of color and resilience: Negotiating oppression and finding support. *Sex Roles*, 68(11-12), 690-702. doi:http://dx.doi.org/10.1007/s11199-012-0149-z
- Singh, A. A., & McKleroy, V. S. (2011). "Just getting out of bed is a revolutionary act": The resilience of transgender people of color who have survived traumatic life events.

 *Traumatology, 17(2), 34-44. doi:10.1177/1534765610369261
- Sperber, J., Landers, S., & Lawrence, S. (2005). Access to health care for transgendered persons: results of a needs assessment in Boston. *International Journal of Transgenderism*, 8(2-3), 75-91. doi:10.1300/J485v08n02_08
- Statistics Canada. (2015). Aboriginal peoples in Canada: First Nations people, Metis, and Inuit.

 Retrieved from https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-011-x/99-011-x2011001-eng.cfm
- Tanner, A. E., Reboussin, B. A., Mann, L., Ma, A., Song, E., Alonzo, J., & Rhodes, S. D. (2014).
 Factors influencing health care access perceptions and care-seeking behaviors of immigrant Latino sexual minority men and transgender individuals: baseline findings from the HOLA intervention study. *Journal of Health Care for the Poor and Underserved*, 25(4), 1679-1697. doi:10.1353/hpu.2014.0156
- Thornhill, L., & Klein, P. (2010). Creating environments of care with transgender communities.

 JANAC: Journal of the Association of Nurses in AIDS Care, 21(3), 230-239.

 doi:http://dx.doi.org/10.1016/j.jana.2009.11.007
- Travers, R., Pyne, J., Bauer, G., Munro, L., Giambrone, B., Hammond, R., & Scanlon, K. (2013). 'Community control' in CBPR: Challenges experienced and questions raised from the Trans PULSE project. *Action Research*, 11(4), 403-422. doi:10.1177/1476750313507093

- Trickey, A., May, M. T., Vehreschild, J.-J., Obel, N., Gill, M. J., Crane, H. M., . . . Sterne, J. A. C. (2017). Survival of HIV-positive patients starting antiretroviral therapy between 1996 and 2013: a collaborative analysis of cohort studies. *The Lancet HIV*, 4(8), e349-e356. doi:10.1016/S2352-3018(17)30066-8
- Ulett, K. B., Willig, J. H., Lin, H. Y., Routman, J. S., Abroms, S., Allison, J., . . . Mugavero, M. J. (2009). The therapeutic implications of timely linkage and early retention in HIV care.

 **AIDS Patient Care and STDS, 23(1), 41-49. doi:10.1089/apc.2008.0132
- Ungar, M. (2011). The social ecology of resilience: addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry*, 81(1), 1-17. doi:10.1111/j.1939-0025.2010.01067.x
- Ungar, M., Liebenberg, L., Boothroyd, R., Kwong, W. M., Lee, T. Y., Leblanc, J., . . .
 Makhnach, A. (2008). The study of youth resilience across cultures: lessons from a pilot study of measurement development. *Research in Human Development*, 5(3), 166-180.
 doi:10.1080/15427600802274019
- Watkins-Hayes, C. (2014). Intersectionality and the sociology of HIV/AIDS: past, present, and future research directions. *Annual Review of Sociology*, 40, 431-457.
- White Hughto, J. M., Reisner, S. L., & Pachankis, J. E. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science and Medicine*, 147, 222-231. doi:10.1016/j.socscimed.2015.11.010
- Wiewel, E. W., Torian, L. V., Merchant, P., Braunstein, S. L., & Shepard, C. W. (2016). HIV diagnoses and care among transgender persons and comparison with men who have sex with men: New York City, 2006-2011. *American Journal of Public Health*, 106(3), 497-502. doi:10.2105/ajph.2015.302974

- Williams, C. C., Curling, D., Steele, L. S., Gibson, M. F., Daley, A., Green, D. C., & Ross, L. E. (2017). Depression and discrimination in the lives of women, transgender and gender liminal people in Ontario, Canada. *Health & Social Care in the Community*, 25(3), 1139-1150. doi:http://dx.doi.org/10.1111/hsc.12414
- Wilson, E. C., Arayasirikul, S., & Johnson, K. (2013). Access to HIV care and support services for African American transwomen living with HIV. *International Journal of Transgenderism*, 14(4), 182-195. doi:10.1080/15532739.2014.890090
- Wilson, E. C., Chen, Y. H., Arayasirikul, S., Wenzel, C., & Raymond, H. F. (2014). Connecting the dots: examining transgender women's utilization of transition-related medical care and associations with mental health, substance use, and HIV. *Journal of Urban Health*, 92(1), 182-192. doi:10.1007/s11524-014-9921-4
- Wilson, E. C., Garofalo, R., Harris, R. D., Herrick, A., Martinez, M., Martinez, J., & Belzer, M. (2009). Transgender female youth and sex work: HIV risk and a comparison of life factors related to engagement in sex work. AIDS and Behavior, 13(5), 902-913. doi:10.1007/s10461-008-9508-8
- World Health Organization. (2015). *Guideline on when to start antiretroviral therapy and on pre-exposure prophylaxis for HIV*. Retrieved from http://apps.who.int/iris/bitstream/ 10665/186275/1/9789241509565_eng.pdf?ua=1
- World Professional Association for Transgender Health [WPATH]. (2012). Standards of care for the health of transsexual, transgender, and gender nonconforming people, 7th Edition.

 Retrieved from https://www.wpath.org/publications/soc

- Wylie, K., Knudson, G., Khan, S. I., Bonierbale, M., Watanyusakul, S., & Baral, S. (2016).

 Serving transgender people: clinical care considerations and service delivery models in transgender health. *Lancet*, 388(10042), 401-411. doi:10.1016/s0140-6736(16)00682-6
- Xavier, J., Bradford, J., Hendricks, M., Safford, L., McKee, R., Martin, E., & Honnold, J. A.
 (2013). Transgender health care access in Virginia: a qualitative study. *International Journal of Transgenderism*, 14(1), 3-17. doi:10.1080/15532739.2013.689513
- Yehia, B. R., Fleishman, J. A., Moore, R. D., & Gebo, K. A. (2013). Retention in care and health outcomes of transgender persons living with HIV. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, *57*(5), 774-776. doi:10.1093/cid/cit363

Chapter 2 Characterizing the HIV Care Cascade Among Trans Women with HIV in Canada

2.1 Abstract

Background: Transgender (trans) women experience a disproportionate HIV prevalence relative to cisgender (cis) people, yet little is known about the engagement of trans women living with HIV (WLWH) in the HIV care cascade. The HIV care cascade is conceptualized as a series of steps including HIV diagnosis, HIV care linkage, antiretroviral treatment (ART) initiation, ART adherence, and virological suppression. This study sought to describe the HIV care cascade and factors associated with care cascade outcomes for trans WLWH in Canada.

Methods: Utilizing cross-sectional survey data collected 2013-2015 from the Canadian HIV Women's Sexual and Reproductive Health Cohort Study, this paper described the proportions of trans WLWH who: 1) ever accessed HIV care, 2) received any HIV care in the past year, 3) currently use ART, 4) are adherent to ART (≥ 95% taken in the past month), and 5) self-report an undetectable viral load (< 50 copies/mL). Bivariate analyses were used to identify statistically significant correlates of HIV care cascade outcomes.

Results: Of 50 participants, 92% (n=46/50, 95% Confidence Interval (CI): 84%-100%) had accessed HIV care, and of those, 91% (n=42/46, 95% CI: 83%-98%) had received any HIV care in the past year and 78% (n=36/46, 95% CI: 66%-90%) were currently using ART. Of those who were currently using ART, 67% (n=24/36, 95% CI: 50%-82%) reported ≥ 95% adherence, of which 96% (n=23/24, 95% CI: 85%-100%) had a self-reported undetectable viral load. Factors statistically significantly and positively associated with HIV care cascade outcomes included: violence and years living with HIV (ever accessed HIV care) and age, years living with HIV, hazardous alcohol use, and violence (currently using ART). Factors statistically significantly and negatively associated with HIV care cascade outcomes included: physical health-related quality

of life (HR-QoL), barriers to access to care (ever accessed HIV care); social support, trans stigma (received any HIV care in the past year); Ontario residence, physical HR-QoL, HIV-related stigma, unstable housing, racism, barriers to access to care, having a family physician, trans stigma (currently using ART), and depression and PTSD (ART adherence).

Conclusions: Findings suggest gaps in HIV care access, particularly for ART outcomes. Further research is needed to understand the mechanisms by which socioecological, including transspecific (e.g., trans stigma), factors impede women's HIV care access.

2.2 Manuscript

2.2.1 Introduction

In 2014 UNAIDS identified the 90-90-90 targets –aiming by 2020 that 90% of all people living with HIV (PLWH) are diagnosed, 90% of those diagnosed are receiving sustained antiretroviral therapy (ART), and 90% of those receiving ART are virologically suppressed (UNAIDS, 2014). These outcomes are situated within the HIV care cascade, a series of steps from diagnosis, through linkage to care, engagement and retention in care, initiation of ART, adherence to ART, and ultimately, virological suppression (Mugavero, 2013; Nosyk et al., 2014). There has been much research and clinical focus on early treatment with ART, as its benefits include reducing HIV-related illness morbidity and AIDS-related mortality, in addition to preventing new HIV infections (Cohen et al., 2016; Rodger et al., 2016). Other research suggests that improvements in just one step of the treatment cascade – such as ART adherence – may have little effect on viral suppression, emphasizing that linkage to and retention in care are essential for achieving viral suppression (Gardner, McLees, Steiner, del Rio, & Burman, 2011) and for the success of the use of ART as a treatment as prevention (TasP) strategy (Hull, Wu, & Montaner, 2012). Thus, it is important to understand where attrition occurs along the HIV care cascade in order to improve health outcomes for PLWH.

Based on extensive research documenting social and structural drivers of HIV vulnerability among populations who experience marginalization (Gupta, Parkhurst, Ogden, Aggleton, & Mahal, 2008; Operario & Nemoto, 2010; Rhodes, Singer, Bourgois, Friedman, & Strathdee, 2005; Shannon et al., 2015), international non-governmental organizations (e.g., UNAIDS) recognize the importance of creating population-specific prevention programming and reducing healthcare access barriers for populations who experience a disproportionate prevalence of HIV. One such population recognized as experiencing increased vulnerability to HIV is

transgender (trans) women⁵ (UNAIDS, 2014). Globally, trans women – particularly trans women of colour – experience disproportionately high rates of HIV compared to cisgender⁶ adults (Baral et al., 2013; Herbst et al., 2008). Across studies from 15 countries, the odds of HIV seroprevalence for trans women were found to be almost 49 times the odds of being HIV positive for all adults of reproductive age (Baral et al., 2013). Archival research conducted in Canada estimated that 54% of deaths of trans women in Montreal in the 1980s and 1990s were HIV-related (Namaste, 2015). A study of trans people living in Ontario estimated a self-reported HIV prevalence of 2.9%, lower than global estimates, yet substantially higher than the provincial prevalence of 0.006% (Bauer, Travers, Scanlon, & Coleman, 2012; CATIE, 2011; Public Health Agency of Canada, 2015).

Given the increased HIV vulnerability of this population, most of the research pertaining to trans WLWH discusses HIV prevention, while there has been little focus on their healthcare needs and experiences post-diagnosis. However, a growing body of US-based quantitative work suggests that compared to cis PLWH, trans WLWH experience lower care access including lower past-year and lifetime prevalence of HIV testing (Pitasi, Oraka, Clark, Town, & DiNenno, 2017), lower retention in care (Yehia, Fleishman, Moore, & Gebo, 2013), lower ART use (Melendez et al., 2006), lower adherence (Baguso, Gay, & Lee, 2016; Dowshen et al., 2016; Mizuno, Frazier, Huang, & Skarbinski, 2015; Sevelius, Carrico, & Johnson, 2010), and lower rates of viral suppression (Mizuno et al., 2015; Wiewel, Torian, Merchant, Braunstein, &

⁵ *Trans* is an umbrella term referring to people with a shared experience of incompatibility between gender and sex labeled at birth (Sevelius, 2013). Trans women are people labeled male at birth who identify as girls/women, or people on the male-to-female or transfeminine spectrum, including those who have or have not chosen to socially or medically transition (Wylie et al., 2016), addressing diversity of trans Ontarians (Scheim & Bauer, 2015).

[•] Cisgender (cis) refers to people who experience alignment between their gender identity and their physical sex characteristics (Serano, 2007).

Shepard, 2016). There are no comparable published studies of trans WLWH's engagement in the HIV care cascade in a Canadian context.

Access to each point along the HIV care cascade is facilitated or impeded by factors that are contextually specific to the socioecological context of a population (Mugavero, 2013). Few quantitative studies, all conducted in the US, have examined correlates of different points along the HIV care cascade for trans WLWH (Baguso et al., 2016; Mizuno, Beer, Huang, & Frazier, 2017; Santos et al., 2014; Sevelius et al., 2010; Sevelius, Saberi, & Johnson, 2014b). These studies have predominantly focused on adherence (Baguso et al., 2016; Mizuno et al., 2017; Sevelius et al., 2010; Sevelius et al., 2014b) and viral suppression (Dowshen et al., 2016; Santos et al., 2014; Sevelius et al., 2014b); no identified studies focused on correlates of linkage to care, retention in care, or ART initiation for trans women in the US or Canada.

Few studies have examined correlates situated at multiple socioecological levels of HIV care cascade outcomes that uniquely affect trans women. Trans women's experiences have been erased through their inclusion within studies of WLWH or LGBT people more broadly. Previous literature has also conflated gender identity and sexual orientation by integrating trans women within samples of men who have sex with men. Notably, Sevelius et al. (2014b) quantitatively explored the association between experiences of transphobia, stress appraisal of transphobic experiences, importance of gender affirmation, and hormone adherence in relation to both ART adherence and viral suppression. The authors found that lower stress appraisal of transphobic experiences, higher importance of gender affirmation, and adherence to hormone therapy were associated with higher odds of ART adherence and lower stress appraisal of transphobic experiences was associated with higher odds of virological suppression (Sevelius et al., 2014). However, many factors, such as gender expression, access to gender affirming care, and provider

knowledge of trans health issues were not explored. Given the salience of trans-specific organizational and structural factors on influencing access to HIV-related care, quantitative studies are urgently needed that focus on trans women's unique experiences and incorporate trans-specific factors operating at multiple levels.

Perhaps most importantly, there have been no published quantitative studies that describe the HIV care cascade or barriers and facilitators to access to HIV care for trans WLWH in Canada. The US and Canada have notable differences in healthcare system structure and funding, as well as human rights for trans persons. Thus, studies are urgently needed in a Canadian context to understand and address barriers to access to HIV care for trans women.

Gaps in the Literature and Research Questions

There are a dearth of studies that document HIV care engagement among trans WLWH in Canada, and few quantitative studies that comprehensively describe socioecological factors, including those uniquely affecting trans persons, associated with linkage to and engagement in HIV care, as well as ART initiation, adherence, and virological suppression. Consequently, this exploratory quantitative study aims to answer the following research questions:

- What is the proportion of trans WLWH participating in a Canadian cohort study of WLWH who 1) have ever accessed care, 2) received any HIV care in the past year, 3) were currently using antiretroviral therapy (ART), 4) reported ≥ 95% of ART in the past month (adherence), and 5) had a self-reported an undetectable viral load of < 50 copies/mL?</p>
- 2. What sociodemographic (e.g., age), clinical (e.g., current CD4 count), intrapersonal (e.g., depression), interpersonal (e.g., social support), structural (e.g., HIV-related stigma), and trans-specific (access to gender-affirming care, trans stigma) factors are

associated with each step of access along the HIV care cascade for this sample of trans WLWH?

Understanding where attrition occurs along the HIV care cascade and exploring socioecological correlates of access may inform the design of targeted interventions to optimize access to HIV care for trans women, with the ultimate aim of achieving health equity and improving health outcomes for this population.

2.2.2 Methods

Study Design

This study utilized cross-sectional survey data collected between August 2013 and March 2015 from the first wave of the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS), a multi-province (Ontario, Quebec, British Columbia), community-based participatory cohort study focused on health resource utilization and health outcomes among women living with HIV across Canada (Loutfy et al., 2017). Trained peer research associates (PRAs) recruited WLWH aged 16 years or older through word-of-mouth by way of multiple mechanisms (e.g., PRA networks, online). Venue-based sampling was also utilized whereby women were recruited from AIDS service organizations, HIV clinics, and community-based organizations (Loutfy et al., 2017).

All participants (n=1422) completed a structured questionnaire at baseline, administered by PRAs utilizing an online survey platform (FluidSurveysTM). Interviews were predominantly conducted in person in a confidential setting, or via phone or Skype for some rural residents. Participants received a \$50 honorarium for their participation.

Ethics approval for CHIWOS was obtained from the respective Research Ethics Boards of Women's College Hospital (Ontario), Simon Fraser University and the University of British

Columbia/Providence Health (British Columbia), and McGill University Health Centre (Quebec). Ethics approval for the sub-analysis, conducted in partial fulfillment of the requirements for the degree of Doctor of Philosophy of the first author (ALD), was also received from the University of Toronto.

Study Sub-sample

Trans WLWH within CHIWOS were identified by a two-step process. First, in response to the question "What was your biological sex at birth?" participants who selected male or intersex were included and those who selected female, undetermined, don't know, prefer not to answer, or who did not provide a response were excluded. Second, in response to the question: "With respect to your gender, how do you currently identify?" Participants who selected woman and/or trans woman and had complete access to care data were included (n=50); 4 participants who did not respond regarding HIV care access were excluded.

Measures

Outcome measures

Five outcomes consistent with the HIV cascade of care model were assessed. Owing to survey design logic, the cascade was nested two ways. Those ever accessing HIV care and having received any HIV care in the past year represented one nested cascade, and ever accessing HIV care, current ART use, ART adherence, and viral load represent another, with ART adherence nested within current ART use and viral load nested within ART adherence (Figure 1).

1) Ever accessed HIV care was measured utilizing the question "After receiving your HIV diagnosis, when did you first access HIV medical care?", with those who responded "I have never accessed HIV medical care" classified as never and those who indicated a date as ever-

- accessed. For all variables, those who responded "don't know" or "prefer not to answer" were classified as missing.
- 2) Received any HIV care in the past year was measured among the 46 participants who had ever accessed care utilizing the question, "Have you received any HIV medical care in the past year?", and respondents classified as non-engaged (those who answered no) and engaged (those who answered yes).
- 3) <u>Current ART use</u> was measured among the 46 participants who reported ever accessing HIV care by asking "Have you ever taken anti-retroviral medication (ARVs) for your own health", and participants were classified as never took ART, not currently but previously took ART, and currently taking ART and dichotomized as never versus currently for further analyses, as all participants who initiated ART were currently taking ART.
- 4) <u>ART adherence</u> was measured among the 36 participants who reported ever accessing HIV care and current ART use by asking participants to rate the percentage of medication they had taken in the last month (0 to 100%), dichotomized to suboptimal (< 95%) versus optimal adherence (≥ 95%), which is considered a standard cut-off for maximum ART benefits (Achappa et al., 2013; Hansana et al., 2013).
- 5) <u>Self-reported viral load</u> was measured among the 24 participants who reported ever accessing HIV care, current ART use, and optimal (≥ 95%) adherence by asking participants to indicate if their most recent viral load was undetectable (e.g., below 50 copies/mL) or detectable (e.g., over 50 copies/mL) (World Health Organization, 2016).

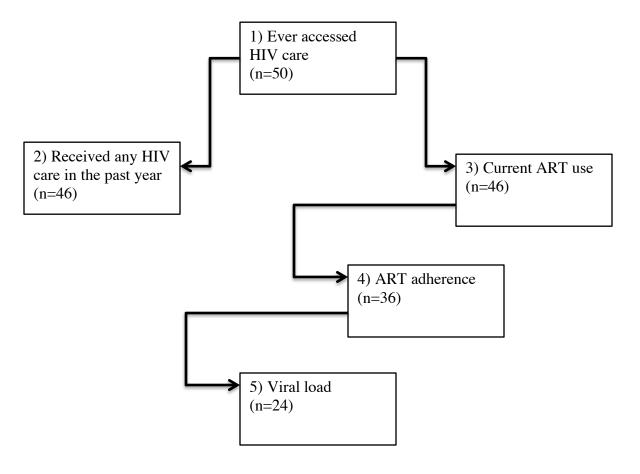


Figure 1. Flowchart of Nested HIV Care Cascade Outcomes and Sample Sizes

Sociodemographic factors

Socio-demographic factors were explored, including province, age (continuous), education (less than high school, high school or higher), sexual orientation (sexual minority, heterosexual), gender presentation (sometimes man/sometimes woman, woman), annual personal income (CAD; < \$20 000, ≥ \$20 000), legal relationship status (single/separated/divorced/widowed, married/common law/in a relationship), ethnicity, immigration status (Canadian citizen, landed immigrant/permanent resident/refugee/other), and main source of income (paid job, social assistance [social assistance, including pension and EI (employment insurance)/WCBI

(Worker's Compensation Board Insurance)] and sex work). Those participants who responded paid job in conjunction with any other option (social assistance, sex work) were coded as having paid employment. Social assistance and sex work were considered as separate categories only for those who chose the option as a sole response.

Clinical factors

Clinical factors included CD4 count, years living with HIV, and overall physical healthrelated quality of life.

<u>CD4 count</u> was measured by asking participants who had ever accessed HIV care to estimate their most recent CD4 count ($< 200 \text{ cells/mm}^3$, $> 200-500 \text{ cells/mm}^3$, $> 500 \text{ cells/mm}^3$). This variable was dichotomized ($\le 500 \text{ cells/mm}^3$, $> 500 \text{ cells/mm}^3$) due to small cell sizes in the present analyses.

Number of years living with HIV was measured continuously by calculating the time between date of diagnosis and date of baseline survey completion.

Physical health-related quality of life (HR-QoL) was measured using the SF-12 (Ware, Kosinski, & Keller, 1996) which has been previously validated with a Canadian population (Hopman et al., 2000) and people living with HIV (Chariyalertsak et al., 2011). The SF-12 physical HR-QoL component (6 items) was scored according to standardized methods (Hays, Sherbourne, & Mazel, 1993; Hopman et al., 2000). For physical HR-QoL, scores ranged from 15.75 to 68.43, Cronbach's alpha = 0.74. Higher scores suggested better physical health. Score ranges and Cronbach's alpha presented are for the current analysis.

Intrapersonal factors

Intrapersonal variables included scaled measures of mental health-related quality of life, hazardous alcohol use, depressive symptoms, post-traumatic stress disorder (PTSD) symptoms,

negative self-image HIV-related stigma, and resilience. History of injection drug use, recreational drug use, and cigarette smoking were each also measured with the categories (ever [currently/not currently but previously] vs. never).

Mental HR-QoL was measured using 6 items from the SF-12 mental health-related QoL; range: 5.84 to 66.32, Cronbach's alpha = 0.85. Higher scores suggested better mental health.

<u>Hazardous alcohol</u> use was measured using the AUDIT-C (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993), with 1 of 3 items adapted by the study team (See Appendix J1 for details). Scores ranged from 0 to 9, Cronbach's alpha = 0.67. Higher scores suggested more hazardous alcohol use.

<u>Depressive symptoms</u> were measured using the CES-D (10 items) (Zhang et al., 2012). Scores ranged from 0 to 30, Cronbach's alpha = 0.91. A higher score indicated greater frequency or number of depressive symptoms.

<u>PTSD symptoms were</u> measured using the 6-item PTSD Checklist – Civilian Form (PCL-C) as a continuous measure (Lang & Stein, 2005; Lang et al., 2012). The 17-item version has been used previously with trans populations (Shipherd, Maguen, Skidmore, & Abramovitz, 2011), including trans women living with HIV (Sevelius et al., 2014). Scores ranged from 6 to 29, with a higher score indicating more severe PTSD symptoms, Cronbach's alpha = 0.87.

Negative self-image HIV-related stigma, a form of internalized HIV-related stigma, was measured using the negative self-image subscale (3 items; e.g. Having HIV makes me feel unclean) of the HIV Stigma Scale (10 items) (Berger, Ferrans, & Lashley, 2001). Scores ranged from 0 to 12 (Cronbach's alpha = 0.88), with a higher score indicating higher negative self-image HIV-related stigma (Wright, Naar-King, Lam, Templin, & Frey, 2007).

<u>Resilience</u> was measured using the Resilience Scale (10 items) (Wagnild, 2009), score range: 29 to 70, Cronbach's alpha =0.91, with a higher score indicating higher resilience.

Interpersonal factors

Interpersonal factors measured included social support, personalized and disclosure HIV-related stigma, and violence in adulthood.

<u>Social support</u> was measured using a 4-item version of the Medical Outcome Study Social Support Survey (MOS-SSS) (Gjesfjeld, Greeno, & Kim, 2008); score range: 4 to 20, Cronbach's alpha = 0.87. Both the total score and score on each item, representative of different types of social support (emotional/information, tangible, affectionate, positive social interaction) were reported.

Personalized HIV-related stigma, which includes HIV-related stigma experienced in interpersonal relationships with others (e.g., I have stopped socializing with some people because of their reactions of my having HIV) was measured using a 3-item subscale from the HIV Stigma Scale. Scores ranged from 2 to 12 (Cronbach's alpha = 0.85) and a higher score indicated a higher level of personalized HIV-related stigma.

Disclosure HIV-related concerns (e.g., I am very careful who I tell that I have HIV) was measured using a 2-item subscale from the HIV Stigma Scale; scores ranged from 1 to 8 (Cronbach's alpha = 0.76), with higher scores indicating higher disclosure HIV-related concerns. History of adult abuse was measured dichotomously by asking: "As an adult, has someone ever: physically hurt you, insult, threaten or verbally degraded you, and/or sexually forced themselves on you or forced you to have sex", with those who responded "yes" to one or more types of violence coded as yes and those who responded "no" to all types of violence coded as no. *Structural factors*

Housing and food security, history of incarceration (ever [past year or yes, but not in the past year] vs. never), concern about public attitudes towards people living with HIV, racism, and access to a family physician (yes vs. no) were structural factors explored in this analysis.

Housing security was dichotomized as unstable (self-contained room, transition house, halfway house, safe house, couch surfing, outdoors on street, parks, or in a car) versus stable (apartment [own/rent] or a house [own/rent]).

Food security was measured using questions on food security from the Canadian Community Health Survey (CCHS) Food Security Survey Module (Government of Canada, 2012), which provides a measure of both food quantity and dietary diversity/quality, consistent with conceptualizations of food security among people living with HIV (Anema et al., 2014; Fielden et al., 2014). Participants were classified as having food security if they responded "never true" to the questions "In the past twelve months, you and other household members worried that food would run out before you got money to buy more", "In the past twelve months, the food that you and other household members bought just didn't last, and there wasn't any money to get more", and "In the past 12 months, you and other household members couldn't afford to eat balanced meals". A response of "often true" or "sometimes true" to any of the three questions was considered food insecurity.

Concern about public attitudes towards people living with HIV, a measure of community-level HIV-related stigma (e.g., most people think a person with HIV is disgusting) was measured using the public attitudes (2 items) subscale of the HIV Stigma Scale; scores ranged from 1 to 8 (Cronbach's alpha = 0.78), with higher scores indicating higher stigma (Berger et al., 2001). Everyday racism (Krieger, Smith, Naishadham, Hartman, & Barbeau, 2005; Williams, Yu, Jackson, & Anderson, 1997) was measured using an 8-item version of the Everyday Racism

Discrimination Scale (range 8 to 48; Cronbach's alpha = 0.96), shortened by the study team from 10 items (See Appendix J1 for details).

<u>Barriers to access to care</u> were measured using the Barriers to Care (BACS) scale, a 12-item scale designed specifically to address barriers to access to medical and social care for people living with HIV, (e.g., geographical barriers, resource concerns) (range: 12 to 48; Cronbach's alpha = 0.94), with a higher score indicating barriers being more problematic (Heckman et al., 1998).

Trans-specific factors

Trans-specific factors included participants' situation regarding transitioning, hormone use (yes vs. no), access to trans-specific care, experiences as a trans person in HIV care, and trans stigma.

Transition situation was measured using a question from the Trans PULSE survey (Trans PULSE, 2009) by asking participants "which of the following applies to your current situation regarding hormones and/or surgery", with response options: "I have fully medically/surgically transitioned", "I am in the process of medically/surgically transitioning", "I am planning to transition, but have not begun", "I am not planning to medically/surgically transition", "The concept of 'transitioning' does not apply to me", "I am not sure whether I am going to medically transition", "Other", "Don't know", "Not sure" and "Prefer not to answer", dichotomized as fully transitioned vs. planning to transition/in progress of transitioning, with other/don't know/prefer not to answer classified as missing for the purpose of the present analyses. Transition was self-defined by participants, and may include a range of procedures (e.g., hormone use, breast augmentation, orchiectomy (removal of testes), and vaginoplasty (surgical construction of a

vagina) among many others which support the alignment of one's sex characteristics and gender identity (Crosby, Salazar, & Hill, 2016; Scheim & Bauer, 2015).

Access to a trans-specific clinic or physician was assessed with the question: "Have you ever accessed medical care from a trans-specific clinic or doctor?" dichotomized as "yes" (yes for my general care or yes for my HIV related care) versus "no" (no there is no trans related care in my area, no the clinic is too busy to take new patients).

HIV physician awareness of trans identity was measured by asking participants "does your HIV doctor know about your trans identity and experience?" with options: "yes, I told my HIV doctor", "yes, my HIV doctor asked about my history", "yes, my HIV doctor was informed of my trans identity without my consent", "no, it hasn't' come up", "no, I don't feel comfortable telling my HIV doctor", "don't know", and "prefer not to answer", dichotomized as yes (three responses starting with yes) vs. no (two responses starting with no), with don't know and prefer not to answer considered missing.

<u>Perceived knowledge of a woman's HIV physician about trans health issues</u> was dichotomized as knowledgeable (very/somewhat knowledgeable) versus not knowledgeable (not very/not at all knowledgeable/HIV physician has never talked to me about trans health).

<u>Comfort discussing trans healthcare needs with one's HIV physician</u> was dichotomized as comfortable (very comfortable/comfortable) versus uncomfortable (uncomfortable/very uncomfortable).

<u>Trust in doctor-patient confidentiality of HIV physician with regards to trans-related care</u> was dichotomized as yes (completely/mostly) versus no (not much/not at all).

Experienced transphobia in HIV care was measured using a question from the Trans PULSE survey (Trans PULSE, 2009) by asking participants if any of the following had ever occurred in

reference to an HIV doctor: refused to see you or ended your care because you were trans; refused to discuss trans-related health concerns; refused to examine parts of your body because you're trans; insisted on examining parts of your body that were not relevant to your care; told you that they don't know enough about trans-related care to provide you care; told you that you were not really the gender you identify with; discouraged you from exploring your gender; used hurtful or insulting language about your trans identity or experience; thought your gender listed on your ID forms was a mistake; belittled or ridiculed you for being trans; other; don't know; prefer not to answer), dichotomized as any versus none reported.

Those who had ever accessed HIV care and reported taking trans-related hormones were asked if they had <u>informed their HIV doctor that they are taking hormones (yes/no)</u> and those who reported taking hormones, informing their doctor, and ever having accessed HIV care were asked <u>whether their doctor had discussed possible drug-drug interactions (DDIs) between HIV</u> medications and hormones.

Trans stigma was measured using a 9-item scale adapted from a reliable and valid 11-item measure of transphobia utilized in the Trans PULSE Project, a community-based study of trans health (Longman Marcellin, Bauer, & Scheim, 2013), initially adapted from a measure of sexual stigma (Diaz, Ayala, Bein, Henne, & Martin, 2001) to be more specific to trans peoples' experiences. The scale was summarized as a total score (range: 4 to 27; Cronbach's alpha = 0.89), with a higher score indicating more trans stigma.

Data Analysis

A comparison of key sociodemographic (age, ethnicity, income) and clinical (years living with HIV) factors for those included in the analysis (n=50) compared to those excluded from the analysis due to missing access to HIV care data (n=4) was completed to explore if data were

missing at random (Jamshidian, 2004). No evidence of non-random missingness was identified. Prior to conducting bivariate analyses, the internal consistency of all scaled measures was assessed using Cronbach's alpha (Cronbach, 1951; Tavakol & Dennick, 2011). For scaled measures, the percentage of missing data was summarized overall and by number of items (See Appendix J1. Scaling of Continuous Measures from CHIWOS Wave 1 Survey and Missing Data Analyses).

Descriptive statistics were computed (proportions, means [SD]) for sociodemographic, clinical, intrapersonal, interpersonal, structural, and trans-specific factors (Table 1; Appendix J2). Proportions and 95% confidence intervals were computed for each HIV care cascade outcome. All 95% confidence intervals for proportions were calculated using the bootstrap variance estimation technique using a set of 500 replicates, to get accurate intervals (Rust & Rao, 1996). Then, bivariate analyses were conducted in order to see if there were any statistically significant associations (p < 0.05) of sociodemographic, clinical, intrapersonal, interpersonal, structural, and trans-specific factors with each HIV care cascade outcome. For categorical factors, chi-square or Fischer's exact tests (in the presence of cell sizes < 5) were used to test for significant associations between proportions. For continuous factors, t-tests were used to examine significant differences between means. Associations between factors and viral load were not explored, as only one participant self-reported a detectable viral load. Proportions, proportion differences, 95% confidence intervals for the difference, and p values are reported for categorical variables significantly associated with each step of the HIV care cascade (Statistically significant results shown in Table 2; Full results shown in Appendix J3, Tables J3a-J3d). Mean, standard deviation, mean difference, standard error, and p values are reported for continuous factors significantly associated with each step of the HIV care cascade (Statistically significant

results shown in Table 2; Full results shown in Appendix J3, Tables J3a-d). Analyses were conducted using SPSS Version 24 (Armonk, NY: IBM Corp.).

Given the small sample size of those with access to care data (n = 50), that the sample size of participants with available data decreased at each stage of the care cascade, and thus, that the number of participants experiencing each outcome was small, multivariable analyses were not conducted (Courvoisier, Combescure, Agoritsas, Gayet-Ageron, & Perneger, 2011; Peduzzi, Concato, Kemper, Holford, & Feinstein, 1996; Vittinghoff & McCulloch, 2007).

2.2.3 Results

Participant Characteristics

The mean age of trans women in this sample (n = 50) was 41 years (standard deviation (SD): 10; range 18-71 years). Participants were representative of all three CHIWOS provinces (50.0% [n=25] from Ontario, 22.0% [n=11] British Columbia, 28.0% [n=14] Quebec). The highest proportions of participants were white (38.0%, n=19) or Indigenous (34.0%, n=17) followed by Latina (12.0%, n=6), Black/African/Caribbean (8.0%, n=4), Arab (n=2, 4.0%), and one participant each (2.0%) reporting West Asian or Multiple races/multiracial ethnicities. Most expressed their day-to-day gender as a woman, had more than a high school education, identified as heterosexual, and were Canadian citizens. The majority of women had personal incomes of less than \$20 000 CAD per year, which considered below the poverty line in Canada for a one or more person family living in a setting with \geq 500 000 people (Statistics Canada, 2017).

Table 1 Sociodemographic Characteristics of a Sample of Trans Women with HIV in Canada (n=50)

Characteristic	N	%	Mean	SD^a	Missing
Province					
Ontario	25	50.0			
British Columbia	11	22.0			
Quebec	14	28.0			
Age (years)			41.00	10.09	
Education					1
Less than high school	8	16.3			
High school or higher	41	83.7			
Sexual orientation					2
Sexual minority	20	41.7			
Heterosexual	28	58.3			
Gender presentation					
Woman	46	92.0			
Sometimes man, sometimes					
woman	4	8.0			
Annual personal income (CAD ^a)					1
< \$20 000	44	89.8			_
≥ \$20 000	5	10.2			
Relationship status		10.2			
Married/common law/in a					
relationship	11	22.0			
Single/separated/					
divorced/widowed	39	78.0			
Ethnicity		, 0.0			
White	19	38.0			
Black/African/Caribbean	4	8.0			
Indigenous	17	34.0			
Latina	6	12.0			
Arab	2	4.0			
West Asian	1	2.0			
Multiple races/multiracial	1	2.0			
Immigration status	•	2.0			
Canadian citizen	42	84.0			
Landed immigrant/	12	01.0			
permanent resident	5	10.0			
Refugee/other	3	6.0			
Source of income	5	0.0			1
Paid job	6	12.2			1
Social assistance	38	77.6			
Sex work	56 5	10.2			
Years living with HIV	5	10.2	10.57	7.28	1
CD to I I I I I I I I I I I I I I I I I I			10.37	1.40	1

^{*}SD=standard deviation; CAD=Canadian dollar

Cascade of HIV Care among a Sample of Trans Women in Canada

Among those for whom there was available access to care data (n=50), 92.0% (n=46/50, 95% Confidence Interval (CI): 84.0%-100.0%) of trans women had ever accessed HIV care and 91.3% (n=42/46, 95% CI: 83.0%-98.0%) of those who had ever accessed HIV care had received at least any HIV care visit within the past year. Among those who had ever accessed HIV care, approximately three quarters (78.3% [n= 36/46], 95% CI: 66.0%-89.5%) had initiated ART use, all of whom were also currently using ART. Of those currently using ART, two-thirds (66.7% [n=24/36], 95% CI: 49.4%-81.7%) reported \geq 95% adherence and most who were adherent (95.8%, n=23/24) had a self-reported undetectable viral load (95% CI: 84.6%-100.0%) (Figure 2).

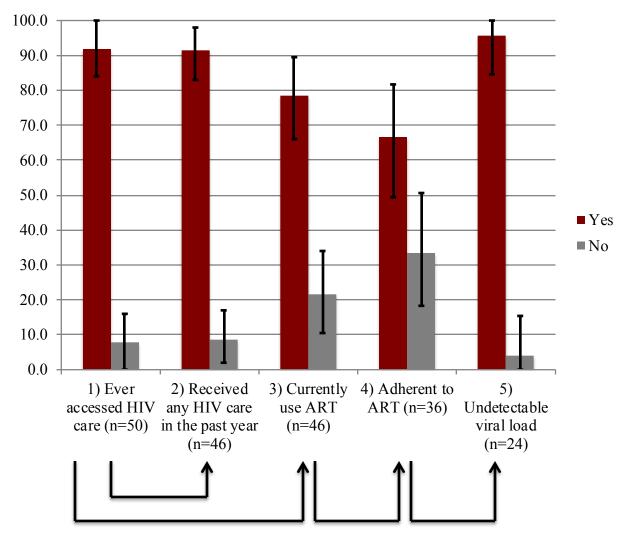


Figure 2. Proportion of Trans Women with HIV at Each Step in the HIV Care Cascade

Factors Associated with Each Step in the HIV Care Cascade among a Sample of Trans Women in Canada

1) Ever accessed HIV care

Compared to trans women who had ever accessed HIV care, those who had never accessed HIV care: had lived with HIV a lower mean number of years (mean difference (MD): -8.38 years, standard error (SE): 1.27, p < 0.001), had a higher physical health-related quality of life (MD: 7.94, SE: 2.10, p=0.001), had a lower prevalence of experiencing violence in adulthood (Prevalence difference (PD) -59.1% [95% CI: -81.04, -12.18], p < 0.05), and had a higher mean score on the barriers to access to care scale (MD: 12.91, SE: 5.31, p < 0.05) (Table 2).

2) Received any HIV care in the past year

Compared to trans women who had accessed any HIV care in the past year, those who had not accessed any HIV care in the past year: had a higher mean score of affectionate social support (MD: 1.38, SE: 0.69, p<0.01), positive social interaction (MD: 1.41, SE: 0.60, p<0.05), and trans stigma (MD: 8.20, SE: 3.68, p<0.05) (Table 2).

3) Currently Use ART

Compared to trans women who were currently using ART, trans women who were not currently using ART were younger (MD: -8.23, SE: 3.54, p<0.05), had been living with HIV for a shorter duration (MD: -7.05, SE: 1.51, p<0.001), and had a higher physical health-related quality of life (MD: 6.86, SE: 2.51, p<0.01). Those residing in Ontario were also more likely to be not currently using ART, relative to currently using ART (PD 69.4 (37.3, 82.0, p<0.001)

Those not currently using ART also had a lower mean hazardous alcohol use score (MD: -1.89, SE: 0.60, p<0.01) and prevalence of experiencing violence in adulthood (PD -57.1 [95% CI: -80.4, -25.9], p<0.001). Trans women who were not using ART also had a higher mean score of personalized HIV-related stigma (MD: 2.69, SE: 0.80, p<0.01), everyday racism (MD: 8.59, SE: 3.92, p<0.05), barriers to access to care (MD: 11.14, SE: 3.82, p<0.01), and trans stigma (MD: 6.66, SE: 2.76, p<0.05) and a higher prevalence of unstable housing (PD 33.3 [95% CI: (2.9, 61.1), p<0.05) and access to a family physician (PD 46.9 [95% CI: 8.3, 65.2], p<0.05) (Table 2).

4) Adherent to ART

Among those using ART, trans women who reported < 95% adherence had higher mean scores of depressive symptoms (MD: 5.94, SE: 2.85, p<0.05) and PTSD symptoms (MD: 7.00, SE: 2.12, p<0.01) relative to trans women who reported \geq 95% adherence (Table 2).

Table 2 Socioecological Factors Significantly Associated with Each HIV Care Cascade Outcome among Trans Women with HIV in Canada

Socioecological level	Factor	Yes No		Proportion Difference (95% CI ^a)	p value
		N (%) or Mean	N (%) or	or Mean Difference	
			(SD _a) Mean (SD)		
		n=46	n=4	(Standard Error) ^b	
1) Ever Accessed HIV	` /				
Clinical	Years living with HIV	11.08 (7.21)	2.69 (1.22)	-8.39 (1.27)	< 0.001
	Physical HR-QoL ^a	46.55 (11.71)	54.49 (2.28)	7.94 (2.10)	0.001
Interpersonal	Adulthood violence (Yes)	37 (84.1)	1 (25.0)	-59.1 (-81.04, -12.18)	0.025
Structural	Barriers to access to care	24.35 (10.68)	37.25 (10.11)	12.91 (5.31)	0.025
2) Received any HIV Care in the Past Year (n=46)		n=42	n=4		
Interpersonal	Affectionate social support	3.37 (1.36)	4.75 (0.50)	1.38 (0.69)	0.003
•	Positive social interaction	3.34 (1.17)	4.75 (0.50)	1.41 (0.60)	0.023
Trans-specific	Trans stigma	17.49 (7.32)	24.0 (6.0)	8.20 (3.68)	0.033
3) Currently Use ART (n=46)		n=36	n=10		
Sociodemographic	Province (Ontario)	11 (30.6)	10 (100.0)	69.4 (37.3, 82.0)	< 0.001
Sociodemographic	Age	43.03 (9.79)	34.8 (10.30)	-8.23 (3.54)	0.025
Clinical	Years living with HIV	12.61(7.32)	5.56 (2.83)	-7.05 (1.51)	< 0.001
	Physical HR-QoL	44.99 (12.79)	51.85 (3.87)	6.86 (2.51)	0.009
Intrapersonal	Hazardous alcohol use	2.73 (2.57)	0.83 (0.98)	-1.89 (0.60)	0.005
Interpersonal	Personalized HIV-related stigma	7.31 (3.31)	10.00 (1.83)	2.69 (0.80)	0.002
-	Adulthood violence (Yes)	33 (97.1)	4 (40.0)	-57.1 (-80.4, -25.9)	< 0.001
Structural	Housing security (Unstable)	6 (16.7)	5 (50.0)	33.3 (2.9, 61.1)	0.043
	Racism	19.81 (10.85)	28.40 (11.35)	8.59 (3.92)	0.034
	Barriers to access to care	21.76 (9.29)	32.90 (10.94)	11.14 (3.49)	0.003
	Access to a family physician (Yes)	13 (40.6)	7 (87.5)	46.9 (8.3, 65.2)	0.044
Trans-specific	Trans stigma	15.96 (6.45)	22.63 (8.16)	6.66 (2.76)	0.021
4) Adherent to ART (n=36)		n=24	n=12		
Intrapersonal	Depressive symptoms	8.36 (6.81)	14.30 (8.82)	5.94 (2.85)	0.046
-	PTSD symptoms	12.33 (3.75)	19.33 (6.84)	7.00 (2.12)	0.005

- · CI=confidence interval; SD=standard deviation; HR-QoL=Health-related quality of life.
 Proportion difference and mean difference calculated by subtracting Yes proportions or means from No proportions or means.
 Chi-square or Fischer's exact tests (in the presence of cell sizes < 5) were used to examine significant associations between proportions. T-tests were used to examine significant associations between means.

2.2.4 Discussion

This is among the first studies to comprehensively describe the HIV care cascade for trans WLWH in Canada. Attrition from the cascade occurred at all stages, from 8% (95% CI: 0%-16%) lost at linkage to care, to 22% (95% CI: 11%-34%) lost at ART initiation/current ART use, and 33% (95% CI: 18-51%) lost at ART adherence. The majority of trans WLWH in CHIWOS had ever accessed care (92%, 95% CI: 84%-100%) and of those, most had accessed care in the past year (91%, 95% CI: 83%-98%), yet only three-quarters (78%, 95% CI: 67%-90%) had initiated and were currently using ART, which suggests a critical point of intervention, particularly for achieving the 90-90-90 goals and enhancing treatment as prevention (World Health Organization, 2016).

In this exploratory study, factors situated at multiple socioecological levels were assessed, broadening the scope of HIV care cascade literature by including trans-specific factors at each level. Overall, these findings provide initial support for a socioecological theoretical approach to understanding HIV healthcare access for trans WLWH, which posits that factors interacting at multiple levels influence access to HIV care (Mugavero, 2013). Clinical (number of years living with HIV, physical health-related quality of life), intrapersonal (hazardous alcohol use, depression, PTSD), interpersonal (violence, social support), and structural (HIV-related stigma, racism, housing instability) factors were associated with access to HIV care at various steps along the care cascade. Interestingly, there was variability in which socioecological levels were associated with different HIV care cascade outcomes. For example, clinical factors were only associated with linkage to care and ART initiation. Specifically, trans WLWH who were not linked to care, and trans WLWH who had not initiated ART, had been living with HIV for a shorter duration and had a higher physical health-related quality of life. Trans women who had

not initiated ART were also younger. Given the recent World Health Organization's recommendation that ART be initiated for all PLWH at any CD4 count (World Health Organization, 2016), future studies are needed to explore ART prescribing practices among this population. Interventions may also be warranted that link young trans women to care sooner after diagnosis and emphasize the importance of ART to optimize health and well-being, irrespective of clinical disease progression.

Alternately, only intrapersonal factors (depression, PTSD) were negatively associated with adherence among trans WLWH in this sample, such that trans WLWH reporting suboptimal adherence had almost double the CES-D score of those reporting greater than or equal to 95% adherence. These findings corroborate those of a meta-analysis (n=207 studies) which identified depressive symptoms as one of the most strongly negatively correlated factors associated with adherence among PLWH (Langebeek et al., 2014). Almost half of the participants in the current study reported clinically significant depressive symptoms (46%) and PTSD symptoms (45%). Trauma may be understood through examining of contextual factors influencing the everyday lives of trans WLWH, such as violence in adulthood, which was experienced by four in five participants. Future research should aim to better understand the events that lead to trauma among trans WLWH in Canada and potential interventions to address trauma – in addition to depression – to mitigate the potential impacts of mental health issues on ART adherence. Resilience scores were high, with a mean score of 62.5 (SD: 9.0) out of a maximum score of 70. Dowshen and colleagues (2016) suggested that future research is needed to understand protective factors leading to young trans WLWH's resilience in response to social exclusion. Thus, while not associated quantitatively with any of the HIV care cascade outcomes,

future qualitative studies may seek to explore resilience among trans WLWH and how this may foster their health and well-being.

At an interpersonal level, social support was associated with access in unanticipated ways, such that women who were not engaged in care had a higher mean level of affectionate support and positive social interaction. Comparable studies, such as that by Sevelius et al. (2014), used relationship status as a proxy measure of social support, whereas Dowshen et al. (2016) asked specifically about social support for attending appointments. It is possible that the types of social support assessed by Sevelius et al. (2014) and Dowshen et al. (2016) would enhance engagement, whereas the types of social support included in this study may be protective for health, thereby reducing the likelihood of accessing care. Future studies may seek to understand how specific types of social support may be protective for health of trans WLWH, who may face substantial barriers to accessing social support.

Structural barriers impeded access to the HIV care cascade at multiple points. At linkage and current ART use, women who had never accessed care and those who were not currently using ART had significantly higher scores on the barriers to access to care scale, relative to women who had ever accessed care. Additional barriers to ART use included unstable housing – which is a well-documented barrier to access to care and good health outcomes for WLWH, broadly (Douab et al., 2014) and has also been demonstrated among trans WLWH (Santos et al., 2014). This is among the first quantitative studies to identify experiences of everyday racism as a barrier to access to HIV care for trans WLWH, corroborating qualitative research (Logie, James, Tharao, & Loutfy, 2011; Wilson, Arayasirikul, & Johnson, 2013). Alternately, ethnicity was not associated with any of the HIV care cascade outcomes, underscoring the importance of measuring stigma in addition to identity, consistent with an intersectional approach (Bowleg,

2008). Similarly, sexual orientation was not associated with any of the HIV care cascade outcomes. Future studies may include measures of sexual stigma in addition to questions pertaining to sexual orientation.

Perhaps most importantly, this study shows that trans stigma is associated with limited access to HIV care across the cascade. Trans WLWH had not received any HIV care in the past year and those who were not currently using ART reported higher mean trans stigma scores, relative to those who were engaged in care and those who had initiated/were currently using ART. While perhaps due to small sample size, it is important to note that trans-specific HIV physician factors (e.g., HIV physician aware of trans identity, perceived knowledge of HIV physician about trans health issues, trust in doctor-patient confidentiality of HIV physician with regards to trans care, ever experienced a transphobic event in a healthcare setting) were not associated with access to HIV care. One-sixth (17%) of participants had experienced a transphobic event in an HIV healthcare setting, which is relatively low based on studies conducted among trans women in other care settings (Bauer, Zong, Scheim, Hammond, & Thind, 2015). Taken together, these findings suggest that the creation of trans-friendly HIV services – safe places where trans women are met with welcoming attitudes from healthcare personnel (Melendez & Pinto, 2009; Sevelius, Patouhas, Keatley, & Johnson, 2014a; Wilson et al., 2013) – is important but insufficient for increasing access to HIV care for trans WLWH. Further qualitative studies are necessary to understand the mechanism by which trans stigma impedes access to HIV care for trans WLWH.

The study findings did not show feminizing hormone use or access to gender-affirming care to be associated with engagement along the care cascade. Similarly, Baguso et al. (2016) also did not identify this association. Nor were associations identified between gender

presentation or being seen by others as one's identified gender and access to care. However, hormone therapy has been described qualitatively as an entry point into HIV care (Melendez & Pinto, 2009; Schilder et al., 1998; Sevelius et al., 2014a; Wilson et al., 2013) and access to gender affirmation contributes to mental health and wellbeing and safety of trans WLWH (Sevelius et al., 2014a; Wilson et al., 2013) and should continue to be considered potential factors influencing HIV care for this population. Future research should aim to fill substantial gaps in the medical literature – such as a lack of studies documenting potential drug-drug interactions between ART and feminizing hormones (Radix, Sevelius, & Deutsch, 2016; Wansom, Guadamuz, & Vasan, 2016), research which may increase providers' comfort discussing drug-drug interactions and, subsequently, women's comfort discussing trans healthcare needs with their HIV physicians.

Limitations and Strengths

This study has several limitations and strengths. First, cross-sectional analyses preclude determination of causality between correlates and outcomes, as both the socioecological factors and HIV care cascade outcomes were measured at the same point in time. Cross-sectional analyses also necessitate exploration of the HIV care cascade in terms of distinct outcomes, as opposed to what Kay et al. (2016) have described as a continuum of HIV care involving "dynamic and bidirectional navigation of the spectrum of HIV care engagement at an individual level" (Introduction, para. 1). Longitudinal studies are also necessary to also identify trends in access to HIV care for trans women in Canada over time, particularly with the shifting social and political landscape.

Non-random sampling predominantly from ASOs and HIV clinics may lead to underestimation of those never engaged and not retained. However, community advisory boards

were formed to enhance targeted recruitment of women over-represented in Canada's HIV epidemic, including trans women. Data collected were self-reported, and thereby subject to social desirability bias. However, the study team attempted to mitigate this risk through PRA training and the option to complete certain parts of the survey without the interviewer (e.g., sexual health and violence) (Loutfy et al., 2017). Self-report data is also subject to recall bias, and the lack of biological outcomes is a further limitation of our data collection methods. However, preliminary attempts to validate self-report CHIWOS data with a subset of participants for whom health record data linkage is available have shown a high degree of validity of selfreport for viral load (Carter et al., 2017). The most important limitation of this study is the small sample size – decreasing at each step along the cascade due to attrition – certainly underpowered to detect significant differences of moderate to small sizes. Only bivariate analyses were able to be conducted due to the instability of regression models with small numbers of outcome events (Peduzzi et al., 1996). Multiple bivariate analyses were conducted which increases the risk of type 1 error. However, this exploratory small quantitative study is the first on this topic published in a Canadian context and is therefore the largest quantitative sample of trans WLWH in Canada, drawing attention to gaps in HIV care for a highly marginalized population that is underrepresented in HIV research and including diverse trans WLWH from three provinces in Canada.

This analysis used quantitative data collected as part of the CHIWOS survey. Some key factors that may influence access to HIV care were not measured, such as self-efficacy and gender affirmation (Mizuno et al., 2017; Sevelius et al., 2010). Despite this limitation, the CHIWOS survey included multiple trans-specific factors (e.g., trans stigma, comfort discussing trans health issues with one's HIV physician, transition situation), few of which have ever been

looked at in relation to trans WLWH's access to HIV care, which allow for context-specific recommendations to improve access to care for this population.

2.2.5 Conclusions and Implications

HIV care cascade analyses are valuable in directing local programs to address issues along the care cascade (Gardner & Young, 2014). While the high proportion of WLWH linked to HIV care could be regarded as a success, in a setting of universal health care such as Canada, any linkage less than 100% leaves room for improvement. Several multi-site studies have developed evidence-based strategies to increase linkage to HIV care for those newly diagnosed, which can be adapted to specific populations, such as the seek, test, treat, and retain data collection and harmonization initiative (Chandler et al., 2015) or linkage case management (Gardner et al., 2005).

Importantly, these individual-level interventions will have limited success if they do not simultaneously address the structure/organization of healthcare and attempt to reduce multiple types of stigma, including HIV-related stigma, racism, and trans stigma. Future studies should seek to understand the mechanisms by which these types of stigma individually and intersectionally influence access to HIV care for trans WLWH. Future studies may utilize community-based research strategies to engage trans women in further developing research projects to be contextually relevant to trans WLWH.

In conclusion, this study suggests gaps in the HIV care cascade for trans WLWH, and a multitude of modifiable socioecological, including trans-specific, barriers to access to care.

Addressing these barriers may help to achieve the 90-90-90 goals, ultimately promoting health and social justice for trans WLWH.

2.3 References

- Achappa, B., Madi, D., Bhaskaran, U., Ramapuram, J. T., Rao, S., & Mahalingam, S. (2013).

 Adherence to antiretroviral therapy among people living with HIV. *North American Journal of Medical Sciences*, 5(3), 220-223. doi:10.4103/1947-2714.109196
- Anema, A., Fielden, S. J., Castleman, T., Grede, N., Heap, A., & Bloem, M. (2014). Food security in the context of HIV: towards harmonized definitions and indicators. *AIDS and Behavior*, 18 Suppl 5, S476-489. doi:10.1007/s10461-013-0659-x
- Baguso, G. N., Gay, C. L., & Lee, K. A. (2016). Medication adherence among transgender women living with HIV. *AIDS Care*, 28(8), 976-981. doi:http://dx.doi.org/10.1080/09540121.2016.1146401
- Baral, S. D., Poteat, T., Stromdahl, S., Wirtz, A. L., Guadamuz, T. E., & Beyrer, C. (2013b).

 Worldwide burden of HIV in transgender women: a systematic review and meta-analysis. *Lancet Infectious Diseases*. *13*(3), 214-222. doi:10.1016/s1473-3099(12)70315-8
- Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: a respondent driven sampling study in Ontario, Canada. *BMC Public Health*, *15*, 525. doi:10.1186/s12889-015-1867-2
- Bauer, G. R., Travers, R., Scanlon, K., & Coleman, T. A. (2012). High heterogeneity of HIV-related sexual risk among transgender people in Ontario, Canada: a province-wide respondent-driven sampling survey. *BMC Public Health*, 12, 292. doi:http://dx.doi.org/10.1186/1471-2458-12-292
- Bauer, G. R., Zong, X., Scheim, A. I., Hammond, R., & Thind, A. (2015). Factors impacting transgender patients' discomfort with their family physicians: A respondent-driven sampling survey. *PLoS One*, *10*(12), e0145046. doi:10.1371/journal.pone.0145046

- Berger, B. E., Ferrans, C. E., & Lashley, F. R. (2001). Measuring stigma in people with HIV: psychometric assessment of the HIV stigma scale. *Research in Nursing and Health*, 24(6), 518-529.
- Bowleg, L. (2008). When Black + Lesbian + Woman ≠ Black Lesbian Woman: the methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles*, 59(5-6), 312-325. doi:http://dx.doi.org/10.1007/s11199-008-9400-z
- Carter, A., de Pokomandy, A., Loutfy, M., Ding, E., Sereda, P., Webster, K., . . . Team, C. R. (2017). Validating a self-report measure of HIV viral suppression: an analysis of linked questionnaire and clinical data from the Canadian HIV Women's Sexual and Reproductive Health Cohort Study. *BMC Research Notes*, 10(1), 138. doi:10.1186/s13104-017-2453-8
- CATIE. (2011). People living with HIV in Canada. Retrieved from http://librarypdf.catie.ca/pdf/ ATI-40000s/40239_B.pdf
- Chandler, R. K., Kahana, S. Y., Fletcher, B., Jones, D., Finger, M. S., Aklin, W. M., . . . Webb, C. (2015). Data collection and harmonization in HIV research: the seek, test, treat, and retain initiative at the National Institute on Drug Abuse. *American Journal of Public Health*, 105(12), 2416-2422.
- Chariyalertsak, S., Wansom, T., Kawichai, S., Ruangyuttikarna, C., Kemerer, V. F., & Wu, A. W. (2011). Reliability and validity of Thai versions of the MOS-HIV and SF-12 quality of life questionnaires in people living with HIV/AIDS. *Health and Quality of Life Outcomes*, 9, 15.

- Cohen, M. S., Chen, Y. Q., McCauley, M., Gamble, T., Hosseinipour, M. C., Kumarasamy, N., Fleming, T. R. (2016). Antiretroviral therapy for the prevention of HIV-1 transmission. *The New England Journal of Medicine*, 375(9), 830-839.
- Courvoisier, D. S., Combescure, C., Agoritsas, T., Gayet-Ageron, A., & Perneger, T. V. (2011).

 Performance of logistic regression modeling: beyond the number of events per variable, the role of data structure. *Journal of Clinical Epidemiology*, *64*(9), 993-1000.

 doi:10.1016/j.jclinepi.2010.11.012
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334. doi:10.1007/BF02310555
- Crosby, R. A., Salazar, L. F., & Hill, B. J. (2016). Gender affirmation and resiliency among

 Black transgender women with and without HIV infection. *Transgend Health*, 1(1), 8693. doi:10.1089/trgh.2016.0005
- Diaz, R. M., Ayala, G., Bein, E., Henne, J., & Martin, B. V. (2001). The impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men: Findings from 3 to US cities. *American Journal of Public Health*, *91*(6), 927-932.
- Douab, T., Marcellin, F., Vilotitch, A., Protopopescu, C., Préau, M., Suzan-Monti, M., . . . Spire,
 B. (2014). Health-related quality of life of people living with HIV followed up in
 hospitals in France: Comparing trends and correlates between 2003 and 2011 (ANRS-VESPA and VESPA2 national surveys). AIDS Care, 26(Suppl 1), S29-S40. doi:http://dx.doi.org/10.1080/09540121.2014.906553
- Dowshen, N., Matone, M., Luan, X., Lee, S., Belzer, M., Fernandez, M. I., . . . Adolescent Medicine Trials Network for HIV/AIDS Interventions. (2016). Behavioral and health

- outcomes for HIV+ young transgender women (YTW) linked to and engaged in medical care. *LGBT Health*, *3*(2), 162-167. doi:10.1089/lgbt.2014.0062
- Fielden, S. J., Anema, A., Fergusson, P., Muldoon, K., Grede, N., & de Pee, S. (2014).
 Measuring food and nutrition security: tools and considerations for use among people living with HIV. AIDS and Behavior, 18 Suppl 5, S490-504. doi:10.1007/s10461-013-0669-8
- Gardner, E. M., McLees, M. P., Steiner, J. F., del Rio, C., & Burman, W. J. (2011). The spectrum of engagement in HIV care and its relevance to test-and-treat strategies for prevention of HIV infection. *Clinical Infectious Diseases*, 52(6), 793.
- Gardner, E. M., & Young, B. (2014). The HIV care cascade through time. *Lancet Infectious Diseases*, 14(1), 5.
- Gardner, L. I., Metsch, L. R., Anderson-Mahoney, P., Loughlin, A. M., del Rio, C., Strathdee, S., Holmberg, S. D. (2005). Efficacy of a brief case management intervention to link recently diagnosed HIV-infected persons to care. *AIDS*, *19*(4), 423-431.
- Gjesfjeld, C. D., Greeno, C. G., & Kim, K. H. (2008). A confirmatory factor analysis of an abbreviated social support instrument: The MOS-SSS. *Research on Social Work Practice*, 18(3), 231-237.
- Government of Canada. (2012). The Household Food Security Survey Module (HFSSM).

 Retrieved from https://www.canada.ca/en/health-canada/services/food-nutrition/food-nutrition-surveillance/health-nutrition-surveys/canadian-community-health-survey-cchs/household-food-insecurity-canada-overview/household-food-security-survey-module-hfssm-health-nutrition-surveys-health-canada.html

- Gupta, G. R., Parkhurst, J. O., Ogden, J. A., Aggleton, P., & Mahal, A. (2008). Structural approaches to HIV prevention. *The Lancet*, *372*(9640), 764-775. doi:10.1016/S0140-6736(08)60887-9
- Hansana, V., Sanchaisuriya, P., Durham, J., Sychareun, V., Chaleunvong, K., Boonyaleepun, S.,
 & Schelp, F. P. (2013). Adherence to antiretroviral therapy (ART) among people living with HIV (PLHIV): A cross-sectional survey to measure in Lao PDR. *BMC Public Health*, 13, 617-617. doi:10.1186/1471-2458-13-617
- Hays, R. D., Sherbourne, C. D., & Mazel, R. M. (1993). RAND 36-Item Health Status Inventory

 1.0. Health Economics, 2(3). doi: https://doi.org/10.1002/hec.4730020305
- Heckman, T. G., Somlaj, A. M., Peters, J., Walker, J., Otto-Salai, L., Galdabini, C. A., & Kelly, J. A. (1998). Barriers to care among persons living with HIV/AIDS in urban and rural areas. *AIDS Care*, 10(3), 365-375. doi:http://dx.doi.org/10.1080/713612410
- Herbst, J. H., Jacobs, E. D., Finlayson, T. J., McKleroy, V. S., Neumann, M. S., & Crepaz, N.
 (2008). Estimating HIV prevalence and risk behaviors of transgender persons in the
 United States: a systematic review. *AIDS and Behavior*, 12(1), 1-17. doi:10.1007/s10461-007-9299-3
- Hopman, W. M., Towheed, T., Anastassiades, T., Tenenhouse, A., Poliquin, S., Berger, C., . . . Papadimitropoulos, E. (2000). Canadian normative data for the SF-36 health survey.

 Canadian Multicentre Osteoporosis Study Research Group. *Canadian Medical Association*. *Journal*, 163(3), 265-271.
- Hull, M. W., Wu, Z., & Montaner, J. S. G. (2012). Optimizing the engagement of care cascade: a critical step to maximize the impact of HIV treatment as prevention. *Current Opinion in HIV and AIDS*, 7(6), 579-586.

- Jamshidian, M. (2004). Strategies for analysis of incomplete data. In A. M. Hardy & Bryman (Eds.), *Handbook of data analysis* (pp. 113-130). Thousand Oaks, California: SAGE Publications Ltd.
- Krieger, N., Smith, K., Naishadham, D., Hartman, C., & Barbeau, E. M. (2005). Experiences of discrimination: Validity and reliability of a self-report measure for population health research on racism and health. *Social Science and Medicine*, 61(7), 1576-1596.
- Lang, A. J., & Stein, M. B. (2005). An abbreviated PTSD checklist for use as a screening instrument in primary care. *Behaviour Research and Therapy*, 43(5), 585-594.
- Lang, A. J., Wilkins, K., Roy-Byrne, P. P., Golinelli, D., Chavira, D., Sherbourne, C., . . . Stein,
 M. B. (2012). Abbreviated PTSD Checklist (PCL) as a guide to clinical response.
 General Hospital Psychiatry, 34(4), 332-338.
- Langebeek, N., Gisolf, E. H., Reiss, P., Vervoort, S. C., Hafsteinsdóttir, T. B., Richter, C., . . .

 Nieuwkerk, P. T. (2014). Predictors and correlates of adherence to combination
 antiretroviral therapy (ART) for chronic HIV infection: a meta-analysis. *BMC Medicine*,

 12, 142. doi:http://dx.doi.org/10.1186/s12916-014-0142-1
- Logie, C. H., James, L., Tharao, W., & Loutfy, M. R. (2011). HIV, gender, race, sexual orientation, and sex work: a qualitative study of intersectional stigma experienced by HIV-positive women in Ontario, Canada. *PLoS Med*, 8(11), e1001124. doi:10.1371/journal.pmed.1001124
- Longman Marcellin, R., Bauer, G. R., & Scheim, A. I. (2013). Intersecting impacts of transphobia and racism on HIV risk among trans persons of colour in Ontario, Canada. *Ethnicity and Inequalities in Health and Social Care*, 6(4), 97-107.

- Loutfy, M., de Pokomandy, A., Kennedy, V. L., Carter, A., O'Brien, N., Proulx-Boucher, K., . . . Kaida, A. (2017). Cohort profile: The Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS). *PLoS One*, *12*(9), e0184708.
- Melendez, R. M., Exner, T. A., Ehrhardt, A. A., Dodge, B., Remien, R. H., Rotheram-Borus, M.-J., . . . Hong, D. (2006). Health and health care among male-to-female transgender persons who are HIV positive. *American Journal of Public Health*, *96*(6), 1034-1037. doi:10.2105/AJPH.2004.042010
- Melendez, R. M., & Pinto, R. M. (2009). HIV prevention and primary care for transgender women in a community-based clinic. *Journal of the Association of Nurses in AIDS Care*, 20(5), 387-397. doi:10.1016/j.jana.2009.06.002
- Mizuno, Y., Beer, L., Huang, P., & Frazier, E. L. (2017). Factors associated with antiretroviral therapy adherence among transgender women receiving HIV medical care in the United States. *LGBT Health*, *4*(3), 181-187. doi:http://dx.doi.org/10.1089/lgbt.2017.0003
- Mizuno, Y., Frazier, E. L., Huang, P., & Skarbinski, J. (2015). Characteristics of transgender women living with HIV receiving medical care in the United States. *LGBT Health*, 2(3), 228-234. doi:http://dx.doi.org/10.1089/lgbt.2014.0099
- Mugavero, M. J., Amico, K.R., Horn, T., Thompson, M.A. (2013). The state of engagement in HIV care in the United States: from cascade to continuum to control. *Clinical Infectious Diseases*, 57(8), 1164-1171. doi:10.1093/cid/cit420
- Namaste, V. (2015). Oversight: Critical reflections on feminist research and politics. Toronto,
 Ontario: Canadian Scholar's Press, Inc.

- Nosyk, B., Montaner, J. S. G., Colley, G., Lima, V. D., Chan, K., Heath, K., . . . Hogg, R. S. (2014). The cascade of HIV care in British Columbia, Canada, 1996-2011: a population-based retrospective cohort study. *Lancet Infectious Diseases*, *14*(1), 40-49.
- Operario, D., & Nemoto, T. (2010). HIV in transgender communities: syndemic dynamics and a need for multicomponent interventions. *Journal of Acquired Immune Deficiency*Syndromes, 55 Suppl 2, S91-93. doi:10.1097/QAI.0b013e3181fbc9ec
- Peduzzi, P., Concato, J., Kemper, E., Holford, T. R., & Feinstein, A. R. (1996). A simulation study of the number of events per variable in logistic regression analysis. *Journal of Clinical Epidemiology*, 49(12), 1373-1379.
- Pitasi, M. A., Oraka, E., Clark, H., Town, M., & DiNenno, E. A. (2017). HIV testing among transgender women and men 27 States and Guam, 2014-2015. MMWR Morbidity and Mortality Weekly Report, 66(33), 883-887. doi:10.15585/mmwr.mm6633a3
- Public Health Agency of Canada. (2014). HIV and AIDS in Canada: Surveillance report to December 31st, 2013. Retrieved from http://www.phac-aspc.gc.ca/aids-sida/publication/survreport/2013/dec/assets/pdf/hiv-aids-surveillence-eng.pdf
- Radix, A., Sevelius, J., & Deutsch, M. B. (2016). Transgender women, hormonal therapy and HIV treatment: a comprehensive review of the literature and recommendations for best practices. *Journal of the International AIDS Society*, *19*(3 Suppl 2), 20810. doi:http://dx.doi.org/10.7448/IAS.19.3.20810
- Rhodes, T., Singer, M., Bourgois, P., Friedman, S. R., & Strathdee, S. A. (2005). The social structural production of HIV risk among injecting drug users. *Social Science and Medicine*, *61*(5), 1026-1044. doi:10.1016/j.socscimed.2004.12.024

- Rodger, A. J., Cambiano, V., Bruun, T., Vernazza, P., Collins, S., van Lunzen, J., . . . Lundgren, J. (2016). Sexual activity without condoms and risk of HIV transmission in serodifferent couples when the HIV-positive partner is using suppressive antiretroviral therapy. *JAMA*, 316(2), 171-181. doi:10.1001/jama.2016.5148
- Rust, K. F., & Rao, J. N. (1996). Variance estimation for complex surveys using replication techniques. *Statistical Methods in Medical Research*, *5*(3), 283-310. doi:10.1177/0962 28029600500305
- Santos, G. M., Wilson, E. C., Rapues, J., Macias, O., Packer, T., & Raymond, H. F. (2014). HIV treatment cascade among transgender women in a San Francisco respondent driven sampling study. *Sexually Transmitted Infections*, 90(5), 430-433. doi:10.1136/sextrans-2013-051342
- Saunders, J. B., Aasland, O. G., Babor, T. F., de la Fuente, J. R., & Grant, M. (1993).

 Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO

 Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption-II. Addiction, 88(6), 791-804.
- Scheim, A. I., & Bauer, G. R. (2015). Sex and gender diversity among transgender persons in Ontario, Canada: results from a respondent-driven sampling survey. *Journal of Sex Research*, 52(1), 1-14. doi:10.1080/00224499.2014.893553
- Schilder, A. J., Laframboise, S., Hogg, R. S., Trussler, T., Goldstone, I., Schechter, M. T., & O'Shaughnessy, M. V. (1998). "They don't see our feelings." The health care experiences of HIV-positive transgendered persons. *Journal of the Gay and Lesbian Medical Association*, 02(3), 103-111. doi:10.1023/B:JOLA.0000004052.12136.1b

- Serano, J. (2007). Whipping girl: A transsexual woman on sexism and the scapegoating of femininity. Berkeley, CA: Seal Press.
- Sevelius, J. M. (2013). Gender affirmation: a framework for conceptualizing risk behavior among transgender women of color. *Sex Roles*, 68(11-12), 675-689. doi:10.1007/s11199-012-0216-5
- Sevelius, J. M., Carrico, A., & Johnson, M. O. (2010). Antiretroviral therapy adherence among transgender women living with HIV. *Journal of the Association of Nurses in AIDS Care*, 21(3), 256-264. doi:10.1016/j.jana.2010.01.005
- Sevelius, J. M., Patouhas, E., Keatley, J. G., & Johnson, M. O. (2014a). Barriers and facilitators to engagement and retention in care among transgender women living with human immunodeficiency virus. *Annals of Behavioral Medicine*, 47(1), 5-16. doi:10.1007/s12160-013-9565-8
- Sevelius, J. M., Saberi, P., & Johnson, M. O. (2014b). Correlates of antiretroviral adherence and viral load among transgender women living with HIV. *AIDS Care*, 26(8), 976-982. doi:10.1080/09540121.2014.896451
- Shannon, K., Strathdee, S. A., Goldenberg, S. M., Duff, P., Mwangi, P., Rusakova, M., . . . Boily, M. C. (2015). Global epidemiology of HIV among female sex workers: influence of structural determinants. *Lancet*, 385(9962), 55-71. doi:10.1016/s0140-6736(14)60931-4
- Shipherd, J. C., Maguen, S., Skidmore, W. C., & Abramovitz, S. M. (2011). Potentially traumatic events in a transgender sample: Frequency and associated symptoms.

 *Traumatology: An International Journal, 17(2), 56-67. doi:http://dx.doi.org/10.1177/1534765610395614

- Statistics Canada. (2017). Table 206-0094 Low income cut-offs (LICOs) before and after tax by community and family size in current dollars, annual, CANSIM (database).

 Retrieved from http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=2060094
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. doi:10.5116/ijme.4dfb.8dfd
- Trans PULSE. (2009). Trans PULSE Provincial Survey 2009. Retrieved from http://transpulseproject.ca/wp-content/uploads/2012/05/Trans-PULSE-survey-information-only-copy-2012.pdf
- UNAIDS. (2014). 90-90-90: An ambitious treatment target to help end the AIDS epidemic.

 Retrieved from http://www.unaids.org/sites/default/files/media_asset/90-90-90_en.pdf
- Vittinghoff, E., & McCulloch, C. E. (2007). Relaxing the rule of ten events per variable in logistic and Cox regression. *American Journal of Epidemiology*, 165(6), 710-718. doi:10.1093/aje/kwk052
- Wagnild, G. (2009). A review of the resilience scale. *Journal of Nursing Measurement*, 17(2), 105-113.
- Wansom, T., Guadamuz, T. E., & Vasan, S. (2016). Transgender populations and HIV: unique risks, challenges and opportunities. *Journal of Virus Eradication*, 2(2), 87-93.
- Ware, J., Kosinski, M., & Keller, S. D. (1996). A 12-Item Short-Form Health Survey: construction of scales and preliminary tests of reliability and validity. *Medical Care*, 34(3), 220-233.
- Wiewel, E. W., Torian, L. V., Merchant, P., Braunstein, S. L., & Shepard, C. W. (2016). HIV diagnoses and care among transgender persons and comparison with men who have sex

- with men: New York City, 2006-2011. *American Journal of Public Health*, 106(3), 497-502. doi:10.2105/ajph.2015.302974
- Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health: Socio-economic status, stress and discrimination. *Journal of Health Psychology*, 2(3), 335-351.
- Wilson, E. C., Arayasirikul, S., & Johnson, K. (2013). Access to HIV care and support services for African American transwomen living with HIV. *International Journal of Transgenderism*, 14(4), 182-195. doi:10.1080/15532739.2014.890090
- World Health Organization. (2016). Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: Recommendations for a public health approach, Second Edition. Retrieved from http://apps.who.int/iris/bitstream/handle/ 10665/208825/9789241549684_eng.pdf;jsessionid=9C38E2DD4407A8822A3B6245E11 84B94?sequence=1http://apps.who.int/iris/bitstream/10665/208825/1/9789241549684_eng.pdf?ua=1
- Wright, K., Naar-King, S., Lam, P., Templin, T., & Frey, M. (2007). Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *The Journal of Adolescent Health*, 40(1), 96-98.
- Yehia, B. R., Fleishman, J. A., Moore, R. D., & Gebo, K. A. (2013). Retention in care and health outcomes of transgender persons living with HIV. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, 57(5), 774-776. doi:10.1093/cid/cit363

Zhang, W., O'Brien, N., Forrest, J. I., Salters, K. A., Patterson, T. L., Montaner, J. S., . . . Lima, V. D. (2012). Validating a shortened depression scale (10 item CES-D) among HIV-positive people in British Columbia, Canada. *PLoS One*, 7(7), e40793. doi:10.1371/journal.pone.0040793

Chapter 3

Transition and Gender-affirming Care Experiences of Trans Women with HIV in Canada: A Mixed Methods Study

3.1 Abstract

Background: Access to gender-affirming healthcare has been described as critical to HIV care engagement among transgender (trans) women living with HIV (WLWH), a population overrepresented in the HIV epidemic, yet with lower access to HIV care. Little is known about trans WLWH's transition and gender-affirming care experiences.

Methods: A convergent parallel mixed methods design was used to understand the transition and gender-affirming care experiences of trans WLWH, including barriers and facilitators to accessing gender-affirming care and experiences accessing gender-affirming care from HIV physicians. In the quantitative strand, 48 trans WLWH completed a cross-sectional survey, analyzed using descriptive statistics and bivariate analyses. In the qualitative strand, a subsample of 11 participants completed a semi-structured, individual interview, analyzed using framework analysis. Qualitative and quantitative results were merged and analyzed for convergence, divergence, and/or expansion of understanding across strands.

Results: Among 48 trans WLWH (mean age: 41.6 years, standard deviation: 9.8), few participants reported having fully completed their medical transition; the largest proportion reported being in the process of/planning to medically transition. Qualitative findings showed that trans WLWH have highly individualized transition experiences, characterized by a battle between self-determination and (trans)gender policing, shaped by privilege, and influenced by HIV. Quantitative results indicated that factors statistically significantly associated with reporting being in the process of/planning to medically transition (compared to reporting full medical transition) included: other sources of income (vs. paid employment), unstable housing

(vs. stable), and higher physical health-related quality of life, HIV stigma, and barriers in access to care. Qualitative participants similarly described economic insecurity as a structural barrier to access to care. Both quantitative and qualitative results showed predominantly positive relationships between trans WLWH and HIV care providers. Participants recommended that healthcare choices for trans WLWH be maximized and that additional research be conducted about topics specific to trans WLWH to support HIV and gender-affirming care competency.

Conclusions: This study highlighted how HIV stigma and a lack of clinical information specific to trans WLWH's needs limit access to gender-affirming healthcare. HIV physicians may successfully provide both gender-affirming care and HIV care. However, since gender-affirming care may also be provided by other specialists (e.g., surgeons), HIV and other forms of stigma perpetuated by healthcare providers must be addressed, in addition to other structural barriers to access to gender-affirming care.

3.2 Manuscript

3.2.1 Introduction

Gender affirmation, defined as a process whereby a person receives social recognition and support for their gender identity and expression (Sevelius, 2013), is a social determinant of health for transgender (trans) people. Trans people represent a diverse group of individuals with a shared experience of incongruence between their gender identity and sex labeled-at-birth (Reisner, Radix, & Deutsch, 2016; Sevelius, 2013). US-based studies have shown that gender affirmation is a facilitator of HIV care engagement among trans women (Schilder et al., 2001; Schilder et al., 1998; Sevelius, Patouhas, Keatley, & Johnson, 2014a), who experience a high prevalence of HIV (Baral et al., 2013), and yet lower access to HIV care (Mizuno, Frazier, Huang, & Skarbinski, 2015; Pitasi, Oraka, Clark, Town, & DiNenno, 2017; Wiewel, Torian, Merchant, Braunstein, & Shepard, 2016).

Gender affirmation can be enhanced through social and medical processes, sometimes referred to as transition (Coleman et al., 2012; Scheim & Bauer, 2015). Social processes of transition may include gender identity disclosure, change in gender expression through clothing and hairstyle, and use of a new name and/or gender pronoun (Coleman et al., 2012; Scheim & Bauer, 2015). Social transition may also involve processes to change one's gender identity, name, and sex marker (e.g., male/female) on legal documentation (e.g., health card) (Crosby, Salazar, & Hill, 2016; Scheim & Bauer, 2015). Medical transition is defined as changing one's sex characteristics, and most often involves hormone therapy (Scheim & Bauer, 2015). Medical transition may also involve surgical procedures such as breast augmentation, orchiectomy (removal of testes), vaginoplasty (surgical construction of a vagina), facial feminization surgery, tracheal shave, as well as procedures conducted outside of the medical system, such as hair removal/electrolysis and filler/Botox (Scheim & Bauer, 2015).

It is important to note that not all trans people transition gender and/or sex, and not all trans people access gender-affirming healthcare. However, professional standards of care recognize that for those who want to access it, gender-affirming healthcare is vitally important to support the health and wellbeing of trans people (World Professional Association for Transgender Health [WPATH], 2012). Studies have documented manifold positive psychosocial effects of gender-affirming care access, including reduced suicidal ideation, depression, and substance use, as well as increased quality of life and resilience (Bauer, Scheim, Pyne, Travers, & Hammond, 2015; Lindqvist et al., 2017; Murad et al., 2010; Rotondi et al., 2011; White Hughto & Reisner, 2016). Additionally, access to medical and social gender affirmation promotes positive healthcare interactions by reducing stigmatization of trans women within care environments (Crosby et al., 2016).

Despite the importance of access to gender-affirming healthcare for trans women's health and wellbeing, and to increase HIV care engagement, studies suggest that trans WLWH may experience poorer access to gender-affirming care compared to trans women who are not living with HIV (Wilson, Chen, Arayasirikul, Wenzel, & Raymond, 2014). Drawing on data from 314 trans women who participated in a 2010 HIV surveillance study, Wilson and colleagues (2014) identified statistically significant differences based on HIV status in access to gender-affirming medical care. Specifically, while 98% of trans women who were not living with HIV had accessed some form of gender-affirming medical care, a statistically significant lower proportion (88%) of trans WLWH had accessed any gender-affirming medical care (p=0.01). This difference was particularly stark with respect to gender-affirming surgery, whereby half of trans WLWH had accessed breast augmentation and one-quarter had accessed vaginoplasty, relative to those not living with HIV. The authors hypothesized that trans WLWH may choose to not have

surgery due to associated surgical risks. Alternately, they suggested that these differences could also be due to structural barriers that impede trans WLWH from accessing gender-affirming medical care (Wilson et al., 2014).

Indeed, many of the structural barriers to access to gender-affirming care described among trans people, generally, may be more pervasive among trans WLWH due to the intersection of trans and HIV stigma and discrimination and the specific needs of trans WLWH in relation to both gender-affirming and HIV care. These structural barriers to accessing gender-affirming care include: financial challenges through low income and/or a lack of insurance, compounded by differential coverage dependent on geographic location in Canada (Bauer, 2013) or Medicaid restrictions in the US (Gehi & Arkles, 2007) and uncovered costs (e.g., transportation, post-surgical care), and a lack of service availability (Coronel Villalobos, Stieler, Frohard-Dourlent, & Saewyc, 2018).

Differing cost and availability of medical/surgical care must be understood through an understanding of the structure of the Canadian healthcare system. Canada's publicly-funded universal healthcare system, called Medicare, is the shared responsibility of the federal and provincial/territorial governments and each individual province/territory is responsible for the organization, management, and delivery of healthcare (Government of Canada, 2018). As such, each province provides insurance coverage for different types of gender-affirming medical and surgical care, requires unique processes of approval for coverage of these services, and has varying wait times depending on local service availability. In Ontario, British Columbia, and Quebec, Canada's three largest provinces (Statistics Canada, 2018) and the sites where this dissertation study was conducted, the surgical costs of orchidectomy and vaginoplasty are

currently covered through provincial insurance⁷ after a process of referral and assessment (GRS Montreal, 2018; Ministry of Health and Long-term Care, 2016; Trans Care BC, 2018; Trans Health Expansion Partnership, 2017).⁸ The cost of breast augmentation may also be covered if stringent guidelines are met (e.g., insufficient breast growth after a period of time on feminizing hormones).⁹

However, none of these provinces currently covers the costs of travel associated with acquiring assessments nor accessing care, nor the cost of the following procedures: voice surgery, tracheal shave, hair removal/electrolysis, facial feminization surgery, or hair transplants (GRS Montreal, 2018; Ministry of Health and Long-term Care, 2016; Trans Care BC, 2018; Trans Health Expansion Partnership, 2017). These procedures are considered cosmetic, although they are necessary for many trans women to reduce the psychological distress associated with gender dysphoria (Coronel Villalobos et al., 2018). Additionally, there is no national coverage of pharmaceutical products (House of Commons Standing Committee on Health, 2018). Thus, some feminizing hormone regimens may be covered through private insurance for those who are employed or through public assistance for those accessing social assistance or considered lowincome; however, this differs within each province and plan as well, and also often requires an approval process and wait time (Rainbow Health Ontario, 2018).

Other barriers to accessing gender-affirming care that have been well-documented among trans people, broadly, include: transphobia in healthcare settings, a lack of provider knowledge,

(Trans Care BC, 2018).

102

Provincial healthcare coverage includes the Ontario Health Insurance Plan (OHIP), the Medical Service Plan (MSP), and Régie de l'assurance maladie Québec (RAMQ), for Ontario, British Columbia, and Quebec, respectively.

Important to note, this coverage has varied over time; for example, from 1998 to 2008 the Government of Ontario delisted coverage for gender-affirming surgery from OHIP (Rotondi et al., 2013).

Insufficient breast growth is considered smaller than an AA cup after 18 months of feminizing hormone therapy

interpersonal barriers such as fear of rejection, and a lack of knowledge of where to access care (Gridley et al., 2016; Puckett, Cleary, Rossman, Newcomb, & Mustanski, 2018; Safer et al., 2016). For example, a qualitative study of 10 trans WLWH conducted in Vancouver, Canada reported that some participants were turned away by surgeons for gender-affirming surgery (Schilder et al., 1998), suggesting potential structural or interpersonal discrimination. In a qualitative study of 38 trans WLWH from the San Francisco Bay Area of the US, some participants reported that primary care providers withheld hormones as a way to promote antiretroviral therapy (ART) adherence (Sevelius et al., 2014a). As the literature suggests that physician support of women's hormone use is a facilitator of ART initiation and adherence (Melendez & Pinto, 2009; Sevelius et al., 2014a), this punitive response is antithetical to the goal of engaging trans WLWH in HIV care. Qualitative studies have also shown that a lack of information about potential drug-drug interactions (DDIs) between ART and feminizing hormones on the part of both physicians and trans WLWH is a barrier to uptake of ART for this population (Melendez & Pinto, 2009; Sevelius et al., 2014a).

Gender-affirming medical/surgical care is a priority for trans WLWH, often above HIV care (Schilder et al., 2001; Schilder et al., 1998; Sevelius et al., 2014a). As such, integration of gender-affirming care and HIV care has been described as a best practice by leading US trans healthcare organizations (e.g., Fenway health) (Reisner et al., 2016) and is an integral component of demonstration projects seeking to increase HIV care engagement among trans women of colour (Rebchook et al., 2017). Two studies quantitatively (Lacombe-Duncan, 2018) and qualitatively (Munro et al., 2017) described factors associated with HIV care engagement among trans WLWH in a Canadian context. First, in Chapter 2 of this dissertation, Lacombe-Duncan (2018) explored factors associated with HIV care access among trans WLWH participating in the

Canadian HIV Women's Sexual and Reproductive Health Cohort Study (n=50), including transspecific factors at individual (e.g., gender expression), interpersonal (e.g., perceived knowledge of HIV physician about trans care) and structural levels (e.g., trans stigma). Trans stigma was negatively associated with multiple types of HIV care engagement, specifically receiving any HIV care in the past year and currently using ART. Trans-specific HIV physician factors (e.g., HIV physician aware of trans identity) were not associated with access to HIV care. The author surmised that this may be due to the small sample size and suggested future qualitative studies that further explore gender-affirming care experiences of trans WLWH within the context of the patient-HIV provider relationship (Lacombe-Duncan, 2018). Second, through their interviews with trans WLWH (n=14) and service providers (n=10), Munro and colleagues (2017) sought to describe barriers to HIV care engagement among trans WLWH, identifying a number of barriers at interpersonal (e.g., trans stigma) and institutional (e.g., lack of knowledge about trans health) levels (Munro et al., 2017). However, there is an absence of information about the transition experiences of trans WLWH and their access to gender-affirming care, including barriers and facilitators that may be unique to being a person living with HIV, as well as their engagement with HIV care providers regarding trans health issues. By centering transition experiences and gender-affirming care access among trans WLWH as the focal point of a mixed-methods analysis, this study may provide important information about barriers in access to genderaffirming care for trans WLWH and help guide the successful provision of integrated or coordinated gender-affirming and HIV care, and ultimately, have implications for HIV care engagement for this population.

Gaps in the Literature and Research Questions

Scant research has described the transition experiences and gender-affirming care access of trans WLWH, particularly in a Canadian context. This study may not only provide new Canada-specific information, but may also provide an analysis of barriers to accessing genderaffirming care within a system of universal healthcare access. Moreover, qualitative studies have often overlooked how other types of stigma, beyond trans stigma, may influence access to gender-affirming and HIV care for this population. Mixed methods research may optimally provide much needed quantitative data, while also providing the in-depth context of complex transition processes and interpersonal relationships between trans WLWH and care providers (Creswell & Plano Clark, 2011). To my knowledge, is the first mixed-methods research on HIV and gender-affirming medical and surgical care for trans WLWH in Canada. This exploratory mixed methods study aims to answer the following questions: 1) What are the transition experiences of trans WLWH participating in a Canadian cohort study of WLWH (quantitative and qualitative)?; 2) Among a sample of trans WLWH in Canada, what are the barriers and facilitators to reporting medically/surgically transitioning (quantitative) and what do women perceive as barriers and facilitators to accessing gender-affirming care (qualitative)?; 3) What are the experiences of trans WLWH accessing gender-affirming care from HIV care providers (quantitative and qualitative)?; and, 4) To what extent do quantitative results on transition and gender-affirming care experiences for trans WLWH converge, diverge, and/or expand upon the qualitative (convergent mixed methods)?

3.2.2 Methods

Study Design

Mixed methods methodology involves the rigorous collection and analysis of both quantitative and qualitative data, as well as the integration of the two forms of data, allowing for converging, comparing, validating, and corroborating of results (Creswell & Plano Clark, 2011). Consistent with a convergent parallel mixed methods design, quantitative and qualitative data in this study were collected to address the same research questions, analyzed separately, and then merged (Creswell & Plano Clark, 2011).

Quantitative Study Sample and Data Collection

The quantitative portion of this paper utilizes baseline survey data from the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS), collected in 2013-2015 (Loutfy et al., 2017) in Ontario, British Columbia, and Quebec, Canada. The full sample included 1422 WLWH aged 16 years or older who were recruited by trained peer research associates (PRAs) through word-of-mouth (e.g., online) and venue-based sampling (e.g., recruitment from AIDS service organizations and clinics) (Loutfy et al., 2017). PRAs administered a structured questionnaire to participants utilizing an online survey platform (FluidSurveys™), in-person in a confidential setting, or via phone or Skype for some rural residents.

Trans WLWH within CHIWOS were identified by a two-step process. First, in response to the question "What was your biological sex at birth?" participants who selected male or intersex were included and those who selected female, undetermined, don't know, prefer not to answer, or who did not provide a response were excluded. Second, in response to the question: "With respect to your gender, how do you currently identify?" Participants who selected trans

woman as at least one of their gender identities were included in the analyses (n=54). Owing to flawed survey skip logic, those trans women who identified their sex labeled at birth as male and only chose 'woman' as their primary gender identity (and not trans woman) were not prompted to respond to trans-specific questions pertaining to transition and gender-affirming care (n=6), and therefore were excluded from the analysis, resulting in a final sample size of 48 participants.

Ethics approval for CHIWOS was obtained from the respective Research Ethics Boards of Women's College Hospital (Ontario), Simon Fraser University and the University of British Columbia/Providence Health (British Columbia), and McGill University Health Centre (Quebec). Ethics approval for the sub-analysis was also received from the University of Toronto (Appendix B).

Quantitative Measures

Sociodemographic and Clinical Characteristics

Socio-demographic factors included: province (Ontario, British Columbia, Quebec), age (continuous), education (less than high school, high school or higher), sexual orientation (sexual minority, heterosexual), annual personal income (CAD; < \$20 000, ≥ \$20 000), source of income (paid job, other sources of income [social assistance, including pension and EI/WCBI, and sex work, combined to represent more precarious forms of employment that do not include comprehensive health insurance]), legal relationship status (single/separated/divorced/widowed, married/common law/in a relationship), and ethnicity.

Clinical factors included years living with HIV, measured continuously by calculating the time between date of diagnosis and date of baseline survey completion, and overall physical health-related quality of life (HR-QoL), measured using the 6-item physical health component of the SF-12 (Ware, Kosinski, & Keller, 1996) (range: 15.75 to 68.43, Cronbach's alpha = 0.71,

higher scores indicative of better physical health). Score ranges and Cronbach's alpha presented are for the current analysis (n=48 participants). The internal consistency of all scaled measures was assessed using Cronbach's alpha (Cronbach, 1951; Tavakol & Dennick, 2011). More details on scoring of scaled measures, missing data, and measure adaptation can be found in Appendix J).

Transition Experience

Participants were asked "which of the following applies to your current situation regarding hormones and/or surgery", with response options: "I have fully medically/surgically transitioned", "I am in the process of medically/surgically transitioning", "I am planning to transition, but have not begun", "I am not planning to medically/surgically transition", "The concept of 'transitioning' does not apply to me", "I am not sure whether I am going to medically transition", "Other", "Don't know", "Not sure" and "Prefer not to answer", summarized as fully transitioned, planning to transition/in the process of transitioning, not planning to transition/the concept of transition does not apply to me, and other/don't know/not sure/prefer not to answer (Trans PULSE, 2009). Transition was self-defined by participants, and may include a range of medical/surgical services which support the alignment of one's sex characteristics and gender identity (Crosby et al., 2016). Participants were also asked if they were currently taking transrelated hormones (yes, no). Those who had ever accessed HIV care and reported taking transrelated hormones were asked if they had informed their HIV doctor that they are taking hormones (yes/no) and those who reported taking hormones and informing their HIV physician of hormone use, were asked whether their doctor had discussed possible DDIs between HIV ART and hormones.

Factors Associated with Transition Experience

In addition to the sociodemographic (annual personal income, source of income) and clinical characteristics (physical HR-QoL), housing security, HIV-related stigma, barriers to access to care, and trans stigma were explored in association with transition experience. Housing security was dichotomized as unstable (self-contained room, transition house, halfway house, safe house, couch surfing, outdoors on street, parks, or in a car) versus stable (apartment (own/rent) or a house (own/rent). HIV-related stigma was measured using the 10-item HIV Stigma Scale (Berger, Ferrans, & Lashley, 2001; Wright, Naar-King, Lam, Templin, & Frey, 2007) (range: 11 to 40, Cronbach's alpha = 0.84, higher scores indicating higher HIV-related stigma). Barriers to access to care were measured using the Barriers to Care (BACS) scale, a 12item scale designed specifically to address barriers to access to medical and social care for people living with HIV, including geographic, medical, psychological, stigma, and resource concerns (range: 12 to 48; Cronbach's alpha = 0.94), with a higher score indicating barriers being more problematic (Heckman et al., 1998). While asked specifically in relation to access to HIV care, many of the barriers (e.g., geographic) also pose barriers to gender-affirming care access. Trans stigma was measured using a 9-item scale shortened from an 11-item measure of transphobia (Longman Marcellin, Bauer, & Scheim, 2013). The scale was summarized as a total score (range: 4 to 27; Cronbach's alpha = 0.89, higher score indicating more trans stigma). Experiences Accessing Gender-affirming Care from HIV Physicians

Questions were included that assessed the perceived quality of gender-affirming care received HIV from care providers, in addition to characteristics of the patient-provider relationship between trans WLWH and HIV care providers. Perceived knowledge of a woman's HIV physician about trans health issues, comfort discussing trans healthcare needs with one's HIV physician, and trust in doctor-patient confidentiality of one's HIV physician with respect to

trans health issues were dichotomized as knowledgeable (very/somewhat knowledgeable) versus not knowledgeable (not very/not at all knowledgeable/HIV physician has never talked to me about trans health), comfortable (very comfortable/comfortable) versus uncomfortable (uncomfortable/very uncomfortable), and yes (completely/mostly) versus no (not much/not at all), respectively. Transphobia experienced in HIV care was measured by asking participants about the occurrence of ten transphobic experiences with HIV care providers (e.g., physician refused to see you or ended your care because you were trans), with additional response options of other (to capture transphobic experiences other than the 10 included), don't know, and prefer not to answer. Responses were dichotomized as any experiences of transphobia in HIV care, inclusive of those who reported any of the 10 acts of discrimination or other, versus none reported (Trans PULSE, 2009).

Qualitative Study Sample and Data Collection

A sub-set of trans WLWH (n=11) who completed the CHIWOS survey participated in an open-ended, semi-structured, individual interview focused on their experiences accessing different types of health care (HIV-related, gender-affirming). Participants were purposively chosen to include those with various experiences with respect to healthcare access (more engaged, less engaged) and diverse identities/experiences, consistent with an intersectional approach.

A script was utilized by PRAs and/or the local CHIWOS coordinator to recruit participants (Appendix C). Participants were aware of the purpose of the research as well characteristics of the interviewer (e.g., doctoral student, social work). For those who asked, ALD elaborated on her role as a trans ally and motivations for pursuing the research. For 10 of 11 interviews, following an indication of interest and permission, participant contact information

was passed onto the primary investigator (ALD), a PhD-trained researcher and MSW-trained clinician, to set-up and conduct an individual, semi-structured interview. Only 1 participant contacted did not respond to a request for an interview. For 1 of 11 interviews, the interview was both set-up and conducted by a PRA trained in qualitative data collection and research ethics who had a pre-existing relationship with Indigenous trans WLWH, a participant group experiencing a negative history, including exploitation, from researchers.

The interviews (25 to 100 minutes) were conducted in private settings to maximize participant comfort (n=5 in the participants home, n=2 by phone, n=4 in community-based or hospital settings). A semi-structured interview guide was developed iteratively in partnership with the CHIWOS Trans Community Advisory Board (CAB), a group of trans people and cisgender (cis) allies from the CHIWOS team interested in trans health. The interview guide was informed by a social ecological approach, which considers the interdependence of people and their environment (Bronfenbrenner, 1979; Gitterman & Germain, 2008). Specifically, this meant that the questions sought to explore barriers and facilitators to healthcare access at intrapersonal, interpersonal, and structural levels. The questions in the interview guide were further informed by an intersectional theoretical approach, which considers how multiple forms of oppression and privilege intersect to impact the daily lives of people (Bowleg, 2008, 2012; Crenshaw, 1989; Hill Collins, 2000; McCall, 2005). Thus, trans WLWH were asked about how their healthcare experiences were shaped by their multiple positionalities, such as being a trans person, being a person living with HIV, and other experiences (e.g., sex work) and identities (e.g., race/ethnicity) as applicable. The interview guide was pilot-tested and refined as appropriate (Appendix G). Following each interview, the participant was offered a comprehensive guide to local resources, all identified as trans-friendly by trans community members (Appendix E).

Interviews were recorded and transcribed verbatim (n=5 by ALD; n=6 by a transcriptionist). The quality of each transcript was assessed by listening to the audio files while simultaneously checking the transcripts. Few discrepancies were noted, none of which impacted meaning. Notes were also taken before and after each interview, and later integrated during the analysis phase. The Consolidated Criteria for Reporting Qualitative Research (COREQ) 32-item Checklist (Tong, Sainsbury, & Craig, 2007) was used to ensure adequate reporting of qualitative data collection and analysis (Appendix K1).

Quantitative Data Analysis

Sociodemographic and clinical characteristics of the quantitative sample (n=48) were described using descriptive (proportions, means) and inferential statistics (associated 95% confidence intervals [CIs]). Proportions and 95% CIs were also computed for transition experience, hormone use, and for each of the six variables measuring experiences accessing gender-affirming care from HIV physicians. CIs (95%) for proportions and means were calculated using the bootstrap variance estimation technique using a set of 500 replicates (Rust & Rao, 1996).

Bivariate analyses were conducted to test for statistically significant associations (p<0.05) of sociodemographic (annual personal income, source of income), clinical (physical HR-QoL), and structural factors (housing security, HIV-related stigma, barriers to access to care, trans stigma) with transition experience. These seven factors were chosen based on identification of potential importance through literature review or through their discussion in qualitative findings. Transition experience was dichotomized into "being in the process of or planning to medically/surgically transition" versus "fully medically/surgically transitioning" with other response options excluded. In this way, the dichotomized options were a proxy for gender-

affirming care access among those who desired to medically/surgically transition and who have or have not been able to fully do so. Chi-square or Fischer's exact tests (in the presence of cell sizes < 5) were used to test for significant associations between proportions for categorical factors. Proportions, proportion differences, 95% CIs for the difference, and p values are reported. T-tests were used to compare the effect of transition experience on continuous factors. Mean, standard deviation (SD), mean difference, standard error, and p values are reported. Analyses were conducted using SPSS Version 24 (Armonk, NY: IBM Corp.).

Qualitative Data Analysis

Framework analysis (FA), a qualitative content analysis (QCA) method, was used to analyze the qualitative data (Ritchie & Spencer, 1994). QCA allows for the interpretation of the content of textual data through a systematic process of coding and identifying themes (Hsieh & Shannon, 2005). FA is a flexible approach (Gale, Heath, Cameron, Rashid, & Redwood, 2013), combining inductive (open) and deductive (framework) coding (Bradley, Curry, & Devers, 2007). A series of six steps were taken by the primary investigator (ALD) (Ritchie & Spencer, 1994). Step one began by familiarization with the data as a whole, involving reading and rereading each transcript and making notes of key ideas. Second, development of the analytic framework began by line-by-line open coding of three interviews (one from each province), an *inductive* coding approach (Kondracki, Wellman, & Amundson, 2002).

Third, continued developed of the analytic framework involved: returning to the original research questions and interview guide to expand the code list and combining codes into a preliminary analytic framework organized thematically (e.g., theme: transition experiences; subtheme: social transition); developing a code book with descriptions of each code; testing the analytic framework on three more interviews; and, revising the analytic framework to account

for new insights. Data were organized according to four overarching categories, three of which were chosen to match available quantitative data: 1) transition experiences; 2) barriers and facilitators to access to gender-affirming care; and, 3) the interpersonal relationship between trans WLWH and HIV care providers. A qualitative only category was summarized (recommendations) (Appendix K2. Final Coding Framework, Paper 2).

Fourth, indexing, defined as a systematic process of applying the analytic framework to textual data (line-by-line coding, using a *deductive* approach), was conducted with each of the 11 transcripts in full, facilitated by the use of NVivo 11.4.0 (QSR International Pty Ltd., 2012). The fifth step involved charting data into framework matrices, defined as a table with numerous cells that summarize the data by codes (columns) and participants (rows) (Appendix K3. Charting of Themes and Sub-themes, Paper 2). Charting allowed for both data reduction (summarizing participant perspectives by theme/code) as well as to keep each participant's narrative intact through a summary of their personal story across themes. Finally, after all data had been indexed and charted according to the overarching categories, mapping and interpretation of the data as a whole began, the analytic phase of FA. Mapping and interpretation involved reviewing the charting and writing a summary description of the data, noting trends and negative cases within themes and sub-themes, as well as trends across participants. Finally, the interpretation was abstracted through the integration of noted impressions, defining and further describing concepts, searching for patterns and associations between themes, and considering explanations for the findings (Thorarinsdottir & Kristjansson, 2014). For example, pressure to transition was described as (trans) gender policing (Box 1. Overarching Qualitative Themes and Sub-themes).

Peer debriefing was utilized to increase trustworthiness and authenticity (Lincoln & Guba, 1985). Rigor was also established through documentation for auditing purposes (Drisko,

1997; Padgett, 2008) as well as through the charting process, which allowed for the dissertation committee to also review and interpret the summarized data (Gale et al., 2013). While transcripts and notes were not returned to individual interview participants (traditional member checking) due to feasibility (time and funding limitations), the trans members of the CHIWOS Trans CAB provided debriefing and interpretation of findings, a type of member checking involving data interpretation by people with a shared experience to the participants (Barusch, Gringeri, & George, 2011). Additionally, ALD presented preliminary work at trans health and HIV conferences, integrating audience perspectives.

Box 1. Overarching Qualitative Themes and Sub-themes

Transition experiences Highly individualized Self-determination versus (trans) gender policing • Shaped by privilege (class, passing, citizenship) Importance for mental health and wellbeing Concerns about drug-drug interactions Barriers and facilitators to access to gender-affirming care Influence Physical and mental health of HIV Stigma and discrimination • Lack of finances/insurance coverage • Geography/availability of gender-affirming care providers Bureaucratic processes Interpersonal relationship between trans WLWH and HIV care providers Champions for healthcare compassion Recommendations Structure healthcare to maximize choices for trans WLWH Promote research and education to increase provider competency

Mixed Methods Data Analysis

Mixed methods analysis involves the integration of the two forms of data (Creswell & Plano Clark, 2011), allowing for an interpretation greater than individual qualitative and qualitative parts (Fetters & Freshwater, 2015; Guetterman, Fetters, & Creswell, 2015). Mixed methods analysis included: specifying dimensions by which to compare the results from quantitative and qualitative data (e.g., four overarching themes); specifying which information would be compared across dimensions (e.g., comparing reported transition experience [quantitative] with participants' narratives pertaining to transition across social, legal, and medical domains [qualitative]); completing refined analyses to produce comparison information (e.g., analyzing factors associated with transition experience consistent with qualitative codes, such as source of income and HIV stigma); representing comparisons through a combination of written description of quantitative and qualitative findings (statistics-by-themes) and/or visually representing the data charts (side-by-side comparisons/joint displays) and considering how results converge, diverge, or expand understanding (Creswell & Plano Clark, 2011).

3.2.3 Results

Sociodemographic and Clinical Characteristics of Quantitative and Qualitative Study Participants

The quantitative sample (n=48) was representative of all three CHIWOS provinces, including Ontario (52.1% [n=25/48]), British Columbia (18.8% [n=9/48]), and Quebec (29.2% [n=14/48]) (Table 1). Participants ranged in age from 24 to 71 years, with a mean age of 41.6 years. The majority of participants (93.6% [n=44/47]) reported a personal income of less than \$20 000 CAD per year, which is considered below the poverty line in Canada (Statistics Canada,

2017). The highest proportions of participants were white (37.5% [n=18/48]) or Indigenous (33.3% [n=16/48]) followed by Latina (12.5% [n=6/48]), Black/African/Caribbean (8.3% [n=4/48]), Arab (4.2% [n=2/48]) and one participant each (2.1%) reporting West Asian and Multiple races/multiracial ethnicities. Participants reported living with HIV for a mean of 11.2 years.

The qualitative sub-sample similarly included trans WLWH from each of the three included provinces (n=5 Toronto, Ontario; n=3 Vancouver, British Columbia; n=3 Montreal, Quebec. Participants ranged in age from their 20s to 60s (n=1 20s, n=4 30s, n=3 40s, n=2 50s, and n=1 60s). Fewer than half were white (n=4), with the remaining participants identifying as Indigenous (n=3), Latina (n=2), Black/African/Caribbean (n=1), and multiple races/multiracial (n=1). The majority of women had been living with HIV for over 14 years (n=8), with a few living with HIV for between 6 and 14 years (n=3).

Table 1 Sociodemographic and Clinical Characteristics of the Full Quantitative Sample (n=48)

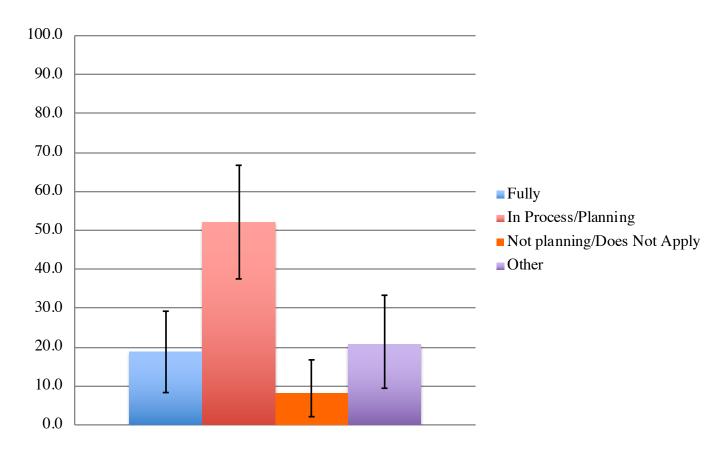
	Mean or %	95% CIab	Missing
Sociodemographic characteristics			<u> </u>
Province			
Ontario	52.1	27.1, 66.7	
British Columbia	18.8	8.6, 29.5	
Quebec	29.2	16.9, 42.4	
Age (years) (mean, SD)	41.6	38.9, 44.3	
Education			
Less than high school	16.7	6.2, 27.9	
High school or higher	83.3	72.1, 93.8	
Sexual orientation (n=46)		,	2
Sexual minority	43.5	29.2, 56.8	
Heterosexual	56.5	43.2, 70.8	
Annual personal income (CAD ^a) (n=47)		,	1
< \$20 000	93.6	85.4, 100.0	
≥ \$20 000	6.4	0.0, 14.6	
Source of income		,	
Paid job	12.5	4.0, 22.9	
Other sources of income	87.5	77.1, 96.0	
Relationship status		•	
Married/common law/in a			
relationship	22.9	11.9, 34.8	
Single/separated/divorced/		•	
widowed	77.1	65.2, 88.1	
Ethnicity		•	
White	37.5	23.7, 51.1	
Black/African/Caribbean	8.3	2.0, 17.0	
Indigenous	33.3		
Latina	12.5		
Arab	4.2		
West Asian	2.1	0.0, 8.0	
Multiple races/multiracial	2.1	0.0, 8.0	
Clinical characteristics		,	
Years living with HIV (mean, SD) (n=47)	11.2	9.2, 13.4	1
Physical HR-QoL ^a (mean, SD) (n=47)	47.0	43.1, 49.8	1

^{*}CI=confidence interval; CAD=Canadian dollars; HR-QoL=health-related quality of life.

^{•95%} confidence intervals for means and proportions were calculated using the bootstrap variance estimation technique using a set of 500 replicates.

Transition Experiences

Participants (n=48) endorsed a range of transition experiences (Figure 1). The largest proportion reported being in the process of medically/surgically transitioning or planning to medically/surgically transition (52.1% [n=25/48], 95% CI: 37.5%-66.7%). Approximately one-fifth of participants reported fully medically/surgically transitioning (18.8% [n=9/48], 95% CI: 8.3-29.2%). A minority of participants were not planning to medically/surgically transition or transition did not apply (8.3% [n=4/48], 95% CI: 2.1%-16.7%). Most participants reported currently taking hormones (68.8% [n=33/48], 95% CI: 56.3%-81.3%); however, among those who had informed their HIV physician about their hormone use (96.3% [n=26/27], 95% CI: 87.2%-100.0%), only two-thirds reported that their HIV physician had discussed potential DDIs between ART and hormones (69.2% [n=18/26], 95% CI: 51.7%-88.1%).



Note. 95% confidence intervals for proportions were calculated using the bootstrap variance estimation technique using a set of 500 replicates. "Other" category includes response options: other, don't know, not sure, and prefer not to answer.

Figure 1. Transition Experiences Among A Sample of Trans WLWH (n=48)

Qualitative results demonstrated highly individualized transition experiences across social, legal and medical domains, and a range of desires with respect to transition and access to gender-affirming care (Table 2). Almost every participant (n=9/11) described her experience of socially transitioning, anywhere from childhood: "...when I was a kid" (Participant 3), to adolescence: "...when I was in public school or in high school" (Participant 6), and into young adulthood. Despite that most participants described socially transitioning, few participants described having updated all legal identity documentation: two participants described having changed all legal documentation (health card, passport, driver's license); one participant described changing some, but not all documentation. As one participant described: "I still don't have my legal ID. They changed my health card but I'm still having problems with the passport...some people get it and some don't and it all depends who you get" (Participant 3, 60s). Participant 3's quote reflects the structural barrier of bureaucracy in accessing legal transition. Participant 11 similarly experienced structural barriers to accessing legal transition due to a precarious immigration status. In the absence of updated documentation, participants experienced pervasive misgendering¹⁰ in healthcare, and challenges (both anticipated and experienced) with international travel and police interactions, two experiences that are heavily reliant on legal identity documentation. As one participant said, "... Sometimes when I go to a new place, they call me by my name. I go into the office. But as soon as I'm in the office some of them refer to me as Sir" (Participant 4, 30s).

The desire and the ability to access medical and surgical transition was shaped by multiple types of privilege, including class privilege and well as 'passing privilege', defined as the social advantage of being perceived by others to be cisgender (Mizock & Hopwood, 2018).

-

¹⁰ *Misgendering* refers to the misclassification of a person's gender identity, including examples such as using a gender pronoun that is inconsistent with the person's stated pronoun (Ansara & Hegarty, 2014).

Passing privilege was for some perceived to be possible without medical intervention, for others possible with medical intervention, for others not possible, and for a minority, not important. Half of participants had had one or more gender-affirming medical procedures, including breast augmentation, vaginoplasty, filler/Botox, or laser hair removal. The other half had not accessed any gender-affirming medical procedures, for various reasons, including, for one participant, a lack of desire, and for the remainder, experiencing barriers to access, concerns about side effects of hormones, and concerns about the potential to experience complications with genderaffirming surgery, particularly in light of others' negative experiences.

Women exhibited self-determination, making their own personalized decisions about what would work best for them in terms of their transition, based on their perspectives on gender diversity, their satisfaction with their gender expression, and their cultural identities. For example, participant 8 (30s) reflected on her decision not to access gender-affirming surgery because of her understanding of two-spirit identity": "But I want to keep my body parts, I don't believe in altering it. And I believe it's a special thing that our great god has given us to be two spirits in one body whether you're a girl with a man or you're a man with a girl, or a female."

These personal decisions were not made easily, in light of external pressures from the trans community, medical professionals, and society more broadly to conform to a particular image of femininity and to a particular transition experience. The majority of participants experienced gender policing, defined as monitoring the conformity of others to traditional gender norms (Mizock & Hopwood, 2016), as well as the requirement to conform to a certain trans experience, perpetuated predominantly by other trans people. As participant 4 (30s) described,

"...People were asking me everywhere are you going to transition, are you going to do the whole

[&]quot;Two-spirit is an identity that emerged in 1990 to describe third or fourth gender people in Indigenous cultures (e.g., First Nations, Metis, Inuit, American Indian, and Alaskan Native) across North America (Robinson, 2017).

transition? No...I'm fine like this. Aren't I okay like that? I remember asking a lot of friends and people that. Like don't you feel comfortable with me being like that?"

Again emphasizing individuality, decisions about what types of access were most important were personalized. For example, to some, feminizing hormone access was vital, described as necessary to survival. To others, breast augmentation was the most important procedure they wished to access, and to others, vaginoplasty was held as an ultimate aspiration. However, access to some or multiple types of transition were important for health and wellbeing, and promoted access to non-discriminatory healthcare encounters and public safety, whereas denial of access to gender-affirming care was associated with emotional distress and suicidality. For example, participant 3 (60s) described how she "burst into tears" when her breast augmentation surgery was suddenly cancelled. Participant 11 (40s) responded "I'd rather die" after it was suggested she stop taking feminizing hormones due to having experienced a life-threatening side effect.

Women who concurrently took ART and hormones had significant concerns about DDIs. Some participants reported adverse events. As participant 4 (30s) described: "...I started feeling sick...and I wasn't sure why. But I was talking to my doctor and he said because I have [an antiretroviral] booster.... So it would almost like double [the hormones]".

Table 2
Transition Experiences Qualitative Findings

Themes	Quote		
Highly individualized	" I did have the opportunity to go and get my top surgery done and I refused and I turned them down cause I was doing it all for the wrong reasons. I didn't want to go through the full change I just wanted my top surgery" (Participant 5, 30s)		
	"I think I dreamed about it last night that I was going to do it anyway. Because that's what I've been always dreaming about. Be a complete woman physically and mentally." (Participant 11, 40s)		
Self-determination versus trans (gender) policing	"I don't need it. Because that no define me. Who I am. You know? It's my personality. It's who I am." (Participant 1, 50s)		
	"But I feel out of place there with the other trans because they all look at me I get the cold shoulders from a lot of them now because they're all looking at me just saying, oh, you're not trans because you're not wearing a wig." (Participant 8, 30s)		
	"Because some doctors say, why don't you want the surgery? Psychologists do that sometimes, they push to the surgery." (Participant 9, 30s)		
Shaped by privilege (class, passing)	"And I mean I don't think I ever will go through with that unless I like win a million dollars, then hell yes." (Participant 5, 30s)		
	"So, if one is not passible, then society can be quite cruel And I've been through it all but do you know what? I just kind of dress down now and everything and that's what's been keeping me safe." (Participant 6, 50s)		
	"I know some had the surgery done, the papers changed, but they look so the people misgender them. That's what I said to trans always. It's not because you will have, sorry to be rude, a pussy, that will make you call Mrs, by people. They don't see your pussy." (Participant 9, 30s)		
Importance for mental health	"I had a stroke one of the neurologists told me, oh, she came to me and she approached me,		

and well-being

telling me, you might probably have to stop your hormone therapy. And I went like, you're crazy, if you stop my hormones I'd rather die. They put me on a watch surveillance for 24 hours because of that." (Participant 11, 40s)

"I just burst into tears. She [my doctor] takes me in her office and she's what's going on. I said you know what, I waited too long to have them done, I'm not having them [breast implants] out." (Participant 3, 60s)

Concerns about drug-drug interactions between ART and feminizing hormones

"... In the past year maybe even a bit less than a year have I changed ARVs [antiretroviral therapy] that are a bit more complimenting to HRT [hormone replacement therapy]. 'Cause before my medications negatively impacted the effects of HRT.... Because I noticed a change as soon as I changed my meds..... So for me I feel a lot of the progress I would have had from HRT, that ship has sailed..... And nobody talked about it." (Participant 7, 40s)

"It is a thin line that you have to walk with balancing those two.... it kind of scares me because I know there are a lot of people who can't get the HRTs [hormone replacement therapy] covered and they wouldn't be aware of the danger...." (Participant 10, 20s)

Barriers and Facilitators to Gender-affirming Care Access

Compared to the mean physical HR-QoL score for those who reported fully medically/surgically transitioning (Mean (M): 39.2, SD: 14.0) the mean physical HR-QoL for those in the process of or planning to medically/surgically transition (M: 52.4, SD: 8.0) was statistically significantly higher (Mean difference (MD): 13.2, standard error (SE): 3.8, p=0.002) (Table 3). Considering the qualitative results, whereby participants described good HIV health as a pre-requisite for accessing gender-affirming surgery, it is plausible that trans WLWH who are in the process of or planning to transition are highly motivated to maintain good HIV clinical health.

Even though HR-QOL was higher, HIV-related stigma, economic insecurity, and barriers to care were also higher for this group. The mean score of HIV-related stigma for those in the process of or planning to medically/surgically transition (M: 25.2, SD: 6.7) was statistically significantly higher (MD: 7.2, SE: 2.5, p=0.008) than the mean score of HIV-related stigma for those who reported fully medically/surgically transitioning (M: 18.0, SD: 4.5). Although not statistically significant, quantitative results suggest that those who have fully medically/surgically transitioned may experience lower trans stigma.

Qualitative results similarly showed that HIV stigma posed a formidable barrier to access to gender-affirming medical procedures (e.g., vaginoplasty, laser hair removal, breast augmentation). Some participants described directly being denied access to gender-affirming surgeries due to their HIV status, which impacted their mental health. These denials were felt as particularly devastating given the many structural barriers that trans WLWH may navigate in attempting to access gender-affirming care. As one participant described:

"It took me three and a half hours to get out there [to my appointment] with the snow banks... I had letters from my HIV doc, had letters from my physician, everything was good to go. She made a date for me to have the surgery... So she called me [back Monday] and she said, "Oh, I've decided I'm not going to do your surgery" (Participant 3, 60s).

HIV stigma was perceived as embedded within institutional policies that permitted the denial of access to gender-affirming surgery, which led to feelings of helplessness. Participant 2 (40s) described, "Well they have a right to do that.. refuse surgery. I wrote letters. I did all that. There's not much I can do about it". While participants were aware of surgeons who would provide care for trans WLWH in the United States and Thailand, these surgeons were out of reach for many reasons (e.g., lack of financial resources, criminal justice history limiting access to border-crossing). Those who were able to access gender-affirming medical procedures described experiencing HIV stigma when interacting with service providers whereby their HIV status was raised as a concern and they were made to feel they posed additional challenges to service providers. For example, participant 9 (30s) described, "No, [they didn't make a big deal], but he just talked about it. We don't need to talk about it. Anyway, you're supposed to sterilize the tools. So, what's the change?".

A few participants also described trans stigma as a barrier in access to gender-affirming medical care from common healthcare settings (e.g., endocrinology). Trans stigma was institutionalized in these care settings through clinical and administrative tools (e.g., sex-specific body silhouettes used in laser hair removal consultations, resulting in patient discomfort;

_

The GRS Montreal website currently states, "Yes, it is possible to have surgery as HIV is not a contraindication to surgery. However, it is important to mention your infection to us and to provide us with the results of your viral load when you want to plan your surgery. Your viral load lab results must be labelled undetectable" (GRS Montreal, 2018).

automated appointment reminder systems which refer to legal identity documentation with sex labelled-at-birth, resulting in misgendering).

Compared to trans women who had fully medically/surgically transitioned, those who were in the process of or planning to medically/surgically transition had a lower prevalence of reporting paid employment (Prevalence difference (PD) -36.4 [95% CI: -65.9, -5.9], p<0.05) and a higher prevalence of unstable housing (PD: 44.0 [95% CI: 9.4, 62.9], p<0.05), indicating greater overall economic instability. Divergent from the quantitative results, in the qualitative findings social assistance emerged as a highly important form of insurance coverage, facilitating access to hormones and gender-affirming surgeries. Lastly, participants further described how experiences of marginalization (e.g. homelessness, precarious immigration status) compounded financial barriers to access to care. For example, participant 1 had her hormones stolen in the shelter system, "And I had to pay again. Oh that was horrible", and participant 11 was unable to access gender-affirming surgery due to precarious immigration status.

The mean score of barriers to access to care for those in the process of or planning to medically/surgically transition (M: 26.5, SD: 11.3) was also statistically significantly higher compared to those who reported fully medically/surgically transitioning (M: 15.6, SD: 4.3; MD: 10.9, SE: 2.8, p<0.001). Trans WLWH highlighted bureaucratic processes as a salient barrier to their access of medical and legal transition. Geographic location still influenced access to gender-affirming care among trans WLWH, despite that all participants were located in large urban centres in Canada. For example, participants described how locations of care availability (e.g., downtown versus outside of downtown, within a specific province versus outside of a specific province) influenced access.

Table 3
Barriers and Facilitators in Access to Gender-Affirming Care Joint Display

	Quantitative					Qualitative	Merged
Factor	Fully medically/ surgically transitioned (n=9) N (%) or Mean (SD ₁)	In the process of/planning to medically/ surgically transition (n=25) N (%) or Mean (SD)	Proportion Difference (95% CI·) or Mean Difference (Standard Error)	p value	Theme(s)	Quotations	Outcomes
Physical HR-QoL ^b (n=37)**	39.2 (14.0)	52.4 (8.0)	13.2 (3.8)	0.002	Physical and mental health • Good HIV physical health a prerequisite for accessing genderaffirming surgery	"Some people I know who are HIV and they had the surgery and they don't have trouble. They want their situation of CD4 to be good, because the surgery could make people die." (Participant 11, 40s)	Converge & Expand
HIV-related stigma (n=36)*	18.0 (4.5)	25.2 (6.7)	7.2 (2.5)	0.008	Stigma and discrimination • HIV stigma a barrier to access to genderaffirming surgeries	"Actually they didn't provide services to HIV people for a decade or moreit was 7 years of floundering in the system. Wondering when, when is this going to happen" (Participant 7, 40s)	Converge & Expand

Trans stigma (n=32)	15.9 (6.9)	19.9 (7.0)	4.0 (2.9)	0.177	Stigma and discrimination • Trans stigma experienced in settings, but not a barrier to access to gender-affirming care	" They [the endocrinologist] called me to remind me the appointment, right? And the machine that called me called me by Mr." (Participant 11, 40s)	Converge & Expand
Annual personal income (CAD) (< \$20 000/year) (n=37)	6 (75.0)	24 (96.0)	21.0 (-2.7, 55.2)	0.139	Lack of finances/ insurance coverage • Women find ways to pay • Social	"I was 11 years living on the street and prostituting myself [All the] years I lived on the street. I paid for my pills. Always."	Diverge & Expand
Source of income (Paid employment) (n=38)*	4 (44.4)	2 (8.0)	-36.4 (-65.9, -5.9)	0.031	assistance a mechanism to gain access to insurance coverage	"If I need something, I have like \$30,000 of credit card I could use.	
Housing security (Unstable) (n=38)*	0 (0.0)	11 (44.0)	44.0 (9.4, 62.9)	0.017		So, if I had problems with my breasts, I will have the credit card to help me." (Participant 9)	
Barriers to access to care (n=36)*	15.6 (4.3)	26.5 (11.3)	10.9 (2.8)	< 0.001	Geography/ availability of gender-affirming care providers • Downtown	"Living in [another city] I knew it [genderaffirming surgery] was like a two year wait list". (Participant 10,	Converge & Expand

increased	20s)
access	
	"And their evaluation
Bureaucratic	of me was you'll never
Processes	live in society as a
 Barrier to 	woman, you'll never
access to legal	function as woman, so
and medical	don't even try it."
transition in	(Participant 3, 60s)
particular	

CI=confidence interval; SD=standard deviation; HR-QoL=Health-related quality of life.
Proportion difference and mean difference calculated by subtracting in the process of or planning to medically/surgically transition from fully medically/surgically transitioned.

Chi-square or Fischer's exact tests (in the presence of cell sizes < 5) were used to examine significant associations between proportions. T-tests were used to examine significant associations between means.

Interpersonal Relationship Between Trans WLWH and HIV Care Providers

Both quantitative and qualitative results showed predominantly positive relationships between trans WLWH and HIV care providers. Quantitatively, most participants reported: perceiving their HIV physicians to be very or somewhat knowledgeable about trans health issues (69.4% [n=25/36], 95% CI: 52.9%-83.3%), being very comfortable or comfortable discussing trans healthcare needs with their HIV physician (85.7% [n=30/35], 95% CI: 72.2%-94.6%), being completely/mostly trusting of their HIV physician with regards to doctor-patient confidentiality in reference to trans-related care (94.1% [n=32/36], 95% CI: 86.1%-100.0%), and never experiencing transphobia in HIV care (80.0% [n=32/40], 95% CI: 67.5%-91.2%) settings.

Qualitative results show that HIV physicians are champions for healthcare compassion. Women talked about their providers displaying non-judgment through supporting them in difficult times in their lives. As one woman said, "Even being on the street he always cared about me. Even when I was in rehab... Even in jail," which made her "adore him" and allowed her to easily access care from him, stating that when, "Something happen in my body. I run to him" (Participant 1, 50s). Others talked about how their HIV physicians would treat them with respect and show them that they cared by expressing a genuine interest in their lives, extending beyond their physical and mental health (e.g., asking about relationships), characterized as "beyond care" (Participant 4, 30s). As such, women's relationships with their HIV physicians were characterized by trust and collaboration. Participants very much valued that physicians supported them in making autonomous decisions, such as choosing not to take ART.

As a result of positive patient-provider relationships, women had a space to access care, even when other settings were considered highly discriminatory: "I won't go to the hospital, I'll go to see my... I could be stabbed, shot, whatever" (Participant 6, 50s). Physicians were able to

identify mental health crises due to positive and long-term relationships they had fostered with participants: "He knows if there's something wrong even when I come in and there's nothing wrong he can tell there's something wrong with me..." (Participant 5, 30s). Physicians were also able to mitigate opportunities for discrimination or rectify/address discriminatory behaviours perpetuated by other care providers towards their patients: "Well she just happens to get her on the phone and she said this [physician name], can you tell me why you would not do my patient's surgery?" (Participant 3, 60s)

Two participants highlighted instances of being misgendered by HIV physicians in public, which they felt to be purposeful and avoidable. Other negative experiences highlighted with HIV care physicians by these two participants included being stereotyped (e.g., portrayed as a sex worker or someone who used substances, and asked invasive questions with respect to those assumed experiences).

"... And after the meeting with him, he arrived to the secretary girl and say give him that about me, talking about me, give him that. She's not supposed to know I am trans. Yeah, the people in the back could hear it too." (Participant 9, 30s)

This purposeful misgendering had the consequence of care avoidance/changing providers, in the case of participant 9 (30s), who said, "Okay, that's the last time I come here", and participant 10 (20s), who experienced verbal harassment to the point that "security had to get involved to stop it and protect" her from another patient who overheard the misgendering.

Table 4
Experiences Accessing Gender-affirming Care from HIV Physicians Joint Display

Quantitati	ive		Qualitative Mo		
	N°	%	Theme(s)	Quotations	Outcomes
Factors		$(95\% \text{ CI}_{a,b})$			
Perceived knowledge about trans health issues (n=36) Very/ somewhat knowledgeable	25	69.4 (52.9, 83.3)	HIV Care Providers are Champions for Healthcare Compassion • Warmth	" she treats me with respect, like. And she's helped me with my cats she's done a lot for me emotionally, physically, that kind of connection" (Participant 2,	Converge & Expand
Not very/ not at all knowledgeable Comfort discussing trans healthcare needs with HIV physician (n=35) Very comfortable/comfortable Uncomfortable/ very uncomfortable	30 5	30.6 (16.7, 47.1) 85.7 (72.2, 94.6) 14.3 (5.4, 27.8)	 Acceptance/ non-judgment Holistic approach Trust Collaboration Increases access to care (directly and indirectly) 	"There are trans doctors where I go though so there's nothing to scratch your head at." (Participant 8, 30s) "He talks to you and gives you options, like I took two drug holidays at one point" (Participant 3, 60s)	
Trust confidentiality with regards to trans care (n=36) Completely/mostly Not much/not at all	32 2	94.1 (86.1, 100.0) 5.9 (0.0, 13.9)		"And I said you guys cannot do anything unless [physician name] approves anything It all has to be approved by my doctor or I will not let you see me I will walk out and I will die." (Participant 5, 30s)	
Transphobia HIV care				-	
(n=40)	0	• • •		"And before he refers me he mention	
Yes^{d}	8	20.0 (8.8, 32.5)		this is a trans woman she has to be treated in that way I know he does it.	
No	32	80.0 (67.5, 91.2)		All the time." (Participant 1, 50s)	

^aCI=confidence interval

^{95%} confidence intervals for proportions were calculated using the bootstrap variance estimation technique using a set of 500 replicates.

•Completed among participants who identified as having ever accessed HIV care and completed the trans module of the survey (n=40); n=40 unless otherwise specified.

^aThese acts included (non mutually-exclusive): being told by one's HIV provider that they don't know enough about trans-related care to provide one care (n=5); being told that one was not really the gender they identified with (n=1); being discouraged from exploring one's gender (n=1); the HIV care provider thinking the gender listed one's ID or forms was a mistake (n=4), and/or other (n=2).

Recommendations

Recommendations included participants' perspectives on improving the structure of healthcare and addressing gaps in research. In particular, participants emphasized that healthcare should be structured to optimize choices for where trans WLWH could seek care. For example, participant 4 (30s) suggested, "Yeah and so now I deal with one doctor.... I find it easier that way". Whereas for participant 3 (60s), "I keep them separate...". As such, participants desired inclusion of trans people in all services as well as the availability of trans-specific services.

Availability of holistic pre- and post-operative gender-affirming surgical care was lacking. A lack of social and biomedical research specific to the needs of trans women, broadly (e.g., healthcare needs of trans women post gender-affirming surgery) and trans WLWH specifically (e.g., potential drug-drug interactions between feminizing hormones and ART), were thought to contribute to increased HIV vulnerability (e.g., through a lack of prevention research) and poor care outcomes: "...We don't have enough things for HIV trans. So, how we could be prevent, how we could know we are vulnerable..." (Participant 9, 30s).

3.2.4 Discussion

This mixed methods study provides a comprehensive picture of transition and gender-affirming care experiences for trans WLWH, highlighting how their experiences are shaped by HIV. Consistent with studies of trans people generally (Lindqvist et al., 2017; White Hughto & Reisner, 2016), findings of this study show that access to gender-affirming healthcare is vital to the health and wellbeing of trans WLWH. Key findings are discussed in relation to the four overarching domains: transition experiences, barriers and facilitators to access to gender-affirming care, interpersonal patient-HIV provider relationships, and recommendations.

The vast majority of trans WLWH in this study did not perceive themselves as having fully completed transition. This finding may be concerning if being "in the process of transitioning" assumes trans WLWH have unmet medical/surgical gender-affirming healthcare needs and considering that most women reported starting transition by young adulthood and were over 40 years old at the time of their involvement in the study. However, the qualitative findings raise questions as to whether participants desired to "fully" transition. Many of the participants found considerable self-love without medical transition, although they recognized that other trans women and society might not accept their decisions. Future quantitative studies could include measures of satisfaction with gender-affirmation to complement questions about transition process (Sevelius, Saberi, & Johnson, 2014b).

Legal transition was not accessed by many trans WLWH in this study. Gender affirmative healthcare should ultimately include provider's respect of preferred versus legal name and proper use of pronouns, irrespective of legal documentation (Cobos & Jones, 2009). Trans WLWH continue to experience misgendering due to lack of updated legal documentation (Logie, James, Tharao, & Loutfy, 2012; Munro et al., 2017; Schilder et al., 1998). As such, gender-affirming medical care must be coupled with legal support to facilitate trans women's access to legal transition and subsequent better treatment. This support may be even more necessary for trans WLWH, many of whom face multiple structural barriers to access of legal transition (e.g., increased economic insecurity).

There were gaps in discussion of DDIs, with approximately one-third of trans WLWH currently taking hormones having not discussed DDIs with their HIV care providers. Contrary to other qualitative studies (e.g., Sevelius et al., 2014), concerns about DDIs did not deter trans WLWH in this sample from concurrently taking hormones and ART. However, consistent with

the literature, trans WLWH had concerns about potential DDIs. This is among the first studies where trans WLWH have described negative side effects from co-administration, such as feeling ill, and more consequentially, perceived negative impact on transition. These findings underscore the imminent need for biomedical research that examines DDIs between ART and hormones. Additionally, approximately one-third of trans WLWH perceived their HIV care providers to be not very or not at all knowledgeable about trans health issues. Taken together, these findings suggest a need for additional training for HIV care providers specific to the needs of trans WLWH.

Most importantly, these findings show how HIV health shapes and HIV stigma disrupts the transition process for trans WLWH. First, trans WLWH had to maintain good HIV clinical health (e.g., a high CD4 count) to be able to access gender-affirming surgeries. Second, trans WLWH who reported fully medically/surgically transitioning had a lower mean score of HIVrelated stigma, relative to those in the process of/planning to medically/surgically transition. It is possible that given the considerable amount of attention HIV has received as an issue affecting trans women, that simply being in transition increases HIV-related stigma. Future analyses comparing HIV-related stigma between cis and trans WLWH in CHIWOS are warranted. However, the qualitative results of this study also suggest the opposite pathway. At a structural level, HIV stigma was perceived to be embedded within institutional practices, resulting in the denial of access to gender-affirming surgeries for trans WLWH. HIV-related stigma also occurred interpersonally between trans WLWH and various providers. HIV-related stigma intersected with trans stigma, whereby women also experienced institutionalized and interpersonal stigma trans accessing gender-affirming medical care. Interestingly, two qualitative studies conducted in Canada highlighted this issue (lack of access to gender affirming surgery

due to HIV status), yet neither referred to the issue explicitly as HIV stigma (Munro et al., 2017; Schilder et al., 1998).

Financial barriers to access to gender-affirming care were compounded for trans WLWH; most participants in this study were living in poverty and reported social assistance as a primary source of income. The proportion of those with incomes below the poverty line was higher than among other community-based samples of trans women (Denson et al., 2017) as well as US population-based data of trans WLWH (Mizuno et al., 2015). Quantitative and qualitative seemingly diverged, with quantitative results showing that paid employment facilitated full transition, whereas many trans WLWH participating in the qualitative component described the importance of social assistance to accessing transition. However, this divergence may be explained by recognizing that even with the existence of insurance coverage, there are many costs associated with medical transition that are usually not covered (e.g., electrolysis; facial feminization surgery) (Coronel Villalobos et al., 2018; GRS Montreal, 2018; Ministry of Health and Long-term Care, 2016; Rainbow Health Ontario, 2018; Trans Care BC, 2018; Trans Health Expansion Partnership, 2017). The travel costs associated with accessing gender-affirming medical and surgical care is also often a substantial burden (Coronel Villalobos et al., 2018). Trans WLWH may also rely on social assistance for ART prescription coverage, thus, positioning them in a double bind –needing to be on social assistance to afford life sustaining ART and hormone therapy, whilst unable then to be able to afford the myriad of genderaffirming medical care not covered. Trans people also often experience employment discrimination based on gender identity or expression. In this way, trans stigma and HIV-related stigma coalesce dangerously to contribute to entrenched poverty of trans WLWH and a lack of access to gender-affirming healthcare. Lack of access to gender-affirming healthcare may then

increase trans and HIV-related stigma, perpetuating a negative cycle of healthcare and systematic exclusion of trans WLWH. The only way to reduce the systematic exclusion of trans WLWH from accessing the full benefits of gender-affirming healthcare is to extend provincial insurance coverage to a comprehensive range of services, including breast augmentation with less strict guidelines, tracheal shave, electrolysis, and facial feminization, among others, as well as providing additional coverage for required assessments, travel, and after-care costs (Coronel Villalobos et al., 2018).

One hopeful finding emerging from this analysis was that most trans WLWH had positive relationships with their HIV healthcare providers, and perceived their HIV physicians to be knowledgeable about trans healthcare needs. Moreover, the interpersonal relationship between trans WLWH and HIV care providers could be characterized as compassionate (Taylor, Hodgson, Gee, & Collins, 2017). HIV care providers demonstrated compassion by attending holistically to the multiple needs of trans WLWH (e.g., medical, emotional), creating meaningful, personal relationships with trans WLWH, and taking action, by either providing gender-affirming care to trans WLWH themselves, or challenging discrimination against trans WLWH. Other qualitative (Munro et al., 2017) and quantitative (Dowshen et al., 2016) studies have similarly documented positive relationships between trans WLWH and HIV care providers.

It should not be overlooked that some trans WLWH did experience trans stigma from some HIV care providers, in the form of purposeful, public misgendering, which resulted in their avoidance of HIV care and risks to their personal safety. Purposeful misgendering is particularly dangerous, as it is most likely to contribute to care avoidance among trans WLWH (Logie et al., 2012). There is need to remind providers that trans people are protected from discrimination under provincial and territorial human rights policies. There are considerable issues with only

some care providers being known as compassionate and competent at providing care for trans WLWH. Apart from contributing to care avoidance, when only some providers are relegated as 'trans experts', trans WLWH have limited options for where they can access care (Munro et al., 2017).

Trans women's recommendations for how care should be structured challenge the predominant discourse that trans WLWH want to access integrated HIV and gender-affirming care (Munro et al., 2017). Participants in this study described different choices they would make (e.g., some preferred integrated care, others preferred separate types of care). This may be influenced by HIV-related stigma, in that trans WLWH do not necessarily want other trans women to know their HIV status (and therefore may not want to access HIV care in transspecific spaces) (Wilson, Arayasirikul, & Johnson, 2013), or may not want to disclose their trans experience to some or all others (and therefore may not want to access trans-specific spaces). These findings suggest that integrating gender-affirming and HIV healthcare may increase HIV care engagement for some, but not all, trans WLWH.

Limitations and Strengths

This is among the first mixed-methods studies that specifically focused on transition experiences and gender-affirming care access for trans WLWH. The important contributions of this manuscript must be understood in light of some limitations across quantitative, qualitative, and mixed methods domains. First, the quantitative sample is small and underpowered to detect significant differences. However, this is the largest known quantitative sample of trans WLWH in Canada and provides important information regarding barriers to accessing care within a context of universal care. Participants who were labeled male sex at birth and responded only "woman" as their primary gender identity and therefore were not prompted to complete

questions on transition and gender-affirming care access (n=6) may be more likely to perceive themselves as having fully completed transition; thus access to gender-affirming medical/surgical care may be better than appears through this analysis. Alternately, if these participants, who may most closely identify with a gender binary, have been unable to access care, it may have more severe implications for their health and well-being. Future studies may draw on more comprehensive measures, such as the Multidimenssional Sex/Gender Measure, to adequately capture trans people in surveys (Bauer, Braimoh, Scheim, & Dharma, 2017). Self-reported data have inherent limitations, such as social desirability bias. Cross-sectional data precludes an analysis of causality; further, bivariate analyses do not allow for the analysis of potential confounders. However, the survey included several factors specific to the experiences of trans WLWH (e.g., trans stigma, patient-provider relationship characteristics between trans WLWH and HIV care providers), and these are underexplored in a Canadian context.

The qualitative component only included trans WLWH living in Canada's urban centres, thus these findings are limited to trans WLWH who live in some of the best-resourced areas of Canada with respect to gender-affirming and HIV care. Notably, only four of the CHIWOS trans WLWH lived outside of these settings, potentially reflecting urban migration of trans people and PLWH. Future studies are necessary to understand the experiences of rural trans WLWH. Some scholars are concerned that the systematic nature of FA may contribute to a mechanical rather than "intuitive and imaginative" analysis (Parkinson et al., 2016, p. 122). However, the systematic, yet flexible methods of FA allowed for a thorough analysis of all data by theme and by participant, as well as the generation of rich descriptions and interpretations (Gale et al., 2013).

Finally, it should be noted that there was a gap in time between collection of quantitative (2013-2015) and qualitative (2017-2018) data. However, drawing on quantitative and qualitative data from the same participants increased the comparability of the data; and quantitative and qualitative data were highly convergent, in spite of the time gap. Quantitative and qualitative data were evenly profiled and equally valued in contribution to understanding access to gender-affirming care and transition experiences among trans WLWH. The major strength of this study was the mixed methods design. Merging both quantitative and qualitative data brought greater insight women's transition and gender-affirming care experiences than would be provided by each separately (Creswell & Plano Clark, 2011).

3.2.5 Conclusions and Implications

These findings have important implications for the integration of HIV and genderaffirming medical care to increase HIV care engagement among trans WLWH. Exploring access
to gender-affirming care within a context of universal healthcare allowed for a thorough analysis
of barriers and facilitators that move beyond socioeconomic status. In addition to increasing the
gender affirmative care competency of HIV care settings, attention must also be placed on
increasing HIV competency and challenging HIV stigma in other settings where trans WLWH
may need to access gender-affirming medical care. Stigma intervention research may draw on
systematic reviews describing HIV stigma reduction interventions for healthcare settings
(Nyblade, Stangl, Weiss, & Ashburn, 2009), in addition to literature detailing physician-side
barriers to providing care to trans patients (Snelgrove, Jasudavisius, Rowe, Head, & Bauer,
2012).

Consistent with a suggested best practice model of gender-affirmative clinical care (Reisner et al., 2016), healthcare providers should never make assumptions about the types of

gender-affirming services that trans WLWH want. Researchers must continue to advance knowledge pertaining to care of trans people who have undergone gender-affirming surgeries, as well as biomedical research about DDIs. In the interim, HIV providers should still discuss the concurrent use of ART and hormones with trans WLWH, providing them with the most accurate available information. Finally, providing comprehensive support that addresses the social determinants of health, including income and housing, may increase access to gender-affirming care for trans WLWH, as well as HIV care. Comprehensively addressing barriers to accessing gender-affirming medical/surgical care for trans WLWH will simultaneously promote the health and well being of trans WLWH, while ensuring equitable access to gender-affirming care for all trans women, irrespective of HIV status.

3.3 References

- Ansara, Y. G., & Hegarty, P. (2014). Methodologies of misgendering: recommendations for reducing cisgenderism in psychological research. *Feminism & Psychology*, 24(2), 259-270. doi:http://dx.doi.org/10.1177/0959353514526217
- Baral, S. D., Poteat, T., Stromdahl, S., Wirtz, A. L., Guadamuz, T. E., & Beyrer, C. (2013b).

 Worldwide burden of HIV in transgender women: a systematic review and meta-analysis.

 Lancet Infectious Diseases. 13(3), 214-222. doi:10.1016/s1473-3099(12)70315-8
- Barusch, A., Gringeri, C., & George, M. (2011). Rigor in qualitative social work research: a review of strategies used in published articles. *Social Work Research*, *35*(1), 11-19.
- Bauer, G. (2013). Chapter 7: It's all in the context: structural and psychosocial challenges to HIV prevention with transgender women. In J. Gahagan (Ed.), *Women and HIV prevention in Canada: Implications for research, policy, and practice* (pp. 157-174). Toronto, ON: Women's Press.
- Bauer, G. R., Braimoh, J., Scheim, A. I., & Dharma, C. (2017). Transgender-inclusive measures of sex/gender for population surveys: mixed-methods evaluation and recommendations. *PLoS One*, *12*(5), e0178043. doi:10.1371/journal.pone.0178043
- Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: a respondent driven sampling study in Ontario, Canada. *BMC Public Health*, *15*, 525. doi:10.1186/s12889-015-1867-2
- Berger, B. E., Ferrans, C. E., & Lashley, F. R. (2001). Measuring stigma in people with HIV: psychometric assessment of the HIV stigma scale. *Research in Nursing and Health*, 24(6), 518-529.

- Bowleg, L. (2008). When Black + Lesbian + Woman ≠ Black Lesbian Woman: the methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles*, 59(5-6), 312-325. doi:http://dx.doi.org/10.1007/s11199-008-9400-z
- Bowleg, L. (2012). The problem with the phrase women and minorities: intersectionality—an important theoretical framework for public health. *American Journal of Public Health*, 102(7), 1267-1273. doi:10.2105/AJPH.2012.300750
- Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health Services Research*, 42(4), 1758-1772. doi:http://dx.doi.org/10.1111/j.1475-6773.2006.00684.x
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, Mass: Harvard University Press.
- Cobos, D. G., & Jones, J. (2009). Moving forward: transgender persons as change agents in health care access and human rights. *Journal of the Association of Nurses in AIDS Care*, 20(5), 341-347. doi:http://dx.doi.org/10.1016/j.jana.2009.06.004
- Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., . . . Zucker, K. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people, Version 7. *International Journal of Transgenderism*, 13(4), 165-232. doi:10.1080/15532739.2011.700873
- Coronel Villalobos, M., Stieler, S., Frohard-Dourlent, H., & Saewyc, E. (2018). A survey of experiences with surgical readiness assessment and gender-affirming surgery among trans people living in Ontario. Retrieved from: http://saravyc.sites.olt.ubc.ca/files/2018/03/SARAVYC_TCBC-Report-Care-Survey-V4-Final-WEB.pdf

- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex:aA Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum*, 1989(1), 139-167.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods* research: 2nd edition. Thousand Oaks, CA: SAGE Publications.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334. doi:10.1007/BF02310555
- Crosby, R. A., Salazar, L. F., & Hill, B. J. (2016). Gender affirmation and resiliency among

 Black transgender women with and without HIV infection. *Transgender Health*, 1(1), 8693. doi:10.1089/trgh.2016.0005
- Denson, D. J., Padgett, P. M., Pitts, N., Paz-Bailey, G., Bingham, T., Carlos, J. A., . . . Finlayson, T. (2017). Health care use and HIV-related behaviors of Black and Latina transgender women in 3 US metropolitan areas: results from the transgender HIV behavioral survey.

 **Journal of Acquired Immune Deficiency Syndromes, 75(Suppl 3), S268-s275. doi:10.

 1097/qai.0000000000001402
- Dowshen, N., Matone, M., Luan, X., Lee, S., Belzer, M., Fernandez, M. I., . . . Adolescent Medicine Trials Network for HIV/AIDS Interventions. (2016). Behavioral and health outcomes for HIV+ young transgender women (YTW) linked to and engaged in medical care. *LGBT Health*, 3(2), 162-167. doi:10.1089/lgbt.2014.0062
- Drisko, J. W. (1997). Strengthening qualitative studies and reports: standards to promote academic integrity. *Journal of Social Work Education*, *33*(1), 185-197.
- Fetters, M. D., & Freshwater, D. (2015). The 1 + 1 = 3 integration challenge. *Journal of Mixed Methods Research*, 9(2), 115-117. doi:10.1177/1558689815581222

- Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, 13, 117. doi:http://dx.doi.org/10.1186/1471-2288-13-117
- Gehi, P. S., & Arkles, G. (2007). Unraveling injustice: race and class impact of medicaid exclusions of transition-related health care for transgender people. *Sexuality Research & Social Policy*, 4(4), 7-35. doi:http://dx.doi.org/10.1525/srsp.2007.4.4.7
- Gitterman, A., & Germain, C. B. (2008b). Helping individuals, families, and groups with stressful life transitions and traumatic events. *The life model of social work practice*, *Third edition* (pp. 191-239). New York: Columbia University Press.
- Government of Canada. (2018). *Canada's Health Care System*. Ottawa, Canada. Retrieved from https://www.canada.ca/en/health-canada/services/canada-health-care-system.html.
- Gridley, S. J., Crouch, J. M., Evans, Y., Eng, W., Antoon, E., Lyapustina, M., . . . Breland, D. J. (2016). Youth and caregiver perspectives on barriers to gender-affirming health care for transgender youth. *Journal of Adolescent Health*, 59(3), 254-261. doi:10.1016/j.j adohealth.2016.03.017
- GRS Montreal. (2018). Frequently Asked Questions. Retrieved from https://www.grsmontreal.com/en/frequently-asked-questions.html
- Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and qualitative results in health science mixed methods research through joint displays.

 Annals of Family Medicine, 13(6), 554-561. doi:10.1370/afm.1865

- Heckman, T. G., Somlaj, A. M., Peters, J., Walker, J., Otto-Salai, L., Galdabini, C. A., & Kelly, J. A. (1998). Barriers to care among persons living with HIV/AIDS in urban and rural areas. *AIDS Care*, 10(3), 365-375. doi:http://dx.doi.org/10.1080/713612410
- Hill Collins, P. (2000). Black feminist thought: knowledge, consciousness, and the politics of empowerment. New York: Routledge.
- House of Commons Standing Committee on Health. (2018). *Pharmacare now: prescription medicine coverage for all Canadians*. Retrieved from http://publications.gc.ca/site/eng/9.855506/publication.html
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis.

 Qualitative Health Research, 15(9), 1277-1288. doi:10.1177/1049732305276687
- Kondracki, N. L., Wellman, N. S., & Amundson, D. R. (2002). Content analysis: review of methods and their applications in nutrition education. *Journal of Nutrition Education and Behavior*, *34*(4), 224-230. doi:http://dx.doi.org/10.1016/S1499-4046(06)60097-3
- Lacombe-Duncan, A. (2018). Characterizing the HIV care cascade among trans women with HIV in Canada. *Unpublished Manuscript*.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: SAGE Publications.
- Lindqvist, E. K., Sigurjonsson, H., Mollermark, C., Rinder, J., Farnebo, F., & Lundgren, T. K.
 (2017). Quality of life improves early after gender reassignment surgery in transgender
 women. European Journal of Plastic Surgergy, 40(3), 223-226. doi:10.1007/s00238-0161252-0
- Logie, C. H., James, L., Tharao, W., & Loutfy, M. R. (2012). "We don't exist": a qualitative study of marginalization experienced by HIV-positive lesbian, bisexual, queer and

- transgender women in Toronto, Canada. *Journal of the International AIDS Society*, 15(2), 17392. doi:10.7448/IAS.15.2.17392
- Longman Marcellin, R., Bauer, G. R., & Scheim, A. I. (2013). Intersecting impacts of transphobia and racism on HIV risk among trans persons of colour in Ontario, Canada. *Ethnicity and Inequalities in Health and Social Care*, 6(4), 97-107.
- Loutfy, M., de Pokomandy, A., Kennedy, V. L., Carter, A., O'Brien, N., Proulx-Boucher, K., . . . Kaida, A. (2017). Cohort profile: The Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS). *PLoS One*, *12*(9), e0184708.
- McCall, L. (2005). The complexity of intersectionality. Signs, 30(3), 1771-1800.
- Melendez, R. M., & Pinto, R. M. (2009). HIV prevention and primary care for transgender women in a community-based clinic. *Journal of the Association of Nurses in AIDS Care*, 20(5), 387-397. doi:10.1016/j.jana.2009.06.002
- Ministry of Health and Long-term Care. (2016). Sex Reassignment Surgery. Retrieved from http://www.health.gov.on.ca/en/pro/programs/srs/
- Mizock, L., & Hopwood, R. (2016). Conflation and interdependence in the intersection of gender and sexuality among transgender individuals. *Psychology of Sexual Orientation and Gender Diversity*, *3*(1), 93-103. doi:10.1037/sgd0000157
- Mizock, L., & Hopwood, R. (2018). Economic challenges associated with transphobia and implications for practice with transgender and gender diverse individuals. *Professional Psychology: Research and Practice*, 49(1), 65-74. doi:10.1037/pro0000161
- Mizuno, Y., Frazier, E. L., Huang, P., & Skarbinski, J. (2015). Characteristics of transgender women living with HIV receiving medical care in the United States. *LGBT Health*, 2(3), 228-234. doi:http://dx.doi.org/10.1089/lgbt.2014.0099

- Munro, L., Marshall, Z., Bauer, G., Hammond, R., Nault, C., & Travers, R. (2017).
 (Dis)integrated care: barriers to health care utilization for trans women living with HIV.
 Journal of the Association of Nurses in AIDS Care, 28(5), 708-722. doi:10.1016/j.jana.
 2017.06.001
- Murad, M. H., Elamin, M. B., Garcia, M. Z., Mullan, R. J., Murad, A., Erwin, P. J., & Montori, V. M. (2010). Hormonal therapy and sex reassignment: a systematic review and meta-analysis of quality of life and psychosocial outcomes. *Clinical Endocrinology (Oxford)*, 72(2), 214-231. doi:10.1111/j.1365-2265.2009.03625.x
- Nyblade, L., Stangl, A., Weiss, E., & Ashburn, K. (2009). Combating HIV stigma in health care settings: what works? *Journal of the International AIDS Society*, 12, 15. doi:10.1186/1758-2652-12-15
- Padgett, D. K. (2008). *Qualitative methods in sociology, 2nd edition*. Thousand Oaks, CA: SAGE PUBLICATIONS.
- Pitasi, M. A., Oraka, E., Clark, H., Town, M., & DiNenno, E. A. (2017). HIV testing among transgender women and men 27 States and Guam, 2014-2015. MMWR Morbidity and Mortality Weekly Report, 66(33), 883-887. doi:10.15585/mmwr.mm6633a3
- Puckett, J. A., Cleary, P., Rossman, K., Newcomb, M. E., & Mustanski, B. (2018). Barriers to gender-affirming care for transgender and gender nonconforming individuals. *Sexuality Research and Social Policy*, 15(1), 48-59. doi:10.1007/s13178-017-0295-8
- Radix, A., Sevelius, J., & Deutsch, M. B. (2016). Transgender women, hormonal therapy and HIV treatment: a comprehensive review of the literature and recommendations for best practices. *Journal of the International AIDS Society*, *19*(3 Suppl 2), 20810. doi:http://dx.doi.org/10.7448/IAS.19.3.20810

- Rainbow Health Ontario. (2018). Feminizing Hormone Therapy. Retrieved from https://www.rainbowhealthontario.ca/TransHealthGuide/gp-femht.html
- Rebchook, G., Keatley, J., Contreras, R., Perloff, J., Molano, L. F., Reback, C. J., . . . Xavier, J. (2017). The Transgender Women of Color Initiative: implementing and evaluating innovative interventions to enhance engagement and retention in HIV care. *American Journal of Public Health*, 107(2), 224-229. doi:10.2105/ajph.2016.303582
- Reisner, S. L., Radix, A., & Deutsch, M. B. (2016). Integrated and gender-affirming transgender clinical care and research. *Journal of Acquired Immune Deficiency Syndromes*, 72(Suppl 3), S235-242. doi:10.1097/qai.00000000000000000
- Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. B.

 R. G. Burgess (Eds.), *Analyzing Qualitative Data* (pp. 173-194). London, UK: Routledge.
- Robinson, M. (2017). Two-spirit and bisexual people: different umbrella, same rain. *Journal of Bisexuality*, 17(1), 7-29.
- Rotondi, N. K., Bauer, G. R., Scanlon, K., Kaay, M., Travers, R., & Travers, A. (2013).

 Nonprescribed hormone use and self-performed surgeries: "Do-it-yourself" transitions in transgender communities in Ontario, Canada. *American Journal of Public Health*, 103(10), 1830-1836. doi:10.2105/AJPH.2013.301348
- Rotondi, N. K., Bauer, G. R., Travers, R., Travers, A., Scanlon, K., & Kaay, M. (2011).

 Depression in male-to-female transgender Ontarians: Results from the Trans PULSE project. *Canadian Journal of Community Mental Health*, 30(2), 113-133.

 doi:10.7870/cjcmh-2011-0020
- Rust, K. F., & Rao, J. N. (1996). Variance estimation for complex surveys using replication techniques. *Statistical Methods in Medical Research*, *5*(3), 283-310. doi:10.1177/0962

28029600500305

- Safer, J. D., Coleman, E., Feldman, J., Garofalo, R., Hembree, W., Radix, A., & Sevelius, J.
 (2016). Barriers to health care for transgender individuals. *Current Opinion in Endocrinology, Diabetes, and Obesity*, 23(2), 168-171. doi:10.1097/med.0000000
 000000227
- Scheim, A. I., & Bauer, G. R. (2015). Sex and gender diversity among transgender persons in Ontario, Canada: results from a respondent-driven sampling survey. *Journal of Sex Research*, 52(1), 1-14. doi:10.1080/00224499.2014.893553
- Schilder, A. J., Kennedy, C., Goldstone, I. L., Ogden, R., Hogg, R. S., & O'Shaughnessy, M. V. (2001). "Being dealt with as a whole person." Care seeking and adherence: the benefits of culturally competent care. *Social Science and Medicine*, *52*(11), 1643-1659. doi:10.1016/S0277-9536(00)00274-4
- Schilder, A. J., Laframboise, S., Hogg, R. S., Trussler, T., Goldstone, I., Schechter, M. T., & O'Shaughnessy, M. V. (1998). "They don't see our feelings." The health care experiences of HIV-positive transgendered persons. *Journal of the Gay and Lesbian Medical Association*, 02(3), 103-111. doi:10.1023/B:JOLA.0000004052.12136.1b
- Sevelius, J. M. (2013). Gender affirmation: a framework for conceptualizing risk behavior among transgender women of color. *Sex Roles*, 68(11-12), 675-689. doi:10.1007/s11199-012-0216-5
- Sevelius, J. M., Patouhas, E., Keatley, J. G., & Johnson, M. O. (2014a). Barriers and facilitators to engagement and retention in care among transgender women living with human immunodeficiency virus. *Annals of Behavioral Medicine*, 47(1), 5-16. doi:10.1007/s12160-013-9565-8

- Sevelius, J. M., Saberi, P., & Johnson, M. O. (2014b). Correlates of antiretroviral adherence and viral load among transgender women living with HIV. *AIDS Care*, 26(8), 976-982. doi:10.1080/09540121.2014.896451
- Snelgrove, J. W., Jasudavisius, A. M., Rowe, B. W., Head, E. M., & Bauer, G. R. (2012).

 "Completely out-at-sea" with "two-gender medicine": a qualitative analysis of physician-side barriers to providing healthcare for transgender patients. *BMC Health Services Research*, 12, 110. doi:10.1186/1472-6963-12-110
- Statistics Canada. (2017). Table 206-0094 Low income cut-offs (LICOs) before and after tax by community and family size in current dollars, annual, CANSIM (database).

 Retrieved from http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=2060094
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. doi:10.5116/ijme.4dfb.8dfd
- Taylor, A., Hodgson, D., Gee, M., & Collins, K. (2017). Compassion in healthcare: a concept analysis. *Journal of Radiotherapy in Practice*, 16(4), 350-360. doi:10.1017/S14603969 17000322
- Thorarinsdottir, K., & Kristjansson, K. (2014). Patients' perspectives on person-centred participation in healthcare: a framework analysis. *Nursing Ethics*, 21(2), 129-147. doi:10.1177/0969733013490593
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357. doi:10.1093/intqhc/mzm042
- Trans Care BC. (2018). Surgery Funding. Retrieved from http://transhealth.phsa.ca/medical-options/surgeries/surgery-funding

- Trans Health Expansion Partnership. (2017). Transition-related Surgery (TRS): Frequently Asked Questions. Retrieved from https://www.rainbowhealthontario.ca/wp-content/uploads/woocommerce_uploads/2017/06/TransRelatedSurgery-FAQ-2017-final.pdf
- Trans PULSE. (2009). Trans PULSE Provincial Survey 2009. Retrieved from http://transpulseproject.ca/wp-content/uploads/2012/05/Trans-PULSE-survey-information-only-copy-2012.pdf
- Ware, J., Kosinski, M., & Keller, S. D. (1996). A 12-Item Short-Form Health Survey: construction of scales and preliminary tests of reliability and validity. *Medical Care*, 34(3), 220-233.
- White Hughto, J. M., Reisner, S. L., & Pachankis, J. E. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science and Medicine*, 147, 222-231. doi:10.1016/j.socscimed.2015.11.010
- Wiewel, E. W., Torian, L. V., Merchant, P., Braunstein, S. L., & Shepard, C. W. (2016). HIV diagnoses and care among transgender persons and comparison with men who have sex with men: New York City, 2006-2011. *American Journal of Public Health*, 106(3), 497-502. doi:10.2105/ajph.2015.302974
- Wilson, E. C., Arayasirikul, S., & Johnson, K. (2013). Access to HIV care and support services for African American transwomen living with HIV. *International Journal of Transgenderism*, 14(4), 182-195. doi:10.1080/15532739.2014.890090
- Wilson, E. C., Chen, Y. H., Arayasirikul, S., Wenzel, C., & Raymond, H. F. (2014). Connecting the dots: examining transgender women's utilization of transition-related medical care

- and associations with mental health, substance use, and HIV. *Journal of Urban Health*, 92(1), 182-192. doi:10.1007/s11524-014-9921-4
- World Professional Association for Transgender Health [WPATH]. (2012). Standards of care for the health of transsexual, transgender, and gender nonconforming people, 7th Edition.

 Retrieved from https://www.wpath.org/publications/soc
- Wright, K., Naar-King, S., Lam, P., Templin, T., & Frey, M. (2007). Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *The Journal of Adolescent Health*, 40(1), 96-98.

Chapter 4

Resilience, Resistance, and Transformation: A Qualitative Study of How Trans Women with HIV Respond to Intersecting Stigmas in Healthcare

4.1 Abstract

Background: Intersectionality theory has been applied to understand how transgender (trans) stigma, defined as social exclusion and discrimination of trans people at structural, interpersonal, and individual levels, intersects with other types of stigma (e.g., HIV stigma) to impede access to healthcare among trans women living with HIV (WLWH). Intersectionality theory can also be used to highlight the contextual nature of oppression and how power relations are shifted within interpersonal relationships and institutional settings. However, scant published peer-reviewed literature has addressed trans WLWH's coping or resistance in response to healthcare discrimination in the form of resilience or empowerment, limiting knowledge of the potential strengths of trans WLWH as individuals and a community. This qualitative study sought to describe resilience and empowerment exhibited by trans WLWH in response to intersecting stigmas in healthcare.

Methods: Semi-structured, individual interviews were conducted in 2017-2018 with a purposive sample of trans WLWH (n=11) (selected based on diverse identities/experiences and different levels of healthcare engagement) participating in a large, community-based cohort study in three Canadian provinces (Ontario, British Columbia, and Quebec). Framework analysis was used to identify key themes, patterns within themes between participants, and patterns across themes among participants.

Results: Three overarching themes were identified. (1) <u>Responses to stigma and discrimination</u> in healthcare. Trans WLWH exhibited resilience and actively resisted and transformed discriminatory healthcare settings. (2) <u>Motivations</u>, benefits, and consequences of responding to

stigma and discrimination in healthcare. Trans WLWH were motivated to respond by perceived benefits to both self and others. Intrapersonal benefits included increased self-worth and challenging internalized stigma. Reduced social isolation was an interpersonal benefit. Trans WLWH also reported structural benefits, including increased economic resources and leverage for better treatment. Negative consequences included provider reactions, being further stereotyped, and decreased physical health in the form of experiencing HIV-related health complications and emotional wellbeing in the form of experiencing burnout. (3)

Recommendations for systemic change to address stigma and discrimination in healthcare. Trans WLWH recommended trans inclusion in service delivery and program development and oversight. Participants recommended increased provider education, describing who should be trained (e.g., students), what they should learn about (e.g., the social context impacting trans WLWH), and how they should receive training (e.g., from trans WLWH).

Conclusions: Future studies can use intersectionality to highlight both inequities and strategies to promote empowerment of diverse populations of WLWH. Providers can work alongside trans WLWH from a strengths-based perspective to address intersecting stigmas in healthcare settings.

4.2 Manuscript

4.2.1 Introduction

Intersectionality is a critical social theory emerging from Black feminism that allows for an understanding of how multiple social identities intersect at the micro level of an individual's experience to enact systems of privilege and oppression that are operating at the macro level of society (Bowleg, 2008, 2012; Crenshaw, 1989; Hill Collins, 2000; McCall, 2005).

Intersectionality addresses the inadequacy of using one source of oppression as the singular cause of health inequity (Dhamoon & Hankivsky, 2011). As such, intersectionality theory has the potential to illuminate how transgender (trans) stigma, defined as social exclusion and discrimination of trans people at structural, interpersonal, and individual levels¹⁰, intersects with other types of stigma (e.g., HIV stigma, gender non-conformity stigma¹¹, racism) to impede access to healthcare for trans women living with HIV¹⁰ (WLWH) (Lacombe-Duncan, 2016; Logie, James, Tharao, & Loutfy, 2011). An intracategorical approach to intersectionality¹⁰, whereby researchers focus on a particular social group at a neglected point of intersection (e.g., WLWH as a particular social group, with trans identity as a neglected point of intersection) (McCall, 2005), may support a thorough analysis of the complexity of stigmatizing healthcare

-

White Hughto, Reisner and Pachankis (2015) describe *structural stigma* as "societal norms and institutional policies that limit trans people's access to the social and economic resources", *interpersonal stigma* as "enacted forms of stigma inclusive of verbal harassment and physical and sexual assault due to one's (trans) gender identity", and *individual stigma* as trans people's "internalization of negative societal attitudes and/or beliefs that trans people perceive others hold about them (felt normative)" (p.222-223).

¹⁴ Gender-nonconformity stigma is defined as stigma towards those not conforming to expected gender norms; with respect to trans women, this may refer to stigmatization of trans women who have a masculine/masculine-of-center gender presentation (Gordon & Meyer, 2007).

Transgender (trans) women are a diverse group of people labelled male at birth who identify as girls/women, or people on the transfeminine spectrum, including those which have or have not chosen to socially or medically transition (Bauer & Hammond, 2015).

Other methodological approaches to examine intersectionality include anticategorical, whereby analytic categories are deconstructed, and intercategorical, whereby relationships of inequality between social groups is explored (McCall, 2005). An intracategorical approach to intersectionality best suits this dissertation research as the ultimate aim is to highlight inequities (which requires the naming of oppressions), among a particularly overlooked group of WLWH (trans women).

experiences of trans WLWH.

Intersectionality theory also highlights the contextual nature of oppression, suggesting that people are not oppressed across all social contexts, nor at all times or in all places (Hill Collins, 2000). As such, acknowledging how trans WLWH shift power relations within institutional contexts is critical in intersectionality-informed research. However, scant peer-reviewed literature has addressed trans WLWH's coping or resistance in response to healthcare discrimination. Most research depicts trans WLWH as a uniformly disadvantaged group, perpetuating a deficits rather than strengths-based approach; strengths-based approaches are a critically important approach work with trans women (Lacombe-Duncan, 2016; Poteat, Reisner, & Radix, 2014).

An emerging body of resilience research focuses on the strengths (internal and external assets) of individuals and how personal and social resources can contribute positively to development, with a general assumption that having more strengths results in better outcomes (Ungar, 2011; Ungar et al., 2008). Some scholars have brought attention to resilience among trans people at the intersection of multiple marginalized identities (Mizock & Mueser, 2014; Pinto, Melendez, & Spector, 2008; Singh, 2013; Singh & McKleroy, 2011). For example, a qualitative exploration of the resilience of trans people of colour who have experienced traumatic life events (n=11) identified pride in one's gender and ethnic/racial identity, recognizing and negotiating gender and racial/ethnic oppression, navigating relationships with family of origin, accessing healthcare and financial resources, connecting with activist trans communities of colour, and cultivating spirituality and hope for the future as resilience factors (Singh & McKleroy, 2011). Another study described stigma coping strategies used among trans people experiencing mental health issues (n=45) in employment settings, including individual

mechanisms (e.g., self-affirmative coping, drawing on one's sense of self and self-esteem), interpersonal mechanisms (e.g., social-relational coping, including seeking advocates), and structural mechanisms (e.g., political empowerment coping, involving engaging in activism and advocacy to educate others) (Mizock & Mueser, 2014).

Some research has also explored how resilience mitigates the negative impact of trans stigma on mental health outcomes of trans populations (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013; Breslow et al., 2015; Mizock & Mueser, 2014; Pinto et al., 2008; Valentine & Shipherd, 2018), consistent with minority stress theory (Meyer, 1995, 2003). For example, a study of 1093 trans people identified that peer support moderated the association between social stigma and psychological distress, whereby the association between interpersonal stigma and psychological distress were significant at low and moderate levels of peer support, but not for high peer support (Bockting et al., 2013). However, no studies to-date have focused exclusively on how trans WLWH exhibit resilience as they navigate discriminatory healthcare settings.

Empowerment is another theoretical concept that may be beneficially applied to understand how trans WLWH respond to stigma and discrimination in healthcare settings.

Empowerment refers to processes of individual and/or group transformation that span intrapersonal/interpersonal, community, and structural levels and that are built upon the process of conscientization (Carr, 2003; Gutiérrez, DeLois, & GlenMaye, 1995). Conscientization is the process of linking personal problems to political issues (Freire, 1970). Empowerment has been further conceptualized at psychological, relational, community, and structural levels (Christens, 2012a; Christens, 2012b; Graham, 2004). Psychological empowerment occurs when people develop an awareness of social and political environments through conscientization (Christens,

2012b). Relational empowerment includes the challenging of power inequities through building skills for interpersonal relationships, participating in groups, and fostering reciprocity (Christens, 2012b). Community empowerment occurs when people connect based on a shared lived experience and/or common interests (Christens, 2012a). Structural empowerment involves communities enacting social action strategies that involve challenging oppressive social policies. One study of trans veterans (n=201) highlighted how participants educated healthcare providers and advocated for legislation to promote equity in response to facing discrimination across multiple settings (Chen, Granato, Shipherd, Simpson, & Lehavot, 2017). However, almost no studies highlight empowerment among trans WLWH, specifically. Of the limited research, a study of WLWH more broadly, inclusive of trans WLWH, suggests that WLWH advocate, mobilize, and empower themselves and each other towards political change while resisting social exclusion by joining and/or forming groups (Logie et al., 2011) and connecting across medical and social lives.

Despite that there are few studies describing resilience and empowerment processes among trans WLWH, there are some studies among trans WLWH and people living with HIV (PLWH) which suggest that resilience and empowerment may contribute to healthcare engagement and positive health outcomes for this population (Dowshen et al., 2016; Johnson, 2011), and thus warrant further attention. For example, Dowshen and colleagues (2016) found no difference in viral suppression with lower reported adherence among young trans WLWH compared to young cis PLWH, despite more isolating factors. The authors suggested that further work is needed to understand protective factors that may lead to the resiliency among young trans WLWH. Sevelius et al. (2014b) applied the concept of healthcare empowerment (Johnson, 2011), which had been linked to ART adherence and health outcomes in previous studies with

cis PLWH (Johnson, Carol Dawson, Dilworth, & Neilands, 2012; Johnson, Sevelius, Dilworth, Saberi, & Neilands, 2012). When applied to trans WLWH, healthcare empowerment was associated with ART adherence in bivariate analyses, though the association was not sustained in multivariable analyses (Sevelius, Saberi, & Johnson, 2014b). Taken together, these few studies suggest that much more may be explored in relation to how trans WLWH navigate complex and oftentimes hostile healthcare settings. This knowledge may guide the development of strengths-based interventions to address HIV care access disparities, which are well documented among trans WLWH (Dowshen et al., 2016; Kalichman, Hernandez, Finneran, Price, & Driver, 2017; Mizuno, Frazier, Huang, & Skarbinski, 2015).

Gaps in the Literature and Research Questions

As mentioned, few studies have sought to describe trans WLWH's resilience and empowerment in navigating hostile healthcare settings. These findings may be useful in developing interventions to holistically address barriers to access to HIV and other types of healthcare that take into account both oppression and empowerment among trans WLWH, honouring women's individual and collective strengths. The overarching research questions for this study were:

- 1) How do trans WLWH exhibit resilience and empowerment in relation to intersecting stigmas in healthcare settings?
- 2) What are trans WLWH's recommendations to improve stigmatizing healthcare settings?

4.2.2 Methods

Researcher Self-Reflexivity

Self-reflexivity about one's own positionality and the relationship of power to knowledge

production is of critical importance for intersectionality work. As a cis, white, able-bodied, gender-conforming, middle-class woman who is not living with HIV, I (ALD) am conscious of the many unearned privileges I have and recognize that my understanding of the experience of trans WLWH accessing healthcare is shaped by my own positionalities. There are several ways that I experience unearned cis privilege that must be acknowledged on a daily basis. These privileges are also strongly tied to my white privilege. I draw on my combined experiences of being a queer woman in a heteronormative, sexist world, my passion for working towards social justice for people living with HIV, and my desire to understand how we can make healthcare in Canada accessible to everyone, in framing my work on understanding processes of stigmatization and discrimination and the myriad ways these processes impact the health and wellbeing of trans WLWH.

Study Setting

This qualitative study was conducted in Canada's three largest urban centres (Statistics Canada, 2018), Toronto, Montreal, and Vancouver. Each city is well-resourced with respect to services tailored for sexual and gender minority populations, inclusive of lesbian, gay, bisexual, trans, two-spirit, and intersex communities. These cities are also situated within the three provinces (Ontario, Quebec, and British Columbia) consistently reporting the highest annual number and proportion of HIV cases (Bourgeois et al., 2016; Public Health Agency of Canada, 2015). As such, they also each have numerous AIDS Service Organizations (ASOs).

While Canada has been a leader in advancing the rights of sexual minority populations (Government of Canada, 2017), the rights of trans people have lagged behind. Gender identity and expression were only recently added as prohibited grounds of discrimination to the Canadian Human Rights Act in 2017, although various provincial and territorial protections previously

existed and trans people were already often protected under the grounds of sex. Pervasive violence against trans people was documented in a community-based study conducted prior to the inception of these federal protections (Bauer & Scheim, 2015). However, structural violence against trans women, and in particular trans women of colour and those who are sex workers, has been raised recently with several high profile cases (Balkissoon & Ha, 2017; CTV Montreal, 2017).

Canada has a publicly funded healthcare system, governed by five principles, accessibility among them (Government of Canada, 2018). However, counter to this principle, stigma and discrimination within healthcare have been well-documented among trans people in Canada (Bauer et al., 2009; Bauer, Scheim, Deutsch, & Massarella, 2014).

Study Design

This qualitative study is embedded within the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS), a multi-province (Ontario, Quebec, British Columbia), community-based participatory cohort study founded in principles of social justice, critical feminism, and meaningful involvement of WLWH, and focused on health resource utilization and health outcomes among women living with HIV (n=1422; n=54 trans WLWH) (Loutfy et al., 2017). Peer Research Associates (PRAs) recruited WLWH aged 16 years or older through word-of-mouth via multiple mechanisms (e.g., PRA networks, online). Venue-based sampling was also utilized whereby women were also recruited from AIDS service organizations, HIV clinics, and community-based organizations. Community Advisory Boards (CABs) were formed to enhance targeted recruitment of women over-represented in Canada's HIV epidemic, including a trans-specific national-level CAB (Trans CAB), a group of trans

people and cisgender (cis) allies from the CHIWOS team interested in trans health. More details pertaining to the overarching CHIWOS study are described in Chapters Two and Three.

Study Sample and Data Collection

For this study, a sub-set of trans WLWH (n=11) who completed the baseline CHIWOS survey (2013-2015) participated in an open-ended, semi-structured, individual interview focused on their experiences accessing different types of health care (HIV, gender-affirming), with particular attention paid to experiences of resilience and empowerment in the context of experiencing stigma and discrimination in healthcare. These constructs were elicited by asking participants how they responded to stigma and discrimination in healthcare. Interviews were conducted between May 2017 and March 2018.

Participants were purposively chosen to include those with various experiences with respect to healthcare access (more engaged, less engaged). Additionally, consistent with an intersectional approach, participants were purposively chosen to reflect various identities, including those highlighted in the literature as experiencing pervasive barriers to access to care (e.g., racialized trans WLWH) and those identified by the CHIWOS Trans CAB as understudied in a Canadian context (e.g., trans WLWH who are sex workers). The sample includes trans WLWH (n=11) from Vancouver (n=3), Montreal (n=3), and Toronto (n=5). Two of the three participants from Montreal were Francophone, but had English proficient enough to complete a qualitative interview in English with the primary investigator (ALD). Participants ranged in age from their 20s to 60s (n=1 20s, n=4 30s, n=3 40s, n=2 50s, and n=1 60s). Fewer than half were white (n=4), with the remaining participants identifying as Indigenous (n=3), Latina (n=2), Black/African/Caribbean (n=1), multiple races/multiracial (n=1). The majority of women had been living with HIV for over 14 years (n=8), with a few living with HIV for between 6 and 14

years (n=3). Bivariate analyses (not shown) comparing sociodemographics (age, ethno-racial background), clinical characteristics (number of years living with HIV), and resilience between trans WLWH participating in the qualitative interviews compared to those not participating in the interviews did not identify any statistically significant differences, suggesting that the qualitative sub-sample were representative of the full CHIWOS sample.

In each setting, a PRA or the local CHIWOS coordinator was a first point of contact with potential participants, using a recruitment script (Appendix C). Prior to the interview, participants were made aware of the purpose of the research, as well as some characteristics of the interviewer (e.g., doctoral student). For those who asked, the primary investigator (ALD) elaborated on her role within the broader CHIWOS team, her experiences as a trans ally, and her motivations for pursuing the research. For 10 of 11 interviews, following an indication of interest and permission, participant contact information was passed onto ALD, a PhD-trained researcher and MSW-trained clinician, to set up and conduct an interview. For 1 of 11 interviews, the interview was both set up and conducted by a PRA who was trained in qualitative data collection and research ethics and who had a pre-existing relationship with a participant group with historically negative experience with research (Indigenous trans WLWH). Only one participant contacted did not respond to a request for an interview.

The interviews ranged from 25 to 100 minutes and were conducted in private settings to maximize participant comfort discussing sensitive topics (n=5 in the participant's home, n=2 by phone, n=4 in community-based or hospital settings) with only the interviewer and participant present. A guide describing local trans-friendly resources (e.g., ASO's, physical and mental health supports, community centres) was offered to each participant after their interview (Appendix E). The semi-structured interview guide was developed iteratively in partnership with

the CHIWOS Trans CAB, pilot-tested, and refined as appropriate (Appendix G). Interviews were recorded and transcribed verbatim by either the primary investigator (n=5) or a transcriptionist (n=6). Transcript quality was assessed by re-listening to the interview while simultaneously checking the transcript for discrepancies. No discrepancies were noted of which contributed to a misinterpretation of meaning. Notes were also taken before and after each interview, and later integrated during the analysis phase. The Consolidated Criteria for Reporting Qualitative Research (COREQ) 32-item Checklist (Tong, Sainsbury, & Craig, 2007) was used to ensure adequate reporting of qualitative data collection and analysis (Appendix K1). All participants completed an informed consent process prior to participating in the interview. Ethics approval for this qualitative sub-study, conducted in partial fulfillment of the requirements for the degree of Doctor of Philosophy of ALD, was received from the University of Toronto (Appendix B).

Data Analysis

Framework analysis (FA), a qualitative content analysis method, was used (Ritchie & Spencer, 1994). FA is a flexible approach, not subscribing to any particular epistemological underpinning (Gale, Heath, Cameron, Rashid, & Redwood, 2013). While systematic and strongly rooted in participants' narratives, FA also allows for broader interpretation and abstraction (Ritchie & Spencer, 1994).

A series of six steps were taken by ALD (Ritchie & Spencer, 1994). These steps included: (1) familiarization with the data as a whole, involving reading and re-reading each transcript and making notes of key ideas and recurrent themes; (2) development of the analytic framework, involving line-by-line open coding of three interviews (one from each province), an *inductive* approach (Kondracki, Wellman, & Amundson, 2002); (3) continued development of the analytic framework, involving: returning to the original research questions and interview

guide to expand the code list, combining codes into a preliminary analytic framework organized thematically, developing a code book with descriptions of each code, testing the analytic framework on three more interviews, and revision of the analytic framework to account for new insights; (4) indexing each of the 11 transcripts in NVivo 11.4.0 (QSR International Pty Ltd., 2012), a systematic process of applying the analytic framework to textual data (line-by-line coding, using a deductive approach); (5) charting data into framework matrices, defined as a table with numerous cells that summarize the data by codes (columns) and participants (rows), allowing for both data reduction (summarizing participant perspectives by theme/code) as well as keeping each participant's narrative intact through a summary of their story across themes; and, (6) mapping and interpretation, involving reviewing the charting and writing a summary description of the data and noting trends and negative cases within themes and sub-themes as well as across participants (Appendix K2. Final Coding Framework, Paper 3; Appendix K3. Charting of Themes and Sub-themes, Paper 3). After the development of a comprehensive description, the interpretation was abstracted through the integration of noted impressions, defining and further describing concepts, and combining the concepts into a conceptual diagram (Elo & Kyngäs, 2008).

Trustworthiness and authenticity of the study was enhanced through multiple mechanisms, including peer debriefing (Lincoln & Guba, 1985), documentation for auditing purposes (Drisko, 1997; Padgett, 2008), and critical reflexivity (Finlay, 2002; Maynard, 2004; Probst, 2015). Three methods of reflexivity were utilized: verbal (debriefing with the Trans CAB, committee members), written (maintaining a reflexive journal), and historical (learning about trans peoples' experiences within healthcare in Canada over time through reading books, journal articles, news articles) (Finlay, 2002; Probst, 2015; Probst & Berenson, 2014). In the

reflexive journal, ALD critically reflected on research processes, her multiple positionalities, and how these experiences and understandings of her privileges and oppressions may impact the research process, consistent with an intersectional approach grounded in feminist participatory research practices (Maynard, 2004). These written reflections were re-visited throughout the process of data collection and analysis in order to mitigate power dynamics during interviews and to ensure that alternative explanations and understandings beyond ALD's initial, unexamined impressions were explored during analysis. While transcripts and notes were not returned to individual interview participants due to feasibility (time and funding limitations) (traditional member checking), the trans members of the CHIWOS Trans CAB provided debriefing and interpretation of findings, a type of member checking involving data interpretation by people with a shared experience to the participants (Barusch, Gringeri, & George, 2011). Additionally, ALD presented preliminary work at trans health and HIV conferences, integrating audience perspectives.

4.2.3 Findings

Three main themes emerged: 1) responses to stigma and discrimination in healthcare; 2) motivations, benefits, and consequences of responding to stigma and discrimination in healthcare; and 3) recommendations for systemic change to address stigma and discrimination in healthcare. The themes and their sub-themes are described in the next three sections. The study findings are also presented in a conceptual diagram (Figure 1), inductively derived from the data. Exemplary quotes are presented in-text. Additional quotes can be seen in Table 1.

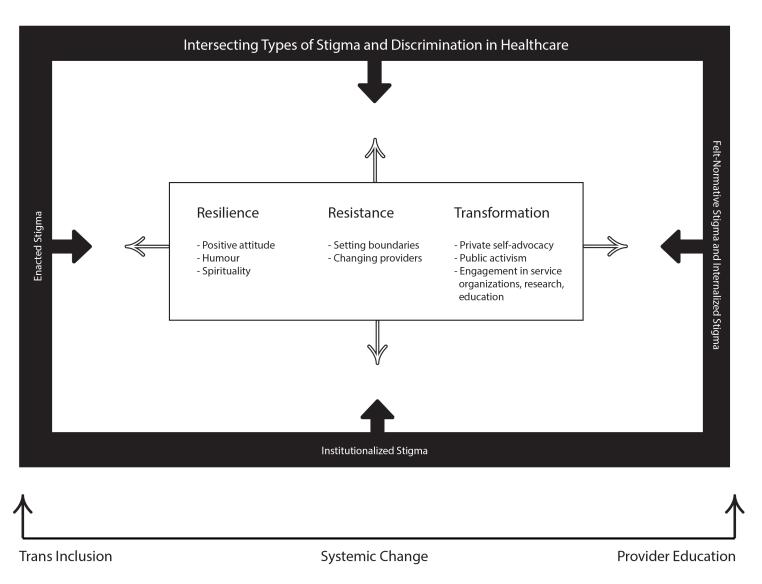


Figure 1. Trans WLWH's Responses to Intersecting Types of Stigma and Discrimination in Healthcare and Recommendations for Systemic Change

Responses to Stigma and Discrimination in Healthcare

Alltrans WLWH in this study exhibited resilience, resistance, and/or transformation in response to experiencing stigma, including multiple types (trans, HIV, sex work, substance use, and gender non-conformity stigma, classism, racism, intersectional¹⁷) and forms (felt normative, enacted, and institutionalized stigma), and in multiple settings (emergency departments, primary care, acute hospital care, HIV care, gender-affirming healthcare, healthcare generally).

With respect to resilience, trans WLWH used internal assets and positive coping mechanisms in response to experiencing stigma and discrimination in healthcare, including 'brushing off' situations, using humour as a coping mechanism, and drawing on spirituality. For example, participant 10 (20s) described, "I just had to laugh and let it go", in response to an emergency department visit where she perceived that nurses and other healthcare providers "became completely phobic" coming back "like every few seconds" to look at her (felt normative trans stigma). In another example, participant 11 (40s) stated, "I believe in God... no matter what they say, they can't take that away from me", in response to being placed on a men's ward and misgendered by staff during an acute care hospital stay (institutionalized and enacted trans stigma). Women exhibited strong senses of self, attributing stigma and discrimination to problems with other people, rather than problems with themselves. For example, participant 1 (50s) reflected on her attitude towards providers looking down on her as a woman of colour within healthcare, generally (felt normative racism), with: "...You not 'gonna make me put down because of who I am. And even for my colour of my skin. You maybe want the colour of my skin."

-

[&]quot;As Bowleg (2008) describes, "intersectionality researchers must analyze each structural inequality separately, as well as simultaneously" (p.319). As such, I refer to trans WLWH's responses to particular types of intersecting stigmas (e.g., trans stigma, HIV stigma) experienced in healthcare, in addition to intersectional stigma, a term I use in this analysis to refer to the co-occurrence of these multiple types of stigma simultaneously within a single healthcare interaction.

Importantly, resilience was not only developed and exerted in response to stigma and discrimination in healthcare, but also in response to the discouraging social conditions, and in particular HIV stigma, which impacted their everyday lives. Resilience in everyday life was similarly characterized in two ways: as intrapersonal characteristics (inner strength, self-esteem/self-worth): "I manage to get around, I manage to survive" (Participant 2, 40s) and as intrapersonal processes (finding life meaning, not letting HIV define oneself, positive coping mechanisms [positive outlook/thinking/spirituality]): "I've been really really lucky in terms of the kind of spirit that I have, and the... this sort of hopeful, stubborn, fortitude to just plow through things, and keep moving" (Participant 7, 40s) and "It's just a little fragment. It's manageable. Let it go. If you don't think about it or hold onto it your life can go so much better" (Participant 5, 30s).

Interpersonal sources of resilience in everyday life were predominantly seen in the form of family members and friends who supported trans WLWH: "I've got my chosen family, that's good enough for me" (Participant 6, 50s). Interpersonal sources of resilience within healthcare settings were rare. However, HIV physicians did emerge as one type of provider who, for the most part, helped to support trans WLWH to access competent, less-discriminatory care: "And before he refers me he mention this is a trans woman she has to be treated in that way..." (Participant 1, 50s). Additionally, multiple participants noted their physician's non-judgment pertaining to substance use: "And he'd known about my drug use because I've been in drug use ever since I moved here. So it was just something that was a part of my life that everyone had learned to accept" (Participant 4, 30s). Participant 2 (40s) also described how her physician would promote self-esteem, ".. And then I'm putting myself, criticizing myself, and she's complimenting me...".

Trans WLWH resisted stigma and discrimination by setting boundaries (e.g., refusing care from specific types of providers; changing providers). For example, participant 1 (50s) described her response to being asked invasive and inappropriate questions about her body (enacted trans stigma) and being looked at like "a freak", particularly by students (felt normative trans stigma): "But I sometimes I push out people. They say oh you don't mind for this student to come see you. Yes I mind. It's my body, it's me, I no want anybody, so out". Women were very aware that sometimes the only thing they could do was to leave a negative situation, particularly in response to institutionalized stigma. For example, participant 2 (40s) described how she responded to denial of gender-affirming care perceived to be due to her HIV status (institutionalized HIV stigma) by saying, "Yep, how do you fight it, you go somewhere else". In response to experiencing enacted trans and/or HIV stigma from a care provider, some trans WLWH weighed the pros and cons of changing to another provider, making their decision about who to switch to based on a combination of word-of-mouth (e.g., provider reputation) and logistical considerations (e.g., geographic location), "I was frustrated and I called my friends. Look, I want to see another doctor. I know I don't need the doctor now, now, but I want an appointment to at least meet them and to be sure to have it for the next meeting" (Participant 9, 30s). However, in reflecting on how to respond to her primary care provider's intersectional classist and transphobic attitudes, participant 7 (40s) highlighted how the ability to leave was constrained by the availability of alternate providers as well as fear that a new provider would be just as if not more stigmatizing than their previous one:

"I felt like saying fuck you, right, and I think that I temper that feeling with, you know, what are my options. Am I just gonna go? Where am I gonna go? And if I do secure

another GP [general practitioner], which is always a problem.... And that's one that's not like worse than I already have."

Almost all participants became self-advocates in the context of healthcare (e.g., informing providers of how/why their actions or words are discriminatory, making informal and formal complaints against particular staff or processes). In some cases, participants described addressing stigma calmly. For example, participant 4 (30s) described what she does when she is misgendered in healthcare settings: "So I would tell people politely like actually if you can call me female and use she and her, something that I would appreciate". In contrast, others recognized a necessity to escalate the severity of the situation and be more insistent about better treatment. For example, participant 6 (50s) described an experience she had in an emergency department, whereby a nurse asked her "what were you out there so late for dressed like that?" (enacted intersectional trans, gender non-conformity, and sex work stigma). She described her response as "I mean, then if they start to get really ignorant, I'll kind of raise my voice and say, listen, you know, this is how it is...".

Some participants also became public advocates for the rights of trans women (e.g., working to change discriminatory laws or policies, starting marches, holding rallies, starting advocacy organizations), in response to trans health programs being cut by the provincial government (institutionalized trans stigma):

"And so I was part of a few people locally, trans people, who fought the provincial government to have something [a health care program] there..." (Participant 7, 40s)

Trans WLWH used purposeful disclosure of their trans identity to advocate for proper treatment of all trans women in the context of intersectional trans and gender non-conformity stigma, often extending their advocacy and activism beyond the healthcare sphere:

"Oh yes. I stop on the subway. And the bus. When I see some woman or man or somebody else making a joke about that trans woman coming in because she's not passing. I stand up and I say I am too so be careful what you say because you never get beat up by a trans?" (Participant 1, 50s)

"[I said] you're not working that front desk anymore. And he said why? I said do you want to know the reason why, I'm going to be blunt. I said because my cock is probably bigger than yours sweetheart and you don't call anybody who is not passing a sir. He did apologize." (Participant 3, 60s)

In this way, trans WLWH worked to ensure that other trans women were not subject to discursive violence. Visibility extended beyond activism through women's engagement within various trans and HIV-specific service organizations at multiple levels (e.g., volunteer, service providers, board members): "You know I make sure trans women represented in there [AIDS Service Organizations]" (Participant 1, 50s).

Many trans WLWH participated in research projects not only as participants but also as researchers, and some also contributed to the education of service providers. For many, this also involved purposeful disclosure of trans identity and HIV status:

"I do a lot of public speaking. I do a lot of training in the community with social workers, people going into this type of work, doctors and medical students." (Participant 3, 60s)

"I got in [to a conference] on a scholarship and so I've done... I work a lot within my community." (Participant 5, 30s)

Motivations, Benefits, and Consequences of Responding to Stigma and Discrimination in Healthcare

Trans WLWH were motivated to challenge stigma and discrimination due to altruism (a sense of need to help other trans WLWH and give back to the trans/HIV community), as well as for personal growth (benefits to self).

"So, I was finding that it's important to help the others. Like I said, I don't receive the help. I was not in need of the help, but I know plenty of people need it." (Participant 9, 30s)

"It [applying for a position] was a really more... like allow myself to prove that I can live an open life with HIV. (Participant 4, 30s)

Some participants explicitly described how engaging in advocacy/activism provided benefits at intrapersonal, interpersonal, and structural levels. Intrapersonal benefits included increased self-worth (e.g., "I feel like that's an accomplishment" [Participant 9, 30s]) and challenging internalized stigma (e.g., "I don't have any stigma for being trans or for HIV positive I don't have that stigma anymore. That heavy weight people sometimes carry for life.

Not me" [Participant 1, 50s]). At an interpersonal level, trans WLWH who engaged in advocacy/activism reported reduced social isolation. As participant 4 (30s) stated, "...I had a team of other people who also was open so we were learning how to navigate through this whole like system this world of organization with each other". At a structural level, participants reported that engaging in paid advocate/activist work resulted in increased access to economic resources. Moreover, participants further reported how being recognized as a trans community leader contributed to better treatment. As participant 3 (60s) described, "She's an activist in the community. She has legal clinics behind her and she'll sue you...".

However, the majority of participants described several burdens of responding. As a result of standing up for their rights, many were labeled as aggressive and some reported being treated poorly and/or feeling let down by provider reactions: "I'm aggressive for being loud for my rights, being loud for myself, you know protecting myself, respect myself" (Participant 1, 50s).

Finally, as participant 9 (30s) said, "we need more trans voices on HIV, but I don't want to be the trans voice of HIV", suggesting that the constant engagement in activism and advocacy was met with burnout, particularly among participants who were also subject to increased physical violence as a result of their visibility. For example, participant 1 (50s) described being recognized and attacked in public as a result of her visibility as a trans activist: "I was attacked in the subway.... I guess she know me from somewhere... And she look at me and she says, "Oh I know you a man. Oh I know." She no even said trans. She said man...because I'm very known in the community as a trans women". Participant 9 (30s) reflected on the deterioration of her physical health as a result of over 15 years of trans activism, complicated by HIV: "And I get sick and tired, and that's because I was too much involved... Each year we had a trans day of pride and I was really involved with that.... Just after that always, I get sick and I get on an intravenous for a month." Lastly, some participants felt that they could no longer access transspecific services because they had achieved a certain level of security: "Because I started working I just felt guilty for accessing services" (Participant 4, 30s). These examples show how the impacts of engaging in advocacy/activism are experienced at the intersection of gender identity, HIV status, and class.

Recommendations to Address Stigma and Discrimination in Healthcare

Trans WLWH had many suggestions to address stigma and discrimination in healthcare, which can be summarized as trans inclusion and provider education.

Trans inclusion, the first sub-theme, captured the importance of having trans people (peers) deliver the services, which was thought to both increase accessibility of the services (e.g. "where they can hear from other persons who are going through it too" (Participant 10, 20s) as well as provide an opportunity for capacity building and income generation among trans people (e.g., "help trans people go to school so that they can work there one day" (Participant 4, 30s). As participant 5 (30s) described:

"I'm trying to implement a transgender staff person because we more so have been getting a lot more trans-identified members or people who have always been a member but have now decided to come out as trans and there's nothing there for them."

Provider education was the second sub-theme. Importantly, almost all participants highlighted the importance of education and training of service providers. Their narratives revealed who should receive education (students, administrative staff, physicians), what education should include (social context affecting trans women with HIV, gender diversity, diversity in experiences with transition, how to provide stigma-free care) and who should deliver the training (trans people).

"I've had medical students from the [university] and I do something for two months twice a year where I will go in. And they all said you taught us more in two hours than we can learn in six months from a textbook. See it's putting a face to it." (Participant 3, 60s)

"You need to be firm about what is transsexuality, what is gender, they know how to be good with a trans, don't misgender, just ask her if you're not sure. And don't ask questions you don't ask to your best friend. That's not only the doctor needs to be informed. That's the secretary." (Participant 9, 30s)

While most recommendations focused on fostering trans inclusion and competent and affirming care for trans people, the following quote suggests that training and education should be intersectional, specifically addressing HIV stigma of trans WLWH:

"I want them to know that not everybody ... not all trans women who are HIV has got it from their wrongdoing, you know what I'm saying? There are certain circumstances where trans women are forced into a situation and unfortunately, they are ... the HIV is passed onto them. I want them to do their research and not judge a book by its cover..."

(Participant 6, 50s)

Ultimately, recommendations called for systemic change.

Table 1
Additional Exemplary Quotes for Sub-themes

Theme 1. Responses to Stigma and Discrimination in Healthcare	
Resilience	"I said you had me in a room with three men. Not only are they going to feel uncomfortable their visitors are going to feel uncomfortable. If I was healthy and could do things, a room and three men is fine. But not in my condition." (Participant 3, 60s)
	"I just learn to ignore and overlook all of it. If I know I did something wrong or I put myself in a position to be criticized, then I'll say, okay, so what? But no, I can say I never, ever stood and taken any abuse from anyone, anywhere. I've never been that way." (Participant 8, 30s)
Resistance	"I put a lot of nurses and students out of my room. So many times." (Participant 1, 50s)
	" It's something where I was like learning to just like distance myself from them. Like. This isn't really something I want to go through." (Participant 4, 30s)
Transformation	"Well I have fought cases too with doctors and stuff. Human decency. You know, I have to a degree the surgeons. Sometimes they get addressed, sometimes they do. You just learn to be at them." (Participant 2, 40s)
	"Oh yeah, I call the supervisor and tell them what happened." (Participant 3, 60s)
	"And so, you know. I was on the board for [organization] for a couple of years" (Participant 7, 40s)
	"I mean like I'm a part of the community in an aspect where I'll stand up for the rights or if there's something that needs to be focused on I make known of it." (Participant 5, 30s)

	"If I was working 40 hours a week or more, everything I had done in the trans community would be probably not made." (Participant 9, 30s)
Theme 2. Motivations, Benefits, and Consequence	uences of Responding to Stigma and Discrimination in Healthcare
Motivations	"It's not right. Because everybody have the right to be who they are. And be respectful. In the way they feel good with themselves." (Participant 1, 50s)
	"And it's been one of the most rewarding experiences that I've ever had. And it's like but it would be something I would wish on more people." (Participant 4, 30s)
Benefits of Responding	"When I do a conference, that's the story of the others too. I talk about myself and the others. So, I like that. I feel like that's an accomplishment." (Participant 9, 30s)
	"So like with every year that goes by I allow myself to change as much as I possibly can so it was just something that was bound to be happening because I am able to take care of myself better and like more expenses to be doing it." (Participant 4, 30s)
	"He said to them you're fucking with the wrong woman. She's an activist in the community. She has legal clinics behind her and she'll sue you" (Participant 3, 60s)
Negative Consequences of Responding	"Yeah, and like if I try and gently remind someone. Oh please, she. And they automatically feel like I'm putting them out of the way. Like even the treatment after that they leave me in the waiting room for longer than normally people should." (Participant 4, 30s)
	"And he said, well, you know, I work for you guys, but I'm not an activist for you guys Knowing that he sees a lot of us and oh yeah, he told me, no, I definitely don't see any compassion and empathy from his side." (Participant 11, 40s)
	"Yeah, I was there pretty well five days a week working and I just got burnt out." (Participant 3, 60s)

	"But looking in hindsight you go wow, and maybe that's why I don't participate in that many spaces anymore. I don't feel like I have that kind of capacity anymore to like. Be in the grinder like that." (Participant 7, 40s)
Theme 3. Recommendations for Systemic Change	e to Address Stigma and Discrimination in Healthcare
Trans Inclusion	"There needs to be more, either peer support or safe spaces where support can be accessed where they can hear from other persons who are going through it too." (Participant 10, 20s)
	"And how could you make it a healthier place for the world in general? You have them actually sit down and listen to the very people that they're supposedly helping. So it should be sort of like real feedback." (Participant 7, 40s)
Provider Education	"Well, I'm not a monster that you get to don't judge before you start talking to that person. So, just talk to us and then you will make your own decision. But at least have some open minded." (Participant 11, 40s)
	"Educating the people. You know? We exist. We here. We are no different than anybody else. My body is one thing and my mind and my heart is another one. And it's hard." (Participant 1, 50s)

4.2.4 Discussion

This is among the first studies to comprehensively describe how trans WLWH disrupt intersecting stigmas experienced in healthcare, with their resilience as well as their resistance and transformation of discriminatory healthcare settings (Figure 1). This study expands intersectional theorizing with respect to trans WLWH by acknowledging their strengths and their abilities to resist and change oppressive systems that influence their everyday lived experience (Hill Collins, 2000). The three overarching themes are discussed in relation to existing literature and intersectionality theory. Implications of the study findings are discussed throughout.

The use of intersectionality theory supports a nuanced analysis of trans WLWH's health care experiences. Multiple types (e.g., trans stigma, HIV stigma) and forms (e.g., institutionalized, felt normative) of stigma were experienced in healthcare settings, across many settings (e.g., hospitals, specialized care settings). These findings corroborate qualitative (Logie et al., 2011; Logie, James, Tharao, & Loutfy, 2012; Melendez & Pinto, 2009; Schilder et al., 2001; Schilder et al., 1998; Sevelius, Patouhas, Keatley, & Johnson, 2014a; Wilson, Arayasirikul, & Johnson, 2013) and quantitative studies (Reisner et al., 2017; Sevelius et al., 2014b) which show that trans stigma within and across healthcare settings is a barrier to access to care for trans WLWH.

Trans WLWH in this study exhibited resilience (e.g., inner strength), and actively resisted stigma and discrimination (e.g., refusing care from specific types of providers), and transformed discriminatory healthcare settings, through private self-advocacy, activism, and engagement in community-based organizations, research, and education (Figure 1). These findings build on the results of a qualitative study by Mizock and Mueuser (2014) that detailed the coping strategies of trans people with mental health issues in navigating trans stigma and discrimination in

employment settings by highlighting coping with intersecting types of stigma and discrimination in healthcare settings. These findings also build on a qualitative study of stigma and discrimination and coping among WLWH (Logie et al., 2011) by highlighting empowerment processes. Resilience can be seen as a pre-requisite for exhibiting empowerment in the context of navigating healthcare hostility. Importantly, resilience among these participants was not only developed and exerted in response to stigma and discrimination in healthcare, but also in response to the injurious social conditions within which they lived their everyday lives.

This study identified some sources of resilience similar to those documented among trans people of colour (e.g., developing a language to become assertive in navigating boundaries in relationships) (Singh & McKleroy, 2011). It also confirmed the findings of a qualitative study exploring resilience among trans youth of colour (n=13), which found that advocacy was a major theme, particularly self-advocacy in social interactions and educational systems (Singh, 2013). This, and other studies call for practitioners, particularly social workers and other mental health professionals, to utilize a strengths-based approach which acknowledges the skills trans clients have, rather than their deficits; explores, validates, and supports the development of pride; addresses the social determinants of health; and connects people to community (Singh & McKleroy, 2011). In addition to increasing access to healthcare, working with strengths may also improve mental health among trans WLWH, consistent with a minority stress approach (Meyer, 1995, 2003).

While the strengths of this population must be recognized, that trans WLWH themselves are doing the work of reducing barriers to access to care is not a positive finding. There were benefits of engaging in activism (increased self-worth, challenging internalized stigma, reduced social isolation, increased economic resources, leverage for better treatment). However, these

benefits could either be achieved through other mechanisms (e.g., participating in paid employment, social support groups) or be altogether not necessary if trans and HIV stigma, among other types of stigma permeating their everyday experiences, was reduced.

As described, trans activism has resulted in significant burnout for some trans WLWH. Findings from a qualitative study exploring the experiences of social justice and human rights activists in the US (n=22) similarly identified several manifestations of burnout, including the deterioration of physical health, psychological and emotional health, hopelessness (Chen & Gorski, 2015). From an intersectional perspective, burnout for trans WLWH is complicated by HIV, including contributing to reduced physical health. Purposeful disclosure of trans (and sometimes HIV) identity and subsequent visibility was used as a mechanism for individual, interpersonal, and collective change. However, while visibility was oftentimes a necessary component of being an activist, it also increased targeted violence against trans WLWH. Thus, the findings of this study suggest that healthcare providers and educators within the health professions should do much more to create safe and affirming spaces for trans WLWH to access care. Healthcare providers can contribute to resilience among WLWH through fostering compassion in healthcare via the recognition of trans WLWH's adverse experiences, connecting with trans WLWH on a personal, authentic, and genuine level, providing stigma-free care, and taking action to identify and rectify discrimination (Taylor, Hodgson, Gee, & Collins, 2017). HIV care providers may understand the social context affecting trans WLWH in a way that other providers do not. However, compassionate care must be extended to other environments in order to optimize the health and well-being of trans WLWH.

Providers can improve care access for trans WLWH by listening to and validating their concerns, without blaming (e.g., being defensive, lacking empathy), labelling/stereotyping (e.g.,

calling them aggressive), and continuing to perpetuate discrimination (e.g., leaving them in the waiting room). Actively working towards creating an inclusive healthcare environment is a critical component of delivering competent and affirmative healthcare for trans people (Rossi & Lopez). A qualitative study conducted with trans people (n=55) and medical providers (n=12) identified the establishment of authority as central to the interpersonal relationship between trans people and their healthcare providers (Poteat, German, & Kerrigan, 2013). More specifically, interpersonal stigma in the context of the patient-provider relationship was used to (re)affirm provider authority by positioning the trans patient as problematic. In the current study, this dynamic was seen not only in the initial perpetration of stigma, but in the response that providers had after their actions were corrected by trans WLWH.

Feminist social work perspectives on empowerment explore how social contexts enable or constrain empowerment processes (Carr, 2003). In addition to challenging stigma within healthcare and broader society, healthcare providers can create opportunities to receive meaningful feedback from trans WLWH and can create spaces for trans WLWH to connect (Pinto et al., 2008). On a broader level, providers can use their power to participate in transformative and social justice oriented change within their organizations that will improve the quality of care and subsequent care engagement of trans WLWH. Beyond those recommendations made by trans WLWH in this study, there are several other studies providers can draw on to address institutional barriers to access (e.g., Bauer et al., 2009).

Trans WLWH made several important recommendations to address structural inequities affecting their experiences within healthcare (trans inclusion, provider education). Trans involvement at every level of organizations was recommended, echoing other qualitative studies (Melendez & Pinto, 2009; Munro et al., 2017; Sevelius et al., 2014a; Wilson et al., 2013). A

study of deans of medical education in North America identified that few hours were dedicated to LGBT health (Obedin-Maliver et al., 2011). An increased need for education is not unique to physicians but includes the broader community of medical and allied healthcare professionals. Literature consistently also documents that social workers do not receive adequate education about the trans community or working with the trans community and more educational content is associated with a greater desire to work with trans people (Erich, Boutte-Queen, Donnelly, & Tittsworth, 2007). Thus, education of social workers is a key priority for building capacity and willingness to work with the trans community, including trans WLWH.

Future studies could draw on formerly-implemented local training models, such as The Trans Access Project, which trained almost 10 000 social service staff and students across Ontario over an 8 years, drawing on the expertise of trans people in all facets from training development to delivery (Scanlon, 2014). Trans training models are also being presently implemented in some provinces (e.g., Ontario through Rainbow Health Ontario's Trans Health Connection [Rainbow Health Ontario, 2018], British Columbia through the Provincial Health Services Authority's Trans Care BC [Provincial Health Services Authority, 2018]. There is much literature showing success of provider-level interventions in aiming to reduce HIV stigma (Rutledge, Whyte, Abell, Brown, & Cesnales, 2011; Stangl, 2013). Additionally, studies of programs to improve providers understanding of LGBT people, broadly, have been assessed (Boroughs, Bedoya, O'Cleirigh, & Safren, 2015; Lelutiu-Weinberger & Pachankis; Poteat et al., 2017; Riggs & Fell, 2010) and some studies have articulated processes for enhancing provider cultural competence for serving trans and gender diverse clients (Hanssmann, Morrison, & Russian, 2008; Lelutiu-Weinberger et al., 2016). Important to note is that these programs all seek to reduce one type of stigma (e.g., HIV stigma or trans stigma). Interventions that address

multiple types of intersecting stigmas simultaneously are lacking and needed (Wagner, Girard, McShane, Margolese, & Hart, 2017).

Studies suggest that educational efforts to increase trans cultural competency can increase provider awareness and understanding of trans people (Hanssmann et al., 2008). As an overarching goal of this paper was to focus on the strengths exhibited by trans WLWH in relation to experiencing stigma and discrimination in healthcare, intersectional stigma (e.g., how trans stigma functions differently in the context of HIV or how HIV stigma functions differently for trans women) was underexplored. Future analyses that demonstrate how different types of stigma are uniquely experienced by trans WLWH (e.g., how HIV stigma differs for cis and trans WLWH) will further support the development of stigma-reduction interventions that are intersectional in nature.

Studies have previously shown that trans WLWH recommend that providers receive more education about their clinical care needs (e.g., drug-drug interactions between antiretroviral treatment and feminizing hormones) (Lacombe-Duncan, 2018). However, apart from clinical care, trans WLWH in this study highlighted a critical need for foundational knowledge among providers about gender diversity, diversity in experiences with transition, and the social context affecting trans WLWH. Participants hoped that provider knowledge of their social context would lead to greater provider empathy and a reduction of stigma in the interpersonal patient-provider relationship. Other studies have similarly highlighted the importance of educating practitioners about the sociocultural context (e.g., social, legal, political landscape within which trans people live) as a critical mechanism to increase knowledge, motivation, and intention to provide culturally competent, non-discriminatory care (Boroughs et al., 2015; Riggs & Fell, 2010).

Schilder et al.'s (1998, 2001) participants similarly suggested that providers should be more

aware of their social context and culture, and did find that interactions with providers were more positive about healthcare when providers took into account their psychosocial realities and diverse identities. While scholars have cautioned against burdening trans people by requesting their participation in provider training (White Hughto, Reisner, & Pachankis, 2015), facilitation by trans people increases inter-group contact, which is an effective mechanism at reducing stigma against diverse populations (Pettigrew & Tropp, 2006) and has been recommended for trans cultural competency trainings (Hanssmann et al., 2008). Hiring, training, and fairly compensating trans people for developing and delivering stigma-reduction interventions can be construed as economic empowerment, which has the potential to contribute to positive outcomes both in the short term (e.g., reduced internalized classism) and long term (e.g., financial stability, emotional health and well-being) (Jiménez-Solomon et al., 2016). Economic inclusion is considered a high priority for an LGBT global research agenda (Badgett & Crehan, 2017).

Strengths and Limitations

A major strength of this study is that it provides a platform for women's voices who are not often represented within HIV research. Moreover, this study brings attention to the strength of trans WLWH as individuals and as a community. One major limitation is the small sample size. Although there was a participant pool of 54 trans WLWH who participated in CHIWOS at baseline, only 11 were referred by PRAs to participate in an individual interview. It is possible that PRAs referred trans WLWH who were at more stable points in their lives, which may have impacted their discussion of resilience, resistance, and transformation. However, analyses of baseline CHIWOS quantitative data showed that trans WLWH who participated in a qualitative interview did not differ significantly from trans WLWH not participating in an interview with

respect to sociodemographics, clinical characteristics, or resilience, suggesting that the qualitative sample was overall reflective of trans WLWH in the larger CHIWOS cohort.

Additionally, most themes were endorsed by multiple participants. Most participants had been living with HIV for many years and had embraced their trans identities/experiences from a young age (Lacombe-Duncan, 2018), allowing time for the development of these adaptive strategies.

Trans WLWH who are newly diagnosed and/or who have recently come out as trans may experience and respond to stigma differently.

As this was an exploratory qualitative study with a small sample size, the aim was not to generalize but to provide a beginning picture of the strengths of trans WLWH in relation to navigating hostile healthcare settings. Results are limited to trans WLWH in resource-rich settings where access to healthcare and healthcare insurance are universal. Despite universal access to healthcare in well-resourced areas, trans WLWH highlighted multiple barriers to access to care. It is likely that trans WLWH living in settings without universal access and/or those in rural settings may have experienced even poorer healthcare access, warranting their further study (Munro et al., 2017).

Finally, some scholars have suggested that the systematic nature of FA may contribute to a mechanical rather than "intuitive and imaginative" analysis (Parkinson et al., 2016, p. 122). However, the systematic, yet flexible methods of FA allowed for a thorough analysis of all data by theme and by participant, as well as the generation of rich descriptions and interpretations (Gale et al., 2013). The analysis was further strengthened by incorporating several methods of reflexivity, which supported the researcher in moving beyond deficits-framed research to highlight the adaptive nature of trans WLWH's responses to healthcare stigma and discrimination. For example, not returning to care after experiencing stigma and discrimination

could have been framed solely negatively as avoidance of care. However, reflecting on the autonomous choices trans WLWH make in response to negative experiences allowed for the emergence of the theme of resistance, a strengths-based counter to avoidance.

4.2.5 Conclusions and Implications

This study addresses notable gaps in the literature published to-date by describing how trans WLWH respond to intersecting stigmas and discrimination in healthcare settings through resilience, resistance, and transformation. Trans WLWH recommend systemic change through simultaneously promoting trans inclusion at all organizational levels and increasing provider training. Training for healthcare providers to increase trans competency is not a new idea (Sevelius, Carrico, & Johnson, 2010); however, this study suggests the breadth of settings in which this training is needed, re-confirms the necessity of training providers beyond physicians and nurses, and provides insight into the topics (social context affecting trans WLWH) and skills (non-judgmental interaction) that trans WLWH believe are crucial for providers to know and have. Providers can counter service delivery focused on deficits by working alongside trans WLWH from a strengths-based perspective, while continuing to fight for systemic and sustained positive change within their organizations, across multiple intersections of inequity.

4.3 References

- Badgett, M. V. L., & Crehan, P. (2017). Developing actionable research priorities for LGBTI inclusion *Journal of Research in Gender Studies*, 7(1), 218-247. doi:http://dx.doi.org/10.22381/JRGS7120178
- Balkissoon, D., & Ha, T. T. (2017). Death of Alloura Wells tells a story of a vulnerable community. *The Globe and Mail*. Retrieved from https://www.theglobeandmail.com/news/toronto/death-of-alloura-wells-tells-a-story-of-a-vulnerablecommunity/article37356642/
- Barusch, A., Gringeri, C., & George, M. (2011). Rigor in qualitative social work research: a review of strategies used in published articles. *Social Work Research*, *35*(1), 11-19.
- Bauer, G. R., & Hammond, R. (2015). Toward a broader conceptualization of trans women's sexual health. *Canadian Journal of Human Sexuality*, 24(1), 1-11. doi:http://dx.doi.org/10.3138/cjhs.24.1-CO1
- Bauer, G. R., Hammond, R., Travers, R., Kaay, M., Hohenadel, K. M., & Boyce, M. (2009). "I don't think this is theoretical; this is our lives": how erasure impacts health care for transgender people. *Journal of the Association of Nurses in AIDS Care*, 20(5), 348-361. doi:10.1016/j.jana.2009.07.004
- Bauer, G. R., & Scheim, A. I. (2015). Statistics from Trans PULSE to inform human rights policy. Retrieved from http://transpulseproject.ca/research/statistics-from-trans-pulse-to-inform-human-rights-policy/
- Bauer, G. R., Scheim, A. I., Deutsch, M. B., & Massarella, C. (2014). Reported emergency department avoidance, use, and experiences of transgender persons in Ontario, Canada:

- Results from a respondent-driven sampling survey. *Annals of Emergency Medicine*, 63(6), 713-720.e711. doi:10.1016/j.annemergmed.2013.09.027
- Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health*, 103(5), 943-951. doi:10.2105/ajph.2013.301241
- Boroughs, M. S., Bedoya, C. A., O'Cleirigh, C., & Safren, S. A. (2015). Toward defining, measuring, and evaluating LGBT cultural competence for psychologists. *Clinical Psychology: Science and Practice*, 22(2), 151-171. doi:10.1111/cpsp.12098
- Bourgeois, A., Edmunds, M., Awan, A., Jonah, L., Varsaneux, O., & Siu, W. (2016). HIV in Canada Surveillance report, 2016. *Canada Communicable Disease Report (CCDR)*, 43(12), 248-256.
- Bowleg, L. (2008). When Black + Lesbian + Woman ≠ Black Lesbian Woman: the methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles*, 59(5-6), 312-325. doi:http://dx.doi.org/10.1007/s11199-008-9400-z
- Bowleg, L. (2012). The problem with the phrase women and minorities: intersectionality—an important theoretical framework for public health. *American Journal of Public Health*, 102(7), 1267-1273. doi:10.2105/AJPH.2012.300750
- Breslow, A. S., Brewster, M. E., Velez, B. L., Wong, S., Geiger, E., & Soderstrom, B. (2015).

 Resilience and collective action: exploring buffers against minority stress for transgender individuals. *Psychology of Sexual Orientation and Gender Diversity*, 2(3), 253-265.

 doi:http://dx.doi.org/10.1037/sgd0000117

- Carr, E. (2003). Rethinking empowerment theory using a feminist lens: the importance of process. *Affilia*, 18(1), 8-20. doi:10.1177/0886109902239092
- Chen, J. A., Granato, H., Shipherd, J. C., Simpson, T. L., & Lehavot, K. (2017). A qualitative analysis of transgender veterans' lived experiences. *Psychology of Sexual Orientation and Gender Diversity*, 4(1), 63-74. doi:http://dx.doi.org/10.1037/sgd0000217
- Christens, B. D. (2012a). Targeting empowerment in community development: a community psychology approach to enhancing local power and well-being. *Community Development Journal*, 47(4), 538-554. doi:10.1093/cdj/bss031
- Christens, B. D. (2012b). Toward relational empowerment. *American Journal of Community Psychology*, 50(1-2), 114-128. doi:10.1007/s10464-011-9483-5
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex:aA Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum*, 1989(1), 139-167.
- CTV Montreal. (2017). Trans advocates call for protection of sex workers after Point St. Charles murder. *CTV News Montreal*. Retrieved from https://montreal.ctvnews.ca/trans-advocates-call-for-protection-of-sex-workers-after-point-st-charles-murder-1.3593987
- Dhamoon, R. K., & Hankivsky, O. (2011). Why the theory and practice of intersectionality matter to health research and policy. In O. Hankivsky (Ed.), *Health inequities in Canada: Intersectional frameworks and practices* (pp. 16-50). Vancouver, BC: UBC Press.
- Dowshen, N., Matone, M., Luan, X., Lee, S., Belzer, M., Fernandez, M. I., . . . Adolescent Medicine Trials Network for HIV/AIDS Interventions. (2016). Behavioral and health outcomes for HIV+ young transgender women (YTW) linked to and engaged in medical care. *LGBT Health*, *3*(2), 162-167. doi:10.1089/lgbt.2014.0062

- Drisko, J. W. (1997). Strengthening qualitative studies and reports: standards to promote academic integrity. *Journal of Social Work Education*, *33*(1), 185-197.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107-115.
- Erich, S. A., Boutte-Queen, N., Donnelly, S., & Tittsworth, J. (2007). Social work education: implications for working with the transgender community. *The Journal of Baccalaureate Social Work*, 12(2), 42-52.
- Finlay, L. (2002). Negotiating the swamp: The opportunity and challenge of reflexivity in research practice. *Qualitative Research*, 2(2), 209-230.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.
- Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, 13, 117. doi:http://dx.doi.org/10.1186/1471-2288-13-117
- Gordon, A. R., & Meyer, I. H. (2007). Gender nonconformity as a target of prejudice, discrimination, and violence against LGB individuals. *Journal of LGBT Health Research*, 3(3), 55-71.
- Government of Canada. (2017). *Rights of LGBTI persons*. Ottawa, Canada. Retrieved from https://www.canada.ca/en/canadian-heritage/services/rights-lgbti-persons.html.
- Government of Canada. (2018). *Canada's Health Care System*. Ottawa, Canada. Retrieved from https://www.canada.ca/en/health-canada/services/canada-health-care-system.html.
- Graham, M. (2004). Empowerment revisited—social work, resistance and agency in black communities. *European Journal of Social Work*, 7(1), 43-56. doi:10.1080/1369191

45042000217393

- Gutiérrez, L. M., DeLois, K. A., & GlenMaye, L. (1995). Understanding empowerment practice:

 Building on practitioner-based knowledge. *Families in Society*, 76(9), 534.
- Hanssmann, C., Morrison, D., & Russian, E. (2008). Talking, gawking, or getting it done: provider trainings to increase cultural and clinical competence for transgender and gender-nonconforming patients and clients. *Sexuality Research & Social Policy*, 5(1), 5-23. doi:10.1525/srsp.2008.5.1.5
- Hill Collins, P. (2000). Black feminist thought: knowledge, consciousness, and the politics of empowerment. New York: Routledge.
- Jiménez-Solomon, O. G., Méndez-Bustos, P., Swarbrick, M., Díaz, S., Silva, S., Kelley, M., . . . Lewis-Fernández, R. (2016). Peer-supported economic empowerment: a financial wellness intervention framework for people with psychiatric disabilities. *Psychiatric Rehabilitation Journal*, 39(3), 222-233. doi:http://dx.doi.org/10.1037/prj0000210
- Johnson, M. O., Carol Dawson, R., Dilworth, S. E., & Neilands, T. B. (2012). Advances in the conceptualization and measurement of health care empowerment: development and validation of the health care empowerment inventory. *PLoS One*, 7(9). doi:http://dx.doi.org/10.1371/journal.pone.0045692
- Johnson, M. O., Sevelius, J. M., Dilworth, S. E., Saberi, P., & Neilands, T. B. (2012).
 Preliminary support for the construct of health care empowerment in the context of treatment for human immunodeficiency virus. *Patient Preference and Adherence*, 6, 395-404. doi:10.2147/ppa.s30040
- Johnson, M. O. P. (2011). The shifting landscape of health care: Toward a model of health care empowerment. *American Journal of Public Health*, 101(2), 265-270.

- Kalichman, S. C., Hernandez, D., Finneran, S., Price, D., & Driver, R. (2017). Transgenderwomen and HIV-related health disparities: falling off the HIV treatment cascade. *Sexual Health*, 14(5), 469-476. doi:10.1071/SH17015
- Kondracki, N. L., Wellman, N. S., & Amundson, D. R. (2002). Content analysis: review of methods and their applications in nutrition education. *Journal of Nutrition Education and Behavior*, 34(4), 224-230. doi:http://dx.doi.org/10.1016/S1499-4046(06)60097-3
- Lacombe-Duncan, A. (2016). An intersectional perspective on access to HIV-related healthcare for transgender women. *Transgender Health*, *I*(1), 137-141.
- Lacombe-Duncan, A. (2018). Transition and gender-affirming care experiences of trans women with HIV in Canada: a mixed methods study. *Unpublished Manuscript*.
- Lelutiu-Weinberger, C., & Pachankis, J. E. Acceptability and preliminary efficacy of a lesbian, gay, bisexual, and transgender-affirmative mental health practice training in a highly stigmatizing national context. *LGBT Health*, *4*(5). doi: 10.1089/lgbt.2016.0194
- Lelutiu-Weinberger, C., Pollard-Thomas, P., Pagano, W., Levitt, N., Lopez, E. I., Golub, S. A., & Radix, A. E. (2016). Implementation and evaluation of a pilot training to improve transgender competency among medical staff in an urban clinic. *Transgender Health*, 1(1), 45-53. doi:10.1089/trgh.2015.0009
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: SAGE Publications.
- Logie, C. H., James, L., Tharao, W., & Loutfy, M. R. (2011). HIV, gender, race, sexual orientation, and sex work: a qualitative study of intersectional stigma experienced by HIV-positive women in Ontario, Canada. *PLoS Medicine*, 8(11), e1001124. doi:10.1371/journal.pmed.1001124

- Logie, C. H., James, L., Tharao, W., & Loutfy, M. R. (2012). "We don't exist": a qualitative study of marginalization experienced by HIV-positive lesbian, bisexual, queer and transgender women in Toronto, Canada. *Journal of the International AIDS Society*, *15*(2), 17392. doi:10.7448/IAS.15.2.17392
- Loutfy, M., de Pokomandy, A., Kennedy, V. L., Carter, A., O'Brien, N., Proulx-Boucher, K., . . . Kaida, A. (2017). Cohort profile: The Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS). *PLoS One*, *12*(9), e0184708.
- Maynard, M. (2004). Feminist issues in data analysis. In A. M. Hardy & Bryman (Eds.), Handbook of data analysis (pp. 131-146). Thousand Oaks, California: SAGE Publications.
- McCall, L. (2005). The complexity of intersectionality. Signs, 30(3), 1771-1800.
- Melendez, R. M., & Pinto, R. M. (2009). HIV prevention and primary care for transgender women in a community-based clinic. *Journal of the Association of Nurses in AIDS Care*, 20(5), 387-397. doi:10.1016/j.jana.2009.06.002
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36(1), 38-56.
- Meyer, I. H. (2003). Prejudice as stress: conceptual and measurement problems. *American Journal of Public Health*, 93(2), 262-265.
- Mizock, L., & Mueser, K. T. (2014). Employment, mental health, internalized stigma, and coping with transphobia among transgender individuals. *Psychology of Sexual Orientation and Gender Diversity*, *1*(2), 146-158. doi:http://dx.doi.org/10.1037/sgd0000029

- Mizuno, Y., Frazier, E. L., Huang, P., & Skarbinski, J. (2015). Characteristics of transgender women living with HIV receiving medical care in the United States. *LGBT Health*, 2(3), 228-234. doi:http://dx.doi.org/10.1089/lgbt.2014.0099
- Munro, L., Marshall, Z., Bauer, G., Hammond, R., Nault, C., & Travers, R. (2017).
 (Dis)integrated care: barriers to health care utilization for trans women living with HIV.
 Journal of the Association of Nurses in AIDS Care, 28(5), 708-722. doi:10.1016/j.jana.
 2017.06.001
- Obedin-Maliver, J., Goldsmith, E. S., Stewart, L., White, W., Tran, E., Brenman, S., . . . Lunn, M. R. (2011). Lesbian, gay, bisexual, and transgender-related content in undergraduate medical education. *JAMA*, 306(9), 971-977. doi:10.1001/jama.2011.1255
- Padgett, D. K. (2008). *Qualitative methods in sociology, 2nd edition*. Thousand Oaks, CA: SAGE PUBLICATIONS.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751-783. doi:http://dx.doi.org/
 10.1037/0022-3514.90.5.751
- Pinto, R. M., Melendez, R. M., & Spector, A. Y. (2008). Male-to-female transgender individuals building social support and capital from within a gender-focused network. *Journal of Gay & Lesbian Social Services*, 20(3), 203-220. doi:10.1080/10538720802235179
- Poteat, T., German, D., & Kerrigan, D. (2013). Managing uncertainty: a grounded theory of stigma in transgender health care encounters. *Social Science and Medicine*, 84, 22-29. doi:http://dx.doi.org/10.1016/j.socscimed.2013.02.019

- Poteat, T., Park, C., Solares, D., Williams, J. K., Wolf, R. C., Metheny, N., . . . Toiv, N. (2017). Changing hearts and minds: results from a multi-country gender and sexual diversity training. *PloS One*, *12*(9), e0184484. doi:10.1371/journal.pone.0184484
- Probst, B. (2015). The eye regards itself: benefits and challenges of reflexivity in qualitative social work research. *Social Work Research*, *39*(1), 37-48.
- Probst, B., & Berenson, L. (2014). The double arrow: how qualitative social work researchers use reflexivity. *Qualitative Social Work*, 13(6), 813-827. doi:10.1177/1473325013506248
- Provincial Health Services Authority. (2018). Trans Care BC: Education. Retrieved from http://www.phsa.ca/transcarebc/health-professionals/education
- Public Health Agency of Canada. (2015). HIV and AIDS in Canada: Surveillance Report to December 31, 2014. Retrieved from https://www.canada.ca/en/public-health/services/publications/diseases-conditions/hiv-aids-canada-surveillance-report-december-31-2014.html?_ga=2.158215802.1108066476.1516034868-1421040438.1505393165
- Rainbow Health Ontario. (2018). Trans Health Connection. Retrieved from https://www.rainbowhealthontario.ca/trans-health-connection/
- Reisner, S. L., Jadwin-Cakmak, L., White Hughto, J. M., Martinez, M., Salomon, L., & Harper,
 G. W. (2017). Characterizing the HIV prevention and care continua in a sample of
 transgender youth in the U.S. AIDS and Behavior, 21(12), 3312-3327. doi:10.1007/s
 10461-017-1938-8

- Riggs, D. W., & Fell, G. R. (2010). Teaching cultural competency for working with lesbian, gay, bisexual and trans clients. *Psychology Learning & Teaching*, 9(1), 30-38. doi:10.2304/plat.2010.9.1.30
- Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. B. R. G. Burgess (Eds.), *Analyzing Qualitative Data* (pp. 173-194). London, UK: Routledge.
- Rossi, A. L., & Lopez, E. J. Contextualizing competence: language and LGBT-based competency in health care. *Journal of Homosexuality*, *64*(10), 1330-1349.
- Rutledge, S. E., Whyte, J., Abell, N., Brown, K. M., & Cesnales, N. I. (2011). Measuring stigma among health care and social service providers: The HIV/AIDS Provider Stigma Inventory. *AIDS Patient Care and STDS*, 25(11), 673-682. doi:10.1089/apc.2011.0008
- Scanlon, K., Pyne, J., Araya, D., Butler, A, Manal, J., Ortigoza, E., Penate, J. & Tokawa, K.

 (2014). Chapter 13: Trans Access Project: Running the gauntlet. In D. I. a. R. Raj (Eds.), *Trans activism in Canada: A reader*. Toronto: Canadian Scholar's Press.
- Schilder, A. J., Kennedy, C., Goldstone, I. L., Ogden, R., Hogg, R. S., & O'Shaughnessy, M. V. (2001). "Being dealt with as a whole person." Care seeking and adherence: the benefits of culturally competent care. *Social Science and Medicine*, *52*(11), 1643-1659. doi:10.1016/S0277-9536(00)00274-4
- Schilder, A. J., Laframboise, S., Hogg, R. S., Trussler, T., Goldstone, I., Schechter, M. T., & O'Shaughnessy, M. V. (1998). "They don't see our feelings." The health care experiences of HIV-positive transgendered persons. *Journal of the Gay and Lesbian Medical Association*, 02(3), 103-111. doi:10.1023/B:JOLA.0000004052.12136.1b

- Sevelius, J. M., Carrico, A., & Johnson, M. O. (2010). Antiretroviral therapy adherence among transgender women living with HIV. *Journal of the Association of Nurses in AIDS Care*, 21(3), 256-264. doi:10.1016/j.jana.2010.01.005
- Sevelius, J. M., Patouhas, E., Keatley, J. G., & Johnson, M. O. (2014a). Barriers and facilitators to engagement and retention in care among transgender women living with human immunodeficiency virus. *Annals of Behavioral Medicine*, 47(1), 5-16. doi:10.1007/s12160-013-9565-8
- Sevelius, J. M., Saberi, P., & Johnson, M. O. (2014b). Correlates of antiretroviral adherence and viral load among transgender women living with HIV. *AIDS Care*, 26(8), 976-982. doi:10.1080/09540121.2014.896451
- Singh, A. A. (2013). Transgender youth of color and resilience: Negotiating oppression and finding support. *Sex Roles*, 68(11-12), 690-702. doi:http://dx.doi.org/10.1007/s11199-012-0149-z
- Singh, A. A., & McKleroy, V. S. (2011). "Just getting out of bed is a revolutionary act": The resilience of transgender people of color who have survived traumatic life events.

 *Traumatology, 17(2), 34-44. doi:10.1177/1534765610369261
- Stangl, A. L., Lloyd, J.K., Brady, L.M., Holland, C.E., & Baral, S. (2013). A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? *Journal of the International AIDS Society*, *16*(Suppl 2), 18637.
- Statistics Canada. (2018). *Population of census metropolitan areas, CANSIM table 051-0056*.

 Retrieved from http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo05a-eng.htm.

- Taylor, A., Hodgson, D., Gee, M., & Collins, K. (2017). Compassion in healthcare: a concept analysis. *Journal of Radiotherapy in Practice*, 16(4), 350-360. doi:10.1017/S14603969 17000322
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357. doi:10.1093/intqhc/mzm042
- Ungar, M. (2011). The social ecology of resilience: addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry*, 81(1), 1-17. doi:10.1111/j.1939-0025.2010.01067.x
- Ungar, M., Liebenberg, L., Boothroyd, R., Kwong, W. M., Lee, T. Y., Leblanc, J., . . .
 Makhnach, A. (2008). The study of youth resilience across cultures: lessons from a pilot study of measurement development. *Research in Human Development*, 5(3), 166-180.
 doi:10.1080/15427600802274019
- Valentine, S. E., & Shipherd, J. C. (2018). A systematic review of social stress and mental health among transgender and gender non-conforming people in the united states. *Clinical Psychology Review*. doi:http://dx.doi.org/10.1016/j.cpr.2018.03.003
- Wagner, A. C., Girard, T., McShane, K. E., Margolese, S., & Hart, T. A. (2017). HIV-related stigma and overlapping stigmas towards people living with HIV among health care trainees in Canada. *AIDS Education and Prevention*, 29(4), 364-376. doi:http://dx.doi.org/101521aeap2017294364
- White Hughto, J. M., Reisner, S. L., & Pachankis, J. E. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science and Medicine*, 147, 222-231. doi:10.1016/j.socscimed.2015.11.010

Wilson, E. C., Arayasirikul, S., & Johnson, K. (2013). Access to HIV care and support services for African American transwomen living with HIV. *International Journal of Transgenderism*, 14(4), 182-195. doi:10.1080/15532739.2014.890090

Chapter 5 Discussion and Conclusion

5.1 Three-paper Dissertation Overview

This three-paper dissertation aimed to expand an understanding of the experiences of trans women living with HIV (WLWH) in Canada accessing HIV, gender-affirming, and other types of healthcare, drawing on social ecological and intersectionality theoretical approaches. The first paper, Characterizing the HIV Care Cascade Among Trans Women with HIV in Canada (Chapter 2), utilized quantitative cross-sectional baseline survey data collected from the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS) to understand engagement across the HIV care cascade¹⁸ and factors associated with HIV care cascade outcomes among trans WLWH (n=54) in Canada. The second paper, Transition and Gender-affirming Care Experiences among Trans Women with HIV in Canada: A Mixed Methods Study (Chapter 3), utilized cross-sectional baseline survey data from CHIWOS and indepth semi-structured individual interviews conducted with a sub-set of trans WLWH who participated in the baseline CHIWOS survey (n=11) to explore their transition and genderaffirming healthcare experiences. The third paper, Resilience, Resistance, and Transformation: A Qualitative Study of How Trans Women with HIV Respond to Intersecting Stigmas in Healthcare (Chapter 4), drew on in-depth semi-structured individual interviews, exploring trans WLWH's responses to intersecting types of stigma and discrimination in healthcare settings. The research questions posed in each paper are described in the Introduction (Chapter 1) and in each of the three empirical chapters (Chapters 2, 3, and 4). This chapter describes and interprets the dissertation results, synthesizing findings across the three chapters and across quantitative and

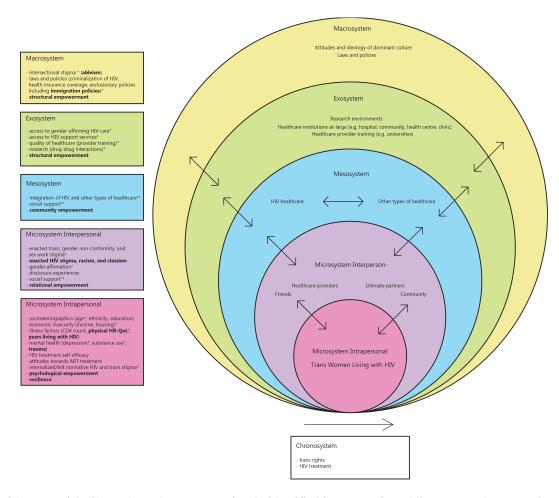
¹⁸ The HIV care cascade was operationalized with five outcomes: ever accessed HIV care, received any HIV care in the past year, currently use antiretroviral treatment (ART), ART adherence, and virological suppression.

qualitative strands, consistent with a convergent mixed methods approach. Study limitations and ethical considerations are also addressed. Finally, implications for social work research, theory, and practice are explored and recommendations are made, consistent with a transformative mixed methods design.

5.2 Synthesis and Interpretation of Findings

Each of the three papers built upon one another to enhance an understanding of trans WLWH's experiences within multiple types of healthcare, particularly the specialized care most salient to them as a population (HIV care and gender-affirming medical/surgical care). A major strength of this dissertation was the mixed methods design, which facilitated a nuanced exploration of trans WLWH's experiences beyond what would have been possible if only quantitative or qualitative data had been relied upon (Creswell & Plano Clark, 2011).

Quantitative and qualitative results were highly convergent and expanded on each other. To highlight the empirical contributions of this dissertation, the significant quantitative results from Chapters 2 and 3 and the qualitative findings from Chapters 3 and 4 are mapped onto an expanded version of the conceptual model termed an "Intersectionality-Informed Social Ecological Context of Healthcare Access for Trans Women Living with HIV", first presented in Chapter 1 (Figure 1). The synthesized results of the three papers are further described across four key dissertation findings (Box 1).



Note. Factors with an asterisk (*) are those that were previously identified in peer-reviewed literature and are corroborated or complicated by the dissertation findings. Factors that are **bolded** are newly added to the model, based on the dissertation findings.

Findings are in contrast to (social support) or complicate (integration) previous findings in the published peer-reviewed literature (Appendix A).

² HR QoL = health-related quality of life.

Figure 1. Expanded Intersectionality-informed Social Ecological Context of Healthcare Access for Trans Women Living with HIV

Box 1. Dissertation Key Findings

- 1) Trans WLWH experience gaps in access to multiple types of care, influenced by factors operating at various social ecological levels.
- 2) Trans WLWH experience multiple types (e.g., trans stigma, HIV stigma) and forms of stigma (e.g., structural, felt normative) in a variety of healthcare settings (e.g., hospitals, specialized care settings) and in their everyday lives, which impedes their access to care.
- 3) Trans WLWH report predominantly positive relationships with their HIV care providers, which increases the accessibility of care. Gaps still remain in HIV care provider competency to provide concurrent HIV and gender-affirming care, which may be improved through social, biomedical, and clinical research to inform care.
- 4) Trans WLWH have many strengths, which they harness to make their care environments more accessible for themselves and others.

5.2.1 Key Finding #1

Trans WLWH experience gaps in access to multiple types of care, influenced by factors operating at various social ecological levels.

Chapter 2 and 3 highlight gaps in access to particular types of care, including HIV care (Chapter 2), gender-affirming care (Chapter 3), and other types of healthcare (e.g., emergency care) (Chapter 3). With respect to HIV care, engagement at the beginning of the HIV care cascade is adequate, with approximately 92% of trans WLWH having ever accessed HIV care and approximately 91% of those having ever accessed care reporting having received any HIV care in the past year (Chapter 2). Although these findings are promising, it is worth reiterating that Canada has a publicly funded healthcare system, governed by five principles, accessibility among them (Government of Canada, 2018). Therefore, any gaps in access along the HIV care cascade warrant attention.

More concerning is that approximately one-fifth of trans WLWH who had ever accessed HIV care had not initiated antiretroviral treatment (ART), and of those currently on ART, one-third reported sub-optimal adherence." These gaps are critical in light of the World Health Organization's 90-90-90 goals, one of which is that 90% of people diagnosed with HIV are receiving sustained ART (World Health Organization, 2016). These gaps also echo US-based quantitative studies describing ART adherence among trans WLWH, which show prevalences of sub-optimal adherence ranging from 22% to 51% (Baguso, Gay, & Lee, 2016; Dowshen et al., 2016; Mizuno, Frazier, Huang, & Skarbinski, 2015; Sevelius, Carrico, & Johnson, 2010). These findings contribute to the global literature suggesting that trans WLWH may not receive the numerous benefits of sustained ART use at optimal adherence levels, such as reduced morbidity and mortality (Trickey et al., 2017; Ulett et al., 2009). One particularly positive finding is that among trans WLWH who reported current ART use and optimal adherence, virological suppression was nearly 100%, suggesting that trans WLWH will experience positive clinical benefits if barriers to ART uptake and adherence are addressed.

Beyond gaps in access to HIV care, the quantitative findings in Chapter 3 demonstrated gaps in access to gender-affirming medical/surgical care. Qualitative findings in Chapter 3 expanded on these quantitative findings to describe the variety of medical/surgical procedures that trans WLWH choose to access (e.g., breast augmentation, feminizing hormones) and the centrality of these services to promote their mental health and well-being (Chapter 3) and positive patient-provider interactions (Chapter 3, Chapter 4). These findings add further evidence of the well-established link between access to gender-affirming medical/surgical care and quality of life

-

¹⁹ Sub-optimal adherence was defined as < 95% of ART taken in past month, which is considered a standard cut-off for maximum ART benefits (Achappa et al., 2013; Hansana et al., 2013).

among trans people (Bauer, Scheim, Pyne, Travers, & Hammond, 2015; Lindqvist et al., 2017; White Hughto & Reisner, 2016).

Beyond documenting gaps in access to healthcare for trans WLWH, this dissertation corroborates, complicates, and builds on literature documenting social ecological barriers and facilitators of HIV care among trans WLWH in the US (Baguso et al., 2016; Dowshen et al., 2016; Mizuno, Beer, Huang, & Frazier, 2017; Reisner et al., 2017; Santos et al., 2014; Sevelius et al., 2010; Sevelius, Saberi, & Johnson, 2014b) and gender-affirming medical/surgical care for trans people in the US (Coronel Villalobos, Stieler, Frohard-Dourlent, & Saewyc, 2018; Gehi & Arkles, 2007; Gridley et al., 2016; Puckett, Cleary, Rossman, Newcomb, & Mustanski, 2018; Safer et al., 2016). In particular, the findings highlight how HIV status and gender identity intersect to produce a unique social ecological context of healthcare access for trans WLWH (Figure 1). Factors statistically significantly associated with one or more HIV care cascade outcomes in quantitative analyses included: sociodemographic (age), clinical (years living with HIV, physical health-related quality of life (HR-QoL), intrapersonal (depressive symptoms, PTSD symptoms, substance use), interpersonal (violence, social support), and structural factors (housing insecurity, racism, barriers to access to care, access to a family physician, geographic location, HIV stigma, trans stigma) (Chapter 2). Similarly, factors statistically significantly associated with reporting being in the process of/planning to medically/surgically transitioning (compared to reporting fully medically/surgically transitioning) included: sociodemographic (sources of income other than paid employment), clinical (HR-QoL), and structural factors (HIV stigma, housing insecurity, barriers to access to care). These findings underscore the importance of multilevel interventions to comprehensively address barriers to access to care at individual, social, and structural levels.

In general, the quantitative findings from Chapters 2 and 3 converge, particularly with respect to the negative associations between access to care and physical HR-QoL, unstable housing, HIV stigma, and barriers to access to care, highlighting the importance of clinical factors and structural factors in relation to accessing HIV and gender-affirming medical/surgical care. The qualitative findings of Chapter 3 provide additional support regarding the association between social ecological factors and access to gender-affirming healthcare. For example, qualitative findings showed how cost impeded access to some types of gender-affirming care (e.g., hair removal), while access to health insurance via social assistance increased access to others (e.g., vaginoplasty, feminizing hormones). Finally, the expanded model (Figure 1) incorporates strengths-based factors at each level, highlighting the resilience exhibited by trans WLWH, as well as giving credence to how trans WLWH resist and transform discriminatory healthcare settings (Chapter 4). These important strengths-based findings are described in Key Finding # 4.

5.2.2 Key Finding # 2

Trans WLWH experience multiple types (e.g., trans stigma, HIV stigma) and forms of stigma (e.g., structural, felt normative) in a variety of healthcare settings (e.g., hospitals, specialized care settings) and in their everyday lives, which impedes their access to care.

The second key finding pertains to the most pervasive barrier to healthcare access among trans WLWH, identified and discussed in all three empirical chapters: stigma and discrimination.²⁰ Multiple types (e.g., trans stigma, HIV stigma) and forms of stigma (e.g.,

_

²⁰ Stigma is a social process of exerting social control which involves labeling, stereotyping, and subsequent discrimination against a person or group of people (Link & Phelan, 2001). It is perpetuated at a structural level through the institutionalization of discriminatory and exclusionary policies, at an interpersonal level through enacted

structural, felt normative) were experienced in healthcare settings, across all possible settings (e.g., hospitals, specialized care settings) (Chapters 3 and 4). These findings corroborate qualitative (Logie, James, Tharao, & Loutfy, 2011; Logie, James, Tharao, & Loutfy, 2012b; Melendez & Pinto, 2009; Schilder et al., 2001; Schilder et al., 1998; Sevelius, Patouhas, Keatley, & Johnson, 2014a; Wilson, Arayasirikul, & Johnson, 2013) and quantitative studies (Reisner et al., 2017; Sevelius et al., 2014b) which show that trans stigma within and across healthcare settings is a barrier to access to care for trans WLWH, extending these findings to document that HIV stigma (Chapters 2, 3, and 4), racism (Chapters 2 and 4), gender non-conformity stigma (Chapters 3 and 4), ableism (Chapter 3), sex work stigma (Chapter 4), substance use stigma (Chapter 4), and classism (Chapter 4) also impede access to healthcare.

Quantitative findings showed that racism and personalized HIV stigma were negatively associated with current ART use. The negative association between personalized HIV stigma, which includes HIV-related stigma experienced in interpersonal relationships, and ART initiation builds on the findings of many other studies conducted among WLWH more broadly which show that disclosure concerns are a barrier to adherence (Buregyeya et al., 2017; Patel et al., 2016; Rao, Kekwaletswe, Hosek, Martinez, & Rodriguez, 2007; Ware, Wyatt, & Tugenberg, 2006). HIV stigma was also negatively associated with access to medical/surgical gender-affirming care (Chapter 3). This is the first analysis of which I am aware that has quantitatively demonstrated an association between HIV stigma and access to gender-affirming medical care.

It is possible that the impact of these global (non healthcare-specific) measures of racism, HIV stigma, and trans stigma on healthcare access is mediated by another social ecological

stigma in interpersonal interactions, and at an individual level through internalized and/or felt normative stigma, whereby people adopt society's negative attitudes towards them as their own and/or perceive that others hold negative attitudes towards them (White Hughto, Reisner, & Pachankis, 2015).

factor. Quantitative analyses for both Chapters 2 and 3 identified social ecological correlates of access to HIV care and gender-affirming care, such as depression. There is some evidence from quantitative cross-sectional studies to suggest that these social ecological factors are correlated with different types stigma, such as: trans stigma and depression (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013), HIV stigma and depression (Logie & Gadalla, 2009; Wolitski, Pals, Kidder, Courtenay-Quirk, & Holtgrave, 2009), and racial discrimination and depression (Logie, Jenkinson, Earnshaw, Tharao, & Loutfy, 2016). However, these studies did not seek to test these social ecological factors as potential mediators between stigma and healthcare access.

Perhaps most importantly, the qualitative findings expand upon the quantitative results by describing how HIV stigma impedes access to gender-affirming care at institutional, interpersonal, and intrapersonal levels (Chapter 3). From a qualitative perspective, of particular importance was trans WLWH's discussion of gender non-conformity stigma. In general, gender non-conformity can be an indication of trans identity, and is associated with more exposure to stigma and discrimination and worse health outcomes among trans people (Grant, Mottet, Tanis, & al., 2011; Reisner et al., 2015). However, the findings also highlighted how gender-conformity or 'passing privilege', defined as the social advantage of being perceived by others to be cisgender (Mizock & Hopwood, 2018), class privilege and white privilege improved care experiences for some participants (Chapter 3, Chapter 4), reconfirming literature from the US describing how gender-affirming care access is heavily divided along lines of race and class and is out of reach for many racialized and low income trans women (Gehi & Arkles, 2007).

Approximately one-fifth of survey participants experienced trans stigma in HIV care, which included being told by their HIV provider that they do not know enough about trans-related care

to provide care, being told by one's HIV provider that one is not really the gender they identify with, being discouraged by one's HIV doctor from exploring one's gender, and being misgendered (Chapter 3). Two participants from the qualitative sub-sample described trans stigma and discrimination from HIV care providers with serious negative consequences, including care avoidance and victimization (Chapter 3). The pervasiveness of trans stigma as well as gender non-conformity stigma underscores the importance of not grouping trans women with men who have sex with men (MSM) or WLWH in empirical studies focused on access to healthcare and of the need to analyze results with a trans-specific lens or dis-aggregate data by gender identity.

Intersecting types of stigma and discrimination was experienced across multiple care settings by multiple providers, suggesting a need for widespread anti-stigma training (Chapter 4). Trans WLWH recommended who should receive education (students, administrative staff, physicians), what education should include (social context affecting trans women with HIV, gender diversity, diversity in experiences with transition, how to provide stigma-free care) and who should deliver the training (trans people) (Chapter 4). Other studies have also stressed the importance of educating practitioners on the sociocultural context, including the social, legal, political landscape within which trans people live, as a critical mechanism to increase knowledge, motivation, and intention to provide culturally competent, gender-affirming care (Boroughs, Bedoya, O'Cleirigh, & Safren, 2015; Riggs & Fell, 2010; Schilder et al., 2001; Schilder et al., 1998).

5.2.3 Key Finding # 3

Trans WLWH report predominantly positive relationships with their HIV care providers, which increases the accessibility of care. Gaps still remain in HIV care provider

competency to provide concurrent HIV and gender-affirming care, which may be improved through social, biomedical, and clinical research to inform care.

A particularly promising finding emerging from this dissertation was that most trans WLWH had positive relationships with their HIV care providers (Chapter 3). Quantitative results showed that most trans WLWH participating in this study are very comfortable or comfortable discussing trans healthcare needs with their HIV care physicians and completely/mostly trust their HIV physicians with respect to confidentiality around trans care (Chapter 3). Important to note is that venue-based sampling was utilized, whereby some CHIWOS participants were recruited from HIV clinics. Participants recruited from HIV clinics may be more likely to have positive relationships with their care providers. The qualitative findings presented in Chapter 3 provide more details in regard to the patient-provider relationship, showing how trans WLWH's relationships with their HIV care providers are characterized by warmth, acceptance/nonjudgment, and a holistic approach to health and well-being, trust, and collaboration. This positive patient-provider relationship increased access to multiple types of healthcare for trans WLWH, both directly (e.g., providing a safe and affirming space for trans WLWH to access care) and indirectly (e.g., making recommendations for safe and affirming spaces where trans WLWH could access care; liaising with other providers such as surgeons providing gender-affirming surgical care and with hospital staff at the request of participants to increase their access to care). Qualitative findings also showed how the HIV physician-patient relationship could be considered compassionate (Taylor, Hodgson, Gee, & Collins, 2017) and empowering (Johnson, Carol Dawson, Dilworth, & Neilands, 2012) (Chapter 3). Finally, from a resilience theoretical lens, HIV care providers can be seen as external sources of resilience, supporting trans WLWH to develop intrapersonal resources (e.g., self-esteem) and to navigate healthcare challenges

(Chapter 4). It is possible that selection bias may have also influenced these findings, as CHIWOS participants may have self-selected to participate in qualitative interviews due to having positive comments to make about their HIV care providers. However, trans WLWH participating in this study had substantial and negative feedback with respect to their relationships with and treatment by other (non-HIV) care providers. Thus, one could also project that participants would self-select into the qualitative portion based on having had negative experiences, which contributes to increased certainty in these positive results.

Despite these positive findings with respect to participant comfort with HIV care providers, the findings of this dissertation suggest that there is still room for improvement with respect to HIV care provider competency in providing concurrent HIV and gender-affirming care. For example, approximately one-third of participants reported that their HIV physicians are not very/not at all knowledgeable about trans health issues (Chapter 3). Additionally, among those study participants who reported taking feminizing hormones and informed their HIV physician about their hormone use, approximately one-third reported that their HIV physician had not discussed potential drug-drug interactions (DDIs) between ART and hormones (Chapter 3). The qualitative findings of this study showed that concern about DDIs was not a barrier to ART use, contrary to US-based studies (Braun et al., 2017; Melendez & Pinto, 2009; Sevelius et al., 2014a); however, women were aware of potential interactions and reported adverse effects on their health and transitions (Chapter 3). As scant research has explored DDIs between ART and feminizing hormones (Radix, Sevelius, & Deutsch, 2016), these findings underscore the urgent need for biomedical research that examines DDIs between ART and hormones.

Studies have shown that access to and quality of healthcare for trans women with HIV are limited by some healthcare providers' lack of knowledge, training and skills to adequately serve

trans WLWH (Logie et al., 2012b; Lombardi, 2001; Munro et al., 2017; Remien et al., 2015; Schilder et al., 1998; Sevelius et al., 2010; Thornhill & Klein, 2010; Wilson et al., 2009). The lack of research, particularly pertaining to trans women's health generally (e.g., post-operative gender-affirming surgical care support and primary care needs after accessing gender-affirming surgery) and specific to trans WLWH (e.g., DDIs), is believed by participants to limit HIV care providers' capacity to provide concurrent gender-affirming medical and HIV care (Chapter 3). Conducting social, biomedical, and clinical research, coupled with utilizing appropriate dissemination strategies to ensure that the research reaches providers, may increase the provision of competent care to trans WLWH.

5.2.4 Key Finding # 4

Trans WLWH have many strengths, which they harness to make their care environments more accessible for themselves and others.

This dissertation demonstrated the strengths trans WLWH employ as they navigate hostile healthcare settings, particularly those external to HIV care. Resilience scores, as measured quantitatively using the Resilience Scale (10 items) (Wagnild, 2009), were high (mean score: 62.5, standard deviation (SD): 9.0, of a possible total score of 70) (Chapter 2). Importantly, resilience was not statistically significantly associated with any HIV care cascade outcome (Chapter 2). This may be due to the small sample size and limited variability of resilience scores, which were uniformly high. However, it is also possible that quantitative measures did not adequately capture resilience specifically within healthcare settings, and that a more context-specific measure of resilience in response to healthcare discrimination may be better equipped to quantitatively detect the impact of resilience on healthcare engagement.

Findings from the qualitative interviews expanded upon the quantitative data by identifying the personal attributes contributing to trans WLWH's resilience (humour, spirituality, self-esteem, inner strength, positive outlook), particularly in relation to how these personal attributes are utilized to navigate intersecting stigmas in everyday life and healthcare (Chapter 4). Qualitative interview participants further described mechanisms of resistance (setting boundaries, changing providers) and transformation (private self-advocacy, public activism, and engaging in service organization, research, and education) (Chapter 4). The qualitative study participants also exhibited resistance (self-determination) with respect to navigating pressures from society, the medical community, and trans communities to transition in particular (binary, heteronormative) ways (Chapter 3).

These findings can be contextually understood through a multilevel empowerment theoretical lens, which recognizes processes of individual and/or group transformation that span intrapersonal/interpersonal, community, and structural levels and that are built upon the process of conscientization (Carr, 2003; Gutiérrez, DeLois, & GlenMaye, 1995). For example, these dissertation findings highlight *psychological empowerment* at the intrapersonal level (e.g., recognizing the link between HIV and trans stigma and poor treatment), *relational empowerment* at the interpersonal level (e.g., private self-advocacy), and *community and structural empowerment* at the structural level (e.g., public activism, and engaging in service organization, research, and education). These findings can also be contextually understood through the application of the life model of social work practice developed by Gitterman & Germain (2008), a social ecological theoretical approach. When experiencing a negative healthcare setting (*negative niche*), trans WLWH exhibit *adaptive behaviours* in the form of changing oneself/the way one thinks (e.g., resilience), changing the environment (e.g., contributing on an organization

board), and/or changing the person and environment transactions (e.g., changing providers, private self-advocacy) until a better *person and environment fit* is achieved (Gitterman & Germain, 2008).

These findings provide an alternative to the deficits-focused discourse on trans WLWH largely as victims of systemic oppression, expanding on qualitative literature published to-date pertaining to how trans women living at the intersection of multiple marginalized identities cope with intersectional stigma and discrimination in everyday life (Logie et al., 2011), employment settings (Mizock & Mueser, 2014), and educational systems (Singh, 2013). For example, a qualitative study conducted among trans youth of colour (n=13) identified the importance of self-advocacy in social interactions and educational systems to address trans stigma (Singh, 2013). Singh (2013) further described how acts of self-advocacy (e.g., asking for a gender-inclusive bathroom) built confidence among trans youth of colour and gave them skills to self-advocate in other settings.

Beyond the personal growth described as a benefit of advocacy by Singh (2013), resisting and transforming discriminatory healthcare settings had multiple other benefits for trans WLWH in this study, including: increased self-worth and challenging internalized HIV stigma (intrapersonal); reduced social isolation (interpersonal); and increased economic resources and leverage for better treatment (structural) (Chapter 4). Personal growth and healing have also been described as benefits of engaging in activism among sexual and gender minority activists more broadly (Arístegui, Radusky, Zalazar, Lucas, & Sued, 2018; Hagen, Hoover, & Morrow, 2018). UNAIDS has also described the benefits of participation in treatment, care, support, and policy decision-making for people living with HIV (PLWH), particularly with respect to stigma-reduction (UNAIDS, 2007). The Greater Involvement of People with HIV (GIPA) principle

exists to ensure that PLWH have the right to make their own decisions and to meaningfully participate in these important decision-making processes (UNAIDS, 2007). However, one could argue based on the results of this dissertation that trans WLWH are not being actively engaged in these spaces by the will of those in positions of power, but are engaging themselves by their fortitude and perseverance.

Although there were many benefits, there were also several challenges associated with challenging healthcare biases, including: reduced HIV health (clinical); reduced mental health (intrapersonal); additional enacted trans stigma in patient-provider relationship and violence in everyday life due to increased visibility (interpersonal); and reduced ability to access care (structural) (Chapter 4). Findings from a qualitative study exploring the experiences of social justice and human rights activists in the US (n=22) similarly identified several manifestations of burnout, including the deterioration of physical health, psychological and emotional health, hopelessness (Chen & Gorski, 2015). However, physical health deterioration may be of particular concern among trans WLWH, who are living with a chronic illness. Ultimately, the findings of this dissertation suggest that healthcare providers and educators within the health professions can do much more to create safe and affirming spaces for trans WLWH to access care, which will be discussed in section 5.5.3.

5.3 Study Limitations

The important contributions of this dissertation must be contextually understood in light of overall considerations, as well as limitations across quantitative, qualitative, and mixed methods domains. Some of these limitations were addressed in great depth in Chapters 2, 3, and 4, and are re-iterated briefly here.

Quantitative analyses drew on cross-sectional baseline survey data from a large cohort of WLWH in three Canadian provinces. The quantitative data is limited by: (1) the non-random sampling design, which may have oversampled for WLWH engaged in care; (2) self-reported data collection measures, which are subject to social desirability and recall bias; (3) the small sample sizes of trans WLWH with data on primary outcomes, underpowered to detect small to moderate significant differences; (4) bivariate analyses, which do not allow for the analysis of potential confounders and which, when conducted multiply, increases the risk of type 1 error; and, (5) cross-sectional analyses, which preclude determination of causality. The impact of limitations (1) and (2) were mitigated by use of the following strategies: (1) the formation of community advisory boards to enhance targeted recruitment of marginalized women, including those not engaged in HIV care; and, (2) options for private completion (without the PRA) of sensitive components of the CHIWOS survey and validation of self-report CHIWOS data with a subset of participants for whom health record data linkage was available (Carter et al., 2017). The CHIWOS survey included multiple trans-specific factors (e.g., trans stigma, comfort discussing trans health issues with one's HIV physician, transition situation), which allowed for population-specific recommendations for research, theory, and practice.

The qualitative data is limited by: (1) purposive (non-random) sampling, which may have led to oversampling of trans WLWH at points of stability/under-sampling of trans WLWH experiencing marginalization; (2) sampling of trans WLWH only from urban, well-resourced, settings; and, (3) the small sample size, which makes conclusions drawn pertaining to smaller sub-sets of the qualitative sample (e.g., city, ethno-racial background) tentative. However, limitations (1) and (2) were mitigated by: (1) conducting post hoc analyses comparing the survey participants who completed versus those who did not complete a qualitative interview; and, (2)

examining the proportion of trans WLWH in CHIWOS living outside of urban settings. Future studies should seek to recruit rural trans WLWH, who may experience more barriers to accessing care as well as more issues with disclosure and social engagement (e.g., in research).

The mixed method study design is limited by the time gap between collection of quantitative (2013-2015) and qualitative (2017-2018) data. However, despite the time gap, findings were highly convergent (as evidenced both in Chapter Three and in this Discussion); the mixed methods design was the greatest strength of this study, allowing for greater insight into the experiences of trans WLWH within healthcare than could be provided by the quantitative or qualitative data separately (Creswell & Plano Clark, 2011). Section 5.6.1 discusses implications for future research, in light of these limitations.

5.4 Ethical Considerations: A Community-Based Participatory Research Informed Dissertation

Perhaps the most important piece to reflect on with respect to ethical considerations of this dissertation is the community-based participatory research (CBPR) approach. In the Introduction (Chapter 1) I reviewed my role as a CHIWOS student, including my engagement over time with the CHIWOS team and CBPR practices mapped onto my dissertation process, described also in a timeline schematic (Appendix H). Here I reflect further on the challenges and successes of this CBPR-informed dissertation.

Commonly described challenges of CBPR, including time and resource requirements, issues of power and control, and meaningful engagement (Flicker, Travers, Guta, McDonald, & Meagher, 2007; Israel, Schulz, Parker, & Becker, 1998; Logie, James, Tharao, & Loutfy, 2012a; Travers et al., 2013), were also challenges experienced within this dissertation process. In addition to completing my doctoral requirements and participating in other projects to advance my knowledge and expertise, I participated in several CHIWOS initiatives over time. While

requiring substantial time, this participation built trust, commitment, and mutual reciprocity between the CHIWOS team and myself, and allowed me to leverage several CHIWOS supports:

(1) a built-in compensation mechanism for PRAs and Research Coordinators assisting with qualitative study recruitment; (2) PRAs had already received much training with respect to participant recruitment and research ethics, necessitating only brief conversations or training sessions; and, (3) a Trans CAB was already established who were committed to the CHIWOS project, and, by proxy, my dissertation work.

That said, I still put in considerable time and resources to build connections, particularly with members of the CHIWOS team located outside of Toronto, making several trips to Vancouver and Montreal, meeting with the teams to explain the purpose of my research, and thanking them for their commitment and support through sharing meals. All of these activities also required financial resources. Relinquishing some control over my dissertation process, particularly around recruitment of qualitative participants, posed some challenges with respect to time. However, without the established trust between PRAs and CHIWOS participants, I do not believe that I would have been granted entry into the worlds of those who I interviewed. I looked to the CHIWOS PRAs to provide their valuable insight about where, when, and how to collect dissertation data. I built meaningful relationships with several PRAs over time, connecting over our shared commitment to better the lives of WLWH and through our shared experience of collecting data from WLWH.

Issues of power and control were another challenge partially mitigated by being embedded within CHIWOS (Israel et al., 1998; Travers et al., 2013). I learned a lot throughout my dissertation process about the complex relationship between trans communities and researchers, particularly with respect to HIV research, both from talking with people and reading works

critiquing the under-representation and yet hyper-visibility of trans women within HIV discourse and practice (Namaste, 2015). At times, I recognized myself as 'the problem' and had to backtrack to rectify issues. When presenting this work, if in the absence of a clearly identifiable trans community member, I am always asked about my role in relation to the trans community and the efforts I am making to increase health and social equity for trans people. I take these questions as a reminder to be conscious of the power I enact through my work and the privileges I am granted that those with whom I work are often not. It is easy to feel disempowered as a student. However, the very nature of receiving a doctorate contributes to the development of "expertise", along with many academic privileges. I sought to equalize power through supporting community partners with other trans health projects when requested, and with scholarship applications and abstract development for our shared work. I underwent my own process of determining what it means to me to be an ally to the trans community.

In terms of meaningful engagement, it is a limitation of this dissertation that no trans community members were directly involved in data analysis or writing of the manuscripts. However, as mentioned, I intend to circulate each paper to CHIWOS team members including Trans CAB members after defense, submitting for publication three (or more) manuscripts that have undergone a participatory process of being built upon and modified by members of the team. Despite some challenges, the CBPR process of this dissertation resulted in successful dissemination to a wide range of audiences and the development of new projects. The findings of this dissertation were shared at a community-led knowledge translation and exchange event, titled the "Trans Women and HIV Research and Practice Conference" with 45+ participants, predominantly service providers working with PLWH in the Greater Toronto Area. The findings from this dissertation, in addition to work of the community partners and engagement with a

national collaborative team, informed a CIHR CBR Catalyst Grant project application focused on making positive change in care environments accessed by trans WLWH, which was funded and will carry on after the dissertation. In this way, a CBPR approach facilitated both an immediate impact of this dissertation, as well as a lasting effect only possible because of working together.

5.5 Implications and Recommendations

The following sub-sections describe implications of this dissertation for social work research, theory, and practice.

5.5.1 Research

This dissertation is among the first studies to comprehensively describe the HIV care cascade for trans WLWH in Canada and one of the only studies in Canada or the US to describe access to gender-affirming medical/surgical care for trans WLWH. This dissertation provides a starting point for understanding the healthcare experiences of trans WLWH in a Canadian context. This dissertation broadens the literature by focusing on how trans WLWH cope with intersecting types of stigma and discrimination in healthcare. The findings of this dissertation inform several lines of future inquiry, which can be understood in relation to each of the four key findings (Table 1).

First, future research may further explore understudied social ecological factors among trans WLWH (e.g., violence, trauma), as well as the mechanisms by which these factors influence access to care. For example, in-depth interviews with 10 trans WLWH living in the US identified transphobic violence experienced in public as a direct barrier to accessing HIV care (Wilson et al., 2013). However, in this dissertation, violence was positively associated with having ever accessed HIV care and current ART use (Chapter 1). Future qualitative studies may inform an

understanding of the myriad ways trans WLWH experience violence and how these experiences influence access to care. Future quantitative studies with larger sample sizes may also use analytic techniques to test for mediation, as it is possible that the association between violence and access to care may be explained by trauma, depression, or substance use, all known to affect trans women (Nuttbrock et al., 2014; Testa et al., 2012; Wilson et al., 2013).

This dissertation broadens the scope of current published peer-reviewed literature by comprehensively exploring trans-specific factors in relation to HIV care access (e.g., trans stigma) and HIV-specific factors in relation to gender-affirming care access (e.g., HIV stigma).

However, several additional trans-specific intrapersonal variables have been identified in the literature as important predictors of ART adherence and virological suppression among trans WLWH, including stress appraisal of transphobic experiences, importance of and satisfaction with gender affirmation³¹, and adherence to hormone therapy (Sevelius et al., 2014b). Future research may also test/adapt quantitative measures of social ecological correlates (e.g., trauma symptoms), specifically for trans WLWH. For example, the PCL-6, which was used to measure post-traumatic stress disorder (PTSD) symptom severity (Lang & Stein, 2005; Lang et al., 2012), may not adequately capture the kinds of repeated and complex traumas experienced by trans people (Richmond, Burns, & Carroll, 2012). Experiences of discrimination have also been shown to result in PTSD-like disorder among sexual minority people; future studies could use relaxed PTSD criteria to identify trans people experiencing PTSD-like disorder (Alessi, Martin, Gyamerah, & Meyer, 2013).

^aGender affirmation can be described as an interpersonal, interactive process whereby a person receives social recognition and support for their gender identity and expression (e.g., proper pronoun use) (Nuttbrock et al., 2009; Sevelius, 2013). Sevelius et al. (2014b) assessed gender affirmation with two 5-item Likert sub-scales: importance of gender affirmation (e.g., "how important is it that strangers call you 'she' when talking about you") and satisfaction with one's gender expression (e.g., "how satisfied are you with your current level of femininity").

Building on these findings, research is needed that focuses on the development/ adaptation/ adoption, pilot-testing, and evaluation of interventions to address healthcare access disparities for trans WLWH at individual, interpersonal, and organizational levels. Evidence-based strategies to increase linkage to HIV care for those newly diagnosed (Chandler et al., 2015), linkage case management (Gardner et al., 2005) and intensive outreach (Naar-King et al., 2007) may most fruitfully be adapted to address individual-level barriers (e.g., depression), organizational constraints (e.g., enacted stigma from healthcare providers), and structural concerns (e.g., financial barriers to access). Successful intervention development should actively engage trans WLWH through CBPR approaches.

Second, this dissertation highlighted the intersection of multiple marginalized identities and opportunities on access to healthcare for trans WLWH. Of particular interest, this small, exploratory study provided preliminary evidence of how ableism intersects with trans stigma to reduce access to income, which has deleterious impacts on the health and well-being of trans WLWH as well as their healthcare access. Future research may further illuminate how access to employment is experienced by trans WLWH, living at the intersection of a marginalized identity (trans identity) and episodic disability (HIV), both of which are associated with barriers to employment (Mizock & Mueser, 2014; O'Brien et al., 2014). There is also a need to develop/adapt/adopt, pilot-test, and evaluate trans and HIV cultural competency interventions for healthcare providers, informed by healthcare-specific HIV stigma reduction intervention research (Nyblade, Stangl, Weiss, & Ashburn, 2009), and literature detailing physician-side barriers to providing care to trans patients (Snelgrove, Jasudavisius, Rowe, Head, & Bauer, 2012).

Third, this dissertation had some positive implications for the delivery of compassionate and strengths-based care for trans WLWH. Future studies may seek to explore what supports HIV

physicians to provide compassionate care, in order to inform interventions with other healthcare providers. Future studies may also explore factors at the provider-level and/or provider-patient interactions to better understand the critical gap in current ART use among study participants. Given that HIV care providers are some of the only providers whom trans WLWH trust and from whom they access care, broadly recommending that HIV care providers push for ART use among trans WLWH needs to be cautiously balanced with patient self-determination, in order to not have an unintended consequence of reducing access to HIV care for trans WLWH. Thus, future mixed methods research may help us to understand ART prescribing practices and factors that influence decision-making among HIV care providers who provide care to trans WLWH, before recommendations are made. Future research should also seek to fill substantial gaps in biomedical and clinical research literature, particularly the dearth of pharmacokinetic studies describing potential DDIs, or a lack thereof, between ART and feminizing hormones (Radix et al., 2016; Wansom, Guadamuz, & Vasan, 2016). The findings of such studies may increase providers' comfort discussing DDIs and, subsequently, women's comfort discussing trans healthcare needs with their HIV physicians.

Finally, a future line of research using mixed methods may further explore resilience and empowerment among trans WLWH in relation to navigating discriminatory healthcare settings. While this dissertation provides preliminary evidence of the implications of resistance and transformation, both positive (e.g., increased self-worth), and negative (e.g., burnout), future qualitative studies may focus on the systemic changes that have occurred as a result of trans WLWH's advocacy and activism. The building and sustaining of social movements is another potential area of research (Richmond et al., 2012). Future quantitative studies may also incorporate measures of empowerment at psychological, relational, community, and structural

levels (Christens, 2012a; Christens, 2012b; Graham, 2004) and test the association between these different levels of empowerment and healthcare access, as this association may have different implications, ranging from the need for individual support that builds psychological empowerment to interventions that encourage social movement engagement.

Table 1
Recommendations for Future Research by Key Dissertation Finding

Key Finding	Future Research
1) Trans WLWH experience gaps in access to multiple types of care, influenced by factors operating at various social ecological levels.	 Describe social ecological correlates of access to care that are understudied specifically among trans WLWH (e.g., violence) Elucidate mechanisms by which social ecological factors influence access to care Expand trans-specific variables studied in relation to HIV care access (e.g., importance of and satisfaction with gender affirmation) Develop measures of social ecological correlates specifically for trans WLWH (e.g., trauma) Develop/adapt/adopt, pilot-test, and evaluate multilevel interventions to increase access to HIV care
2) Trans WLWH experience multiple types (e.g., trans stigma, HIV stigma) and forms of stigma (e.g., structural, felt normative) in a variety of healthcare settings (e.g., hospitals, specialized care settings) and in their everyday lives, which impedes their access to care.	 Explore intersection of ableism and trans stigma in relation to employment opportunities for trans WLWH Develop/adapt/adopt, pilot-test, and evaluate multilevel interventions to reduce multilevel intersecting stigmas in healthcare settings
3) Trans WLWH report predominantly positive relationships with their HIV care providers, which increases the accessibility of care. Gaps still remain in HIV care provider competency	 Explore facilitators of compassionate care provision among HIV care providers Describe ART prescribing practices among HIV care providers

• Conduct biomedical and clinical care

research focused on needs of trans women

(e.g., post-operative gender-affirming

to provide concurrent HIV and gender-

affirming care, which may be improved

through social, biomedical, and clinical

research to inform care.

surgical care) and trans WLWH (e.g., DDIs)

- 4) Trans WLWH have many strengths, which they harness to make their care environments more accessible for themselves and others.
- Document systemic changes as a result of trans WLWH's advocacy and activism
- Explore the building and sustaining of social movements among trans WLWH
- Assess associations between multilevel empowerment factors and care engagement outcomes

5.5.2 Theory

This dissertation was primarily informed by social ecological theory and intersectionality theory. Most of the published literature to-date focused on HIV care access among trans WLWH (n=18/26) does not explicitly include a theoretical framework; only two of sixteen quantitative studies explicitly described the use of a theoretical framework (Reisner et al., 2017, social determinants of health; Sevelius et al., 2014b, gender affirmation). Thus, it is a strength that each of these three dissertation studies is informed by a theoretical approach. The integration of theory in health services research can improve methodology, which ultimately produces stronger research findings to inform decision-making at organizational and policy levels (Brazil, Ozer, Cloutier, Levine, & Stryer, 2005).

The choice of theory shapes the way that data is collected, analyzed, and interpreted (Alderson, 1998). As described in section 5.2.1, the application of social ecological theory supported an in-depth exploration with trans WLWH of factors situated at multiple social ecological levels that may impact their access to HIV, gender-affirming, and other types of care. While this dissertation provided some evidence to support social ecological approaches to understanding healthcare access, social ecological theory is applied with limitations. An ideal study of multilevel factors would include multilevel data, capturing factors measured at

individual, provider, and organizational levels (Hatzenbuehler et al., 2014). Multilevel analyses such as hierarchical linear modelling (HLM) have been used to determine the unique contribution of individual and organizational characteristics on access to care (Glisson & Green, 2006) and patient outcomes (Dahdah et al., 2017). However, multilevel analyses require large samples (Maas & Hox, 2005; Moineddin, Matheson, & Glazier, 2007). Given the small sample size of trans WLWH as a population, this makes the use of these methods particularly challenging. Alternately, institutional ethnography, a qualitative study design, could also be used to understand the actualities of the interaction between trans women and their healthcare providers, while examining the interpersonal relationship in relation to the socio-political context, with the ultimate aim of changing policy and practice.

With respect to the use of intersectionality theory, this dissertation showed how trans WLWH have concerns and experiences unique to the intersection of trans identity and HIV status, not experienced by trans people, generally, nor WLWH generally, suggesting further intersectional theorizing may be important if not vital. Exploring the experiences of trans WLWH as a sub-population highlights their unique experiences of stigma (trans, gender non-conformity, HIV), privilege (class, passing), and the impact that intersecting forms of stigma and privilege have on their access to healthcare. These dissertation findings were also consistent with conceptualizations of intersectionality as being related not only to social identities and position but to "social processes or policies that generate, amplify, or temper inequalities between groups" (Bauer, 2014). For example, racism was negatively associated with ART uptake, corroborating qualitative studies conducted among trans WLWH (Logie et al., 2011; Wilson et al., 2013). Alternately, ethnicity was not associated with any of the HIV care cascade outcomes.

Recruiting trans WLWH with diverse identities/experiences for the qualitative component of this dissertation allowed for a preliminary exploration of how multiple marginalized identities influence access to and experience within healthcare for trans WLWH. Feminist social work scholar Mehrotra (2010) states that a key component of intersectionality theorizing is "exploring the complexities of individual identities and group identities while making visible the ways in which diversity within groups is often ignored and essentialized" (p.419). Importantly, the qualitative findings of this dissertation highlighted differing experiences of trans WLWH within the context of healthcare settings, at the intersection of other marginalized identities, including trans WLWH who are sex workers, trans WLWH who are ethno-racial minorities, trans WLWH who are immigrants or refugees, and multiple constitutions of any and all of the above identities (e.g., a participant who is an ethno-racial minority immigrant trans WLWH who is gender non-conforming, a sex worker, and living with HIV).

Quantitatively, this dissertation assessed three types of stigma (HIV stigma, racism, trans stigma) in relation to HIV care access. Consistent with suggested practices to conduct quantitative intersectionality analyses, this dissertation utilized measures of stigma, rather than only focusing on sociodemographic characteristics (Bauer, 2014; Bowleg, 2008; Bowleg & Bauer, 2016). Bivariate analyses of HIV stigma, trans stigma, and racism each separately in association with a healthcare outcome are consistent with a multiple approach that treats each type of stigma as separate (Hancock, 2007). Future analyses with larger sample sizes may use quantitative techniques to determine how different types of stigma interact in their influence on healthcare access or use. Quantitative measures of intersectional stigma, which measure more than one stigma at a time, may also be used (Bauer, 2014; Bowleg, 2008, 2012). Stigma should

also be measured directly in relation to the healthcare context. Validated scales exist to measure HIV and trans stigma at the provider level, such as the Transgender Inclusive Behaviour Scale (TIBS) (Kattari, O'Connor, & Kattari, 2018) and the Health Care Provider HIV/AIDS Stigma Scale (HPASS) (Wagner, Hart, McShane, Margolese, & Girard, 2014). This dissertation utilized a single-item to measure trans stigma in HIV care settings, similar to a recently published study including a sub-sample of trans youth living with HIV (n=56) (Reisner et al., 2017), however no questions measured HIV stigma in gender-affirming medical/surgical care settings.

Finally, this dissertation expands intersectional theorizing with respect to trans WLWH by acknowledging their strengths and their abilities to resist and change oppressive systems that influence their everyday lived experience (Hill Collins, 2000). Minority stress theory, which shows how the impact of chronic social (minority) stress on health outcomes can be mitigated by positive coping mechanisms (resilience, social support) (Meyer, 1995, 2003), may be a useful theoretical framework for future studies seeking to simultaneously highlight social processes of stigma as well as trans WLWH's strengths in relation to healthcare access.

5.5.3 Practice

The findings of this dissertation inform social work practice at individual (intrapersonal and interpersonal), organizational, and policy levels. Social workers have had a longstanding and pivotal role in direct practice aimed at enhancing engagement of PLWH across the HIV care continuum by addressing barriers at multiple levels (Edmonds, Moore, Valdez, & Tomlinson, 2015). This dissertation builds on this professional practice knowledge work by recommending interventions to increase access to competent and gender-affirming healthcare for trans WLWH (Taylor, 2013). Some recommendations extend beyond social workers to all people working within healthcare settings from administrators, to students, to physicians, to allied health

professionals. Overall, the dissertation findings suggest an integrated approach to multilevel practice that combines patient-centred, trauma-informed, stigma-aware, and strengths-based care, with trans inclusion cornerstone to all levels of practice (Figure 2).

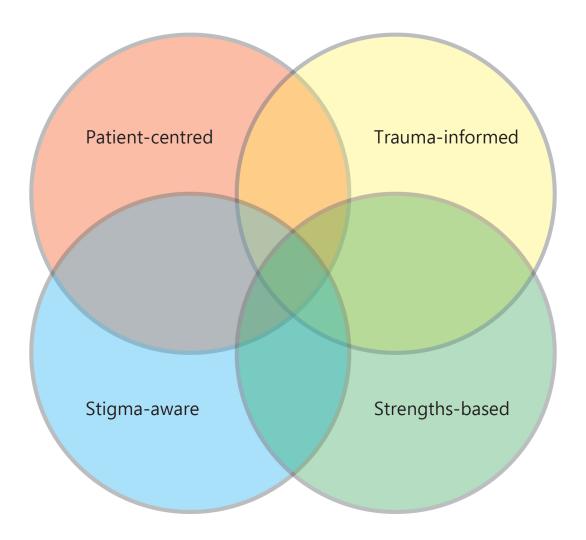


Figure 2. Proposed Integrated Model of Care for Trans Women Living with HIV

In a narrative review and synthesis of 60 papers from health policy, medicine, and nursing, Kitson, Marshall, Bassett & Zeitz (2013) identify three core elements of *patient-centred care*: patient participation and involvement, the relationship between the patient and healthcare provider, and the context where care is delivered. More specifically, patient participation and involvement includes respect for the patient as an autonomous decision-maker in their own care choices, developing a care plan based on a patient's individual needs, and ensuring that care is holistic (Kitson, Marshall, Bassett, & Zeitz, 2013). The relationship between the patient and healthcare provider develops out of provider qualities (e.g., genuineness), provider capacity (e.g., knowledge and skills), and relationship characteristics (e.g., open communication) (Kitson et al., 2013). Finally, the context where care is delivered includes elements of accessibility (e.g., having appropriate hours, enough staff, equipment) (Kitson et al., 2013).

Based on the findings of this dissertation, patient-centred care may respect trans WLWH's individual needs (e.g., different types of gender-affirming medical/surgical care, mental health care), varying preferences for where to access care (e.g., trans-specific settings, women-centred settings, non-gendered settings), and desires for how to access care (e.g., integrated HIV and other types of healthcare within one setting, non-integrated care). A recent US-based study comparing characteristics between trans WLWH (n=166) and cis PLWH (n=13,001) drawing on nationally representative data found that higher percentages of transgender women needed supportive services, including mental health services, meal services, domestic violence services, and housing services (Mizuno et al., 2015). Similarly, Wilson et al. (2013) found that trans WLWH requested tangible supports such as food, gift services, and income support. While Canada's health care system is designed to reduce structural barriers, particularly cost, other studies conducted in Canada have shown that low income is a barrier in

access to care (Williams et al., 2017). The needs of trans WLWH in this dissertation were similarly multifold. For example, almost half of the participants in the current study reported clinically significant depressive symptoms (46%) and PTSD symptoms (45%). Comprehensive service provision may also include assisting with updating legal identity documentation, immigration support, and supporting patients to access income, consistent with an intersectional understanding of trans WLWH's needs. Housing instability was a barrier to both HIV care and gender-affirming care access, suggesting the importance of supporting trans WLWH to access safe and affordable housing. Social workers are well-positioned support trans WLWH through case management (facilitating their access to multiple forms of care, being an advocate for trans WLWH within multiple care spaces) (Kanter, 1989).

These findings also have implications for patient-centred care to be delivered by HIV care providers. As mentioned, biomedical research is desperately needed to address gaps in understanding of potential interactions between feminizing hormones and ART. However, in the interim, HIV care providers and those providers (e.g., family physicians) providing concurrent HIV and trans care, should receive education about the current state of knowledge pertaining to co-prescription of ART and feminizing hormones. This knowledge may support healthcare providers to facilitate discussions with trans WLWH who are concurrently taking ART and feminizing hormones about the best available evidence, listening to trans WLWH about their fears and disappointment with regards to the perceived impact of ART on the success of feminizing hormone use, ultimately promoting more competent care.

The findings of this dissertation also suggest that *trauma-informed care* may be a salient model of care for services supporting trans WLWH (Elliott, Bjelajac, Fallot, Markoff, & Reed, 2005). The principles of trauma-informed care (e.g., recognize the impact of violence and

victimization on development and coping strategies; maximize a woman's choices and control over her recovery; create a positive relational collaboration and an environment of safety, respect and acceptance) (Elliott et al., 2005) are well-aligned with trans WLWH's needs as identified in this dissertation. Addressing trauma in and of itself may be increase ART adherence among trans WLWH. Moreover, one core principle of trauma-informed care as described by Elliot et al. (2005), is dedicated to recognizing women's strengths and highlighting the coping mechanisms they have developed to mitigate the impacts of trauma over time, even if they appear to the provider as maladaptive. This has the effect of reducing guilt and shame and increasing self-esteem, which may promote positive growth (Elliott et al., 2005). In this way, trauma-informed care intersects with strengths-based care. Trauma-informed care should also be culturally appropriate, meaning that interpersonal work with trans WLWH should examine how their social locations shape both their experience of traumatic life events and their resilience to the trauma (Singh & McKleroy, 2011).

These dissertation findings suggest a need to reduce stigma at a structural level within institutional contexts by amending discriminatory policies, at an interpersonal level by reducing enacted stigma in the context of patient-provider relationships, and at an individual level whereby by addressing felt-normative and internalized stigma experienced by trans WLWH. In Figure 2, this has been summarized using the term *stigma-aware care*. At an individual intrapersonal level, social workers may support the development of intrapersonal resources (e.g., positive coping strategies) that will support trans WLWH in coping with stigmatizing healthcare experiences. Individual counselling and social support group participation may reduce internalized trans stigma (Coleman et al., 2012). Social workers can listen, validate, and respond to trans WLWH's concerns about discrimination in healthcare, similar to how HIV care

providers did within these dissertation findings. Moreover, there is a small but growing body of literature that describes burnout among activists, including the causes and consequences (Hagen et al., 2018; Levitt et al., 2009). Social workers working with trans WLWH may apply this body of literature as well as knowledge of vicarious trauma and strategies to mitigate vicarious trauma, to understand and address the experiences of trans WLWH who are service providers, advocates, and activists for trans WLWH (Harrison & Westwood, 2009).

At an individual interpersonal level, social workers are well-positioned to co-deliver antistigma training to healthcare providers, in partnership with trans WLWH. A need for education is not unique to physicians but includes the broader community of medical and allied healthcare professionals as well as students (Warren et al., 2018). Social workers may also benefit from increased education about trans communities and skills and approaches to work with trans people (Erich, Boutte-Queen, Donnelly, & Tittsworth, 2007).

At an organizational level, social workers in management positions can use this information to develop specific policies to guide practitioners to provide competent care to trans WLWH, with an emphasis on anti-oppression (Nyblade et al., 2009). For example, social workers can advocate for gender-inclusive policies and practices within healthcare settings, such as policies that protect against discrimination based on gender identity and, importantly, gender expression. In addition to challenging stigma within healthcare and the broader society, healthcare providers can create opportunities to receive meaningful feedback from trans WLWH and can create spaces for trans WLWH to connect (Pinto, Melendez, & Spector, 2008).

The findings of this dissertation re-confirm the necessity to address widespread social exclusion of trans WLWH and the targeted violence they face, confirming findings of a study conducted among 10 African American trans WLWH which identified trans stigma and resultant

social isolation, violence, and trauma as pervasive issues facing racialized trans WLWH (Wilson et al., 2013). Taken together, these findings suggest a need for social workers to advocate for changes to policies to reduce stigma and provide equal opportunities for trans WLWH more broadly (Hatzenbuehler, Keyes, & Hasin, 2009).

Finally, this, and other studies call for practitioners to utilize a *strengths-based approach* which acknowledges the skills of trans WLWH; explores, validates, and supports the development of pride; addresses the social determinants of health; and connects them to community (Singh & McKleroy, 2011). The six principles of strengths-based healing have considerable overlap with patient-centred and trauma-informed care (Kisthardt, 2013). Perhaps most important, a strengths-based perspective is premised on a fundamental underlying assumption that all people have an inherent capacity to learn, grown, and transform (Kisthardt, 2013; Saleeby, 2013). Even in the most challenging of circumstances, trans WLWH express resourcefulness and are experts in their needs (Saleeby, 2013).

Positioning trans WLWH in leadership and service delivery capacities within organizational contexts is also critically important. Inter-group contact is an effective mechanism at reducing stigma against diverse populations (Pettigrew & Tropp, 2006) and has been recommended for trans cultural competency trainings (Hanssmann, Morrison, & Russian, 2008). The findings of this dissertation suggest that meaningful inclusion of trans WLWH may be supported by adopting similar methods of support as those used for clinical social workers, including peer support, supervision, work-life balance, and self-care (Harrison & Westwood, 2009), but that capacity building (e.g., supporting trans WLWH to access education) is also critically important.

5.6 Conclusion

The aim of this exploratory mixed methods three-paper dissertation was to expand an understanding of the experiences of trans WLWH in Canada accessing HIV care, genderaffirming care, and other types of healthcare, drawing on social ecological and intersectionality theoretical approaches. This dissertation makes unique contributions by: (1) increasing substantive content knowledge by being among the first studies to present quantitative data on the HIV care cascade for trans WLWH in Canada and to comprehensively assess factors associated with the care cascade, including a broad-range of trans-specific factors; (2) using a mixed methods methodological approach; and, (3) building on social justice approaches by highlighting the voices of women who are not often represented within HIV research through a CBPR and qualitative approach. The triangulation of mixed methods using quantitative survey data combined with qualitative interview data supported an exploration of: barriers and facilitators to access to healthcare situated at multiple social ecological levels; how stigma and privilege are uniquely experienced by trans WLWH at various intersections of identity and experience and, in turn, influence their access to care; positive aspects of the care experience, notably HIV care provider competency and compassion; and, the strengths of trans WLWH as individuals and as a community exhibited in their responses to intersecting types of stigma and discrimination in healthcare. These findings inform a future trajectory of social work research, additional areas for theory development, and social work practice, at policy, organizational, and individual levels, all of which may further contribute to health equity and social justice for trans WLWH in Canada.

5.7 References

- Achappa, B., Madi, D., Bhaskaran, U., Ramapuram, J. T., Rao, S., & Mahalingam, S. (2013).

 Adherence to antiretroviral therapy among people living with HIV. *North American Journal of Medical Sciences*, 5(3), 220-223. doi:10.4103/1947-2714.109196
- Alderson, P. (1998). Theories in health care and research: the importance of theories in health care. *BMJ: British Medical Journal*, *317*(7164), 1007-1010.
- Alessi, E. J., Martin, J. I., Gyamerah, A., & Meyer, I. H. (2013). Prejudice-related events and traumatic stress among heterosexuals and lesbians, gay men and bisexuals. *Journal of Aggression, Maltreatment, and Trauma*, 22(5). doi:10.1080/10926771.2013.785455
- Arístegui, I., Radusky, P. D., Zalazar, V., Lucas, M., & Sued, O. (2018). Resources to cope with stigma related to HIV status, gender identity, and sexual orientation in gay men and transgender women. *Journal of Health Psychology*, 23(2), 320-331. doi:http://dx.doi.org/10.1177/1359105317736782
- Baguso, G. N., Gay, C. L., & Lee, K. A. (2016). Medication adherence among transgender women living with HIV. *AIDS Care*, 28(8), 976-981. doi:http://dx.doi.org/10.1080/09540121.2016.1146401
- Bauer, G. R. (2014). Incorporating intersectionality theory into population health research methodology: challenges and the potential to advance health equity. *Social Science and Medicine*, 110, 10.
- Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: a respondent driven sampling study in Ontario, Canada. *BMC Public Health*, *15*, 525. doi:10.1186/s12889-015-1867-2

- Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health*, 103(5), 943-951. doi:10.2105/ajph.2013.301241
- Boroughs, M. S., Bedoya, C. A., O'Cleirigh, C., & Safren, S. A. (2015). Toward defining, measuring, and evaluating LGBT cultural competence for psychologists. *Clinical Psychology: Science and Practice*, 22(2), 151-171. doi:10.1111/cpsp.12098
- Bowleg, L. (2008). When Black + Lesbian + Woman ≠ Black Lesbian Woman: the methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles*, 59(5-6), 312-325. doi:http://dx.doi.org/10.1007/s11199-008-9400-z
- Bowleg, L. (2012). The problem with the phrase women and minorities: intersectionality—an important theoretical framework for public health. *American Journal of Public Health*, 102(7), 1267-1273. doi:10.2105/AJPH.2012.300750
- Bowleg, L., & Bauer, G. (2016). Invited reflection: quantifying intersectionality.

 *Psychology of Women Quarterly, 40(3), 337-341.
- Braun, H. M., Candelario, J., Hanlon, C. L., Segura, E. R., Clark, J. L., Currier, J. S., & Lake, J. E. (2017). Transgender women living with HIV frequently take antiretroviral therapy and/or feminizing hormone therapy differently than prescribed due to drug–drug interaction concerns. *LGBT Health*, *4*(5), 371-375. doi:http://dx.doi.org/10.1089/lgbt. 2017.0057

- Brazil, K., Ozer, E., Cloutier, M. M., Levine, R., & Stryer, D. (2005). From theory to practice: improving the impact of health services research. *BMC Health Services Research*, *5*, 1-1. doi:10.1186/1472-6963-5-1
- Buregyeya, E., Naigino, R., Mukose, A., Makumbi, F., Esiru, G., Arinaitwe, J., . . . Wanyenze, R. K. (2017). Facilitators and barriers to uptake and adherence to lifelong antiretroviral therapy among HIV infected pregnant women in Uganda: a qualitative study. *BMC**Pregnancy and Childbirth, 17(1), 94. doi:http://dx.doi.org/10.1186/s12884-017-1276-x
- Carr, E. (2003). Rethinking empowerment theory using a feminist lens: the importance of process. *Affilia*, 18(1), 8-20. doi:10.1177/0886109902239092
- Carter, A., Min, J. E., Chau, W., Lima, V. D., Kestler, M., Pick, N., . . . Kaida, A. (2014). Gender inequities in quality of care among HIV-positive individuals initiating antiretroviral treatment in British Columbia, Canada (2000-2010): e92334. *PLoS ONE*, 9(3). doi:http://dx.doi.org/10.1371/journal.pone.0092334
- Chandler, R. K., Kahana, S. Y., Fletcher, B., Jones, D., Finger, M. S., Aklin, W. M., . . . Webb, C. (2015). Data collection and harmonization in HIV research: the seek, test, treat, and retain initiative at the National Institute on Drug Abuse. *American Journal of Public Health*, 105(12), 2416-2422.
- Chen, C. W., & Gorski, P. C. (2015). Burnout in social justice and human rights activists:

 Symptoms, causes and implications. *Journal of Human Rights Practice*, 7(3), 366-390.

 doi:10.1093/jhuman/huv011
- Christens, B. D. (2012a). Targeting empowerment in community development: a community psychology approach to enhancing local power and well-being. *Community Development Journal*, 47(4), 538-554. doi:10.1093/cdj/bss031

- Christens, B. D. (2012b). Toward relational empowerment. *American Journal of Community Psychology*, 50(1-2), 114-128. doi:10.1007/s10464-011-9483-5
- Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., . . . Zucker, K. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people, Version 7. *International Journal of Transgenderism*, 13(4), 165-232. doi:10.1080/15532739.2011.700873
- Coronel Villalobos, M., Stieler, S., Frohard-Dourlent, H., & Saewyc, E. (2018). A survey of experiences with surgical readiness assessment and gender-affirming surgery among trans people living in Ontario. Retrieved from: http://saravyc.sites.olt.ubc.ca/files/2018/03/SARAVYC_TCBC-Report-Care-Survey-V4-Final-WEB.pdf
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods* research: 2nd edition. Thousand Oaks, CA: SAGE Publications.
- Dahdah, M. N., Hofmann, M., Pretz, C., An, V., Barnes, S. A., Bennett, M., . . . Shafi, S. (2017).

 Factors associated with rehabilitation outcomes after traumatic brain injury: Comparing functional outcomes between TBIMS centers using hierarchical linear modeling. *The Journal of Head Trauma Rehabilitation*, 32(4), E1-E10. doi:http://dx.doi.org/10.1097/
- Dowshen, N., Matone, M., Luan, X., Lee, S., Belzer, M., Fernandez, M. I., . . . Adolescent Medicine Trials Network for HIV/AIDS Interventions. (2016). Behavioral and health outcomes for HIV+ young transgender women (YTW) linked to and engaged in medical care. *LGBT Health*, *3*(2), 162-167. doi:10.1089/lgbt.2014.0062

- Edmonds, A., Moore, E., Valdez, A., & Tomlinson, C. (2015). Social work and the HIV care continuum: assisting HIV patients diagnosed in an emergency department. *Social Work*, 60(3), 238-246. doi:http://dx.doi.org/10.1093/sw/swv011
- Elliott, D. E., Bjelajac, P., Fallot, R. D., Markoff, L. S., & Reed, B. G. (2005). Trauma-informed or trauma-denied: Principles and implementation of trauma-informed services for women. *Journal of Community Psychology*, 33(4), 461-477. doi:10.1002/jcop.20063
- Erich, S. A., Boutte-Queen, N., Donnelly, S., & Tittsworth, J. (2007). Social work education: implications for working with the transgender community. *The Journal of Baccalaureate Social Work*, 12(2), 42-52.
- Flicker, S., Travers, R., Guta, A., McDonald, S., & Meagher, A. (2007). Ethical dilemmas in community-based participatory research: recommendations for institutional review boards. *Journal of Urban Health*, 84(4), 478-493. doi:10.1007/s11524-007-9165-7
- Gardner, L. I., Metsch, L. R., Anderson-Mahoney, P., Loughlin, A. M., del Rio, C., Strathdee, S., Holmberg, S. D. (2005). Efficacy of a brief case management intervention to link recently diagnosed HIV-infected persons to care. *AIDS*, *19*(4), 423-431.
- Gehi, P. S., & Arkles, G. (2007). Unraveling injustice: race and class impact of medicaid exclusions of transition-related health care for transgender people. *Sexuality Research & Social Policy*, 4(4), 7-35. doi:http://dx.doi.org/10.1525/srsp.2007.4.4.7
- Gitterman, A., & Germain, C. B. (2008). Helping individuals, families, and groups with stressful life transitions and traumatic events. *The life model of social work practice, Third edition* (pp. 191-239). New York: Columbia University Press.

- Glisson, C., & Green, P. (2006). The effects of organizational culture and climate on the access to mental health care in child welfare and juvenile justice systems. *Administration and Policy in Mental Health and Mental Health Services Research*, 33(4), 433-448. doi:http://dx.doi.org/10.1007/s10488-005-0016-0
- Government of Canada. (2018). *Canada's Health Care System*. Ottawa, Canada. Retrieved from https://www.canada.ca/en/health-canada/services/canada-health-care-system.html.
- Graham, M. (2004). Empowerment revisited—social work, resistance and agency in black communities. *European Journal of Social Work*, 7(1), 43-56. doi:10.1080/1369191 45042000217393
- Grant, J. M., Mottet, L. A., Tanis, J., & al., e. (2011). *Inustice at every turn: A report of the*National Transgender Discrimination Survey. Retrieved from http://www.thetaskforce
 .org/static_html/downloads/reports/reports/ntds_full.pdf
- Gridley, S. J., Crouch, J. M., Evans, Y., Eng, W., Antoon, E., Lyapustina, M., . . . Breland, D. J. (2016). Youth and caregiver perspectives on barriers to gender-affirming health care for transgender youth. *Journal of Adolescent Health*, 59(3), 254-261. doi:10.1016/j.j adohealth.2016.03.017
- Gutiérrez, L. M., DeLois, K. A., & GlenMaye, L. (1995). Understanding empowerment practice: Building on practitioner-based knowledge. *Families in Society*, 76(9), 534.
- Hagen, W. B. P., Hoover, S. M. P., & Morrow, S. L. P. (2018). A grounded theory of sexual minority women and transgender individuals' social justice activism. *Journal of Homosexuality*, 65(7), 833-859. doi:http://dx.doi.org/10.1080/00918369.2017.1364562
- Hancock, A.-M. (2007). When multiplication doesn't equal quick addition: examining intersectionality as a research paradigm. *Perspectives on Politics*, *5*(1), 63-79.

- Hansana, V., Sanchaisuriya, P., Durham, J., Sychareun, V., Chaleunvong, K., Boonyaleepun, S.,
 & Schelp, F. P. (2013). Adherence to antiretroviral therapy (ART) among people living with HIV (PLHIV): A cross-sectional survey to measure in Lao PDR. *BMC Public Health*, 13, 617-617. doi:10.1186/1471-2458-13-617
- Hanssmann, C., Morrison, D., & Russian, E. (2008). Talking, gawking, or getting it done: provider trainings to increase cultural and clinical competence for transgender and gender-nonconforming patients and clients. *Sexuality Research & Social Policy*, 5(1), 5-23. doi:10.1525/srsp.2008.5.1.5
- Harrison, R. L., & Westwood, M. J. (2009). Prevening vicarious traumatization of mental health therapists: Identifying protective practices *Psychotherapy: Theory, Research, Practice, Training*, 46(2), 203-219. doi:10.1037/a0016081
- Hatzenbuehler, M. L., Bellatorre, A., Lee, Y., Finch, B. K., Muennig, P., & Fiscella, K. (2014). Structural stigma and all-cause mortality in sexual minority populations. *Social Science and Medicine*, 103, 33-41. doi:http://dx.doi.org/10.1016/j.socscimed.2013.06.005
- Hatzenbuehler, M. L., Keyes, K. M., & Hasin, D. S. (2009). State-level policies and psychiatric morbidity in lesbian, gay, and bisexual populations. *American Journal of Public Health*, 99(12), 2275-2281. doi:10.2105/ajph.2008.153510
- Hill Collins, P. (2000). Black feminist thought: knowledge, consciousness, and the politics of empowerment. New York: Routledge.
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: assessing partnership approaches to improve public health. *Annual Review of Public Health*, 19, 173-202. doi:10.1146/annurev.publhealth.19.1.173

- Johnson, M. O., Carol Dawson, R., Dilworth, S. E., & Neilands, T. B. (2012). Advances in the conceptualization and measurement of health care empowerment: development and validation of the health care empowerment inventory. *PLoS One*, 7(9). doi:http://dx.doi.org/10.1371/journal.pone.0045692
- Kanter, J. (1989). Clinical case management: definition, principles, components. *Hosp Community Psychiatry*, 40(4), 361-368.
- Kattari, S. K., O'Connor, A. A., & Kattari, L. (2018). Development and validation of the Transgender Inclusive Behavior Scale (TIBS). *Journal of Homosexuality*, 65(2), 181-196. doi:10.1080/00918369.2017.1314160
- Kisthardt, W. (2013). Integrating the core competencies in strengths-based, person centered practice: clarifying purpose and reflecting principles. In D. Saleeby (Ed.), *The Strengths Perspective in Social Work Practice* (Sixth Edition ed., pp. 53-78). Boston: Pearson.
- Kitson, A., Marshall, A., Bassett, K., & Zeitz, K. (2013). What are the core elements of patient-centred care? A narrative review and synthesis of the literature from health policy, medicine and nursing. *Journal of Advanced Nursing*, 69(1), 4-15.
- Lang, A. J., & Stein, M. B. (2005). An abbreviated PTSD checklist for use as a screening instrument in primary care. *Behaviour Research and Therapy*, 43(5), 585-594.
- Lang, A. J., Wilkins, K., Roy-Byrne, P. P., Golinelli, D., Chavira, D., Sherbourne, C., . . . Stein,
 M. B. (2012). Abbreviated PTSD Checklist (PCL) as a guide to clinical response.
 General Hospital Psychiatry, 34(4), 332-338.
- Levitt, H. M., Ovrebo, E., Anderson-Cleveland, M. B., Leone, C., Jeong, J. Y., Arm, J. R., . . . Horne, S. G. (2009). Balancing dangers: GLBT experience in a time of anti-GLBT legislation. *Journal of Counseling Psychology*, *56*(1), 67-81. doi:http://dx.doi.org/

10.1037/a0012988

- Lindqvist, E. K., Sigurjonsson, H., Mollermark, C., Rinder, J., Farnebo, F., & Lundgren, T. K.
 (2017). Quality of life improves early after gender reassignment surgery in transgender
 women. European Journal of Plastic Surgergy, 40(3), 223-226. doi:10.1007/s00238-0161252-0
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27(1), 363-385. doi:10.1146/annurev.soc.27.1.363
- Logie, C., & Gadalla, T. M. (2009). Meta-analysis of health and demographic correlates of stigma towards people living with HIV. *AIDS Care*, 21(6), 742.
- Logie, C., James, L., Tharao, W., & Loutfy, M. R. (2012a). Opportunities, ethical challenges, and lessons learned from working with peer research assistants in a multi-method HIV community-based research study in Ontario, Canada. *Journal of Empirical Research on Human Research Ethics*, 7(4), 10-19. doi:http://dx.doi.org/10.1525/jer.2012.7.4.10
- Logie, C. H., James, L., Tharao, W., & Loutfy, M. R. (2011). HIV, gender, race, sexual orientation, and sex work: a qualitative study of intersectional stigma experienced by HIV-positive women in Ontario, Canada. *PLoS Med*, 8(11), e1001124. doi:10.1371/journal.pmed.1001124
- Logie, C. H., James, L., Tharao, W., & Loutfy, M. R. (2012). "We don't exist": a qualitative study of marginalization experienced by HIV-positive lesbian, bisexual, queer and transgender women in Toronto, Canada. *Journal of the International AIDS Society*, *15*(2), 17392. doi:10.7448/IAS.15.2.17392
- Logie, C. H., Jenkinson, J. I., Earnshaw, V., Tharao, W., & Loutfy, M. R. (2016). A structural equation model of HIV-related stigma, racial discrimination, housing insecurity and

- wellbeing among African and Caribbean Black women living with HIV in Ontario, Canada. *PLoS One*, 11(9), e0162826. doi:10.1371/journal.pone.0162826
- Lombardi, E. (2001). Enhancing transgender health care. *American Journal of Public Health*, 91(6), 869-872.
- Maas, C. J., & Hox, J. J. (2005). Sufficient sample sizes for multilevel modeling. *Methodology:*European Journal of Research Methods for the Behavioral and Social Sciences, 1(3), 86.
- Mehrotra, G. (2010). Toward a continuum of intersectionality theorizing for feminist social work scholarship. *Affilia*, 25(4), 417-430. doi:10.1177/0886109910384190
- Melendez, R. M., & Pinto, R. M. (2009). HIV prevention and primary care for transgender women in a community-based clinic. *Journal of the Association of Nurses in AIDS Care*, 20(5), 387-397. doi:10.1016/j.jana.2009.06.002
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36(1), 38-56.
- Meyer, I. H. (2003). Prejudice as stress: conceptual and measurement problems. *American Journal of Public Health*, 93(2), 262-265.
- Mizock, L., & Hopwood, R. (2018). Economic challenges associated with transphobia and implications for practice with transgender and gender diverse individuals. *Professional Psychology: Research and Practice*, 49(1), 65-74. doi:10.1037/pro0000161
- Mizock, L., & Mueser, K. T. (2014). Employment, mental health, internalized stigma, and coping with transphobia among transgender individuals. *Psychology of Sexual Orientation and Gender Diversity*, *1*(2), 146-158. doi:http://dx.doi.org/10.1037/sgd0000029

- Mizuno, Y., Beer, L., Huang, P., & Frazier, E. L. (2017). Factors associated with antiretroviral therapy adherence among transgender women receiving HIV medical care in the United States. *LGBT Health*, *4*(3), 181-187. doi:http://dx.doi.org/10.1089/lgbt.2017.0003
- Mizuno, Y., Frazier, E. L., Huang, P., & Skarbinski, J. (2015). Characteristics of transgender women living with HIV receiving medical care in the United States. *LGBT Health*, 2(3), 228-234. doi:http://dx.doi.org/10.1089/lgbt.2014.0099
- Moineddin, R., Matheson, F. I., & Glazier, R. H. (2007). A simulation study of sample size for multilevel logistic regression models. *BMC Medical Research Methodology*, 7(1), 34. doi:10.1186/1471-2288-7-34
- Munro, L., Marshall, Z., Bauer, G., Hammond, R., Nault, C., & Travers, R. (2017).
 (Dis)integrated care: barriers to health care utilization for trans women living with HIV.
 Journal of the Association of Nurses in AIDS Care, 28(5), 708-722. doi:10.1016/j.jana.
 2017.06.001
- Naar-King, S., Bradford, J., Coleman, S., Green-Jones, M., Cabral, H., & Tobias, C. (2007).

 Retention in care of persons newly diagnosed with HIV: Outcomes of the outreach initiative. *AIDS Patient Care and STDS*, 21(Suppl1), S40-S48. doi:http://dx.doi.org/10.1089/apc.2007.9988
- Namaste, V. (2015). Oversight: Critical reflections on feminist research and politics. Toronto, Ontario: Canadian Scholar's Press, Inc.
- Nuttbrock, L., Bockting, W., Rosenblum, A., Hwahng, S., Mason, M., Macri, M., & Becker, J. (2014). Gender abuse and major depression among transgender women: A prospective study of vulnerability and resilience. *American Journal of Public Health*, 104(11), 2191-2198. doi:http://dx.doi.org/10.2105/AJPH.2013.301545

- Nuttbrock, L. A., Bockting, W. O., Hwahng, S., Rosenblum, A., Mason, M., Macri, M., & Becker, J. (2009). Gender identity affirmation among male-to-female transgender persons: a life course analysis across types of relationships and cultural/lifestyle factors. Sexual and Relationship Therapy, 24(2), 108-125. doi:http://dx.doi.org/10.1080/1468 1990902926764
- Nyblade, L., Stangl, A., Weiss, E., & Ashburn, K. (2009). Combating HIV stigma in health care settings: what works? *Journal of the International AIDS Society*, 12, 15. doi:10.1186/1758-2652-12-15
- O'Brien, K. K., Hanna, S., Gardner, S., Bayoumi, A. M., Rueda, S., Hart, T. A., . . . Davis, A. M. (2014). Validation of the episodic disability framework with adults living with HIV.

 Disability and Rehabilitation, 36(4), 319-329. doi:10.3109/09638288.2013.793408
- Patel, R. C., Odoyo, J., Anand, K., Stanford-Moore, G., Wakhungu, I., Bukusi, E. A., . . . Brown, J. M. (2016). Facilitators and barriers of antiretroviral therapy initiation among HIV discordant couples in Kenya: qualitative insights from a pre-exposure prophylaxis implementation study. *PloS One*, *11*(12). doi:10.1371/journal.pone.0168057
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751-783. doi:http://dx.doi.org/
 10.1037/0022-3514.90.5.751
- Pinto, R. M., Melendez, R. M., & Spector, A. Y. (2008). Male-to-female transgender individuals building social support and capital from within a gender-focused network. *Journal of Gay & Lesbian Social Services*, 20(3), 203-220. doi:10.1080/10538720802235179

- Puckett, J. A., Cleary, P., Rossman, K., Newcomb, M. E., & Mustanski, B. (2018). Barriers to gender-affirming care for transgender and gender nonconforming individuals. *Sexuality Research and Social Policy*, 15(1), 48-59. doi:10.1007/s13178-017-0295-8
- Radix, A., Sevelius, J., & Deutsch, M. B. (2016). Transgender women, hormonal therapy and HIV treatment: a comprehensive review of the literature and recommendations for best practices. *Journal of the International AIDS Society*, *19*(3 Suppl 2), 20810. doi:http://dx.doi.org/10.7448/IAS.19.3.20810
- Rao, D., Kekwaletswe, T. C., Hosek, S., Martinez, J., & Rodriguez, F. (2007). Stigma and social barriers to medication adherence with urban youth living with HIV. *AIDS Care*, *19*(1), 28-33. doi:10.1080/09540120600652303
- Reisner, S. L., Gamarel, K. E., Nemoto, T., & Operario, D. (2014). Dyadic effects of gender minority stressors in substance use behaviors among transgender women and their non-transgender male partners. *Psychology of Sexual Orientation and Gender Diversity*, *1*(1), 63-71. doi:10.1037/0000013
- Reisner, S. L., Radix, A., & Deutsch, M. B. (2016). Integrated and gender-affirming transgender clinical care and research. *Journal of Acquired Immune Deficiency Syndromes*, 72(Suppl 3), S235-242. doi:10.1097/qai.0000000000000001088
- Remien, R. H., Bauman, L. J., Mantell, J. E., Tsoi, B., Lopez-Rios, J., Chhabra, R., . . . Warne, P. (2015). Barriers and facilitators to engagement of vulnerable populations in HIV primary care in New York City. *Journal of Acquired Immune Deficiency Syndromes*, 69 Suppl 1, S16-24. doi:10.1097/QAI.000000000000000077
- Richmond, K. A., Burns, T., & Carroll, K. (2012). Lost in trans-lation: Interpreting systems of trauma for transgender clients. *Traumatology*, *18*(1), 45-57. doi:10.1177/15347656103

- Riggs, D. W., & Fell, G. R. (2010). Teaching cultural competency for working with lesbian, gay, bisexual and trans clients. *Psychology Learning & Teaching*, 9(1), 30-38. doi:10.2304/plat.2010.9.1.30
- Safer, J. D., Coleman, E., Feldman, J., Garofalo, R., Hembree, W., Radix, A., & Sevelius, J.
 (2016). Barriers to health care for transgender individuals. *Current Opinion in Endocrinology, Diabetes, and Obesity*, 23(2), 168-171. doi:10.1097/med.0000000
 000000227
- Saleeby, D. (2013). The strengths approach to practice beginnings. In D. Saleeby (Ed.), *The Strengths Perspective in Social Work Practice* (pp. 97-112). Boston: Pearson.
- Santos, G. M., Wilson, E. C., Rapues, J., Macias, O., Packer, T., & Raymond, H. F. (2014). HIV treatment cascade among transgender women in a San Francisco respondent driven sampling study. *Sexually Transmitted Infections*, 90(5), 430-433. doi:10.1136/sextrans-2013-051342
- Schilder, A. J., Kennedy, C., Goldstone, I. L., Ogden, R., Hogg, R. S., & O'Shaughnessy, M. V. (2001). "Being dealt with as a whole person." Care seeking and adherence: the benefits of culturally competent care. *Social Science and Medicine*, *52*(11), 1643-1659. doi:10.1016/S0277-9536(00)00274-4
- Schilder, A. J., Laframboise, S., Hogg, R. S., Trussler, T., Goldstone, I., Schechter, M. T., & O'Shaughnessy, M. V. (1998). "They don't see our feelings." The health care experiences of HIV-positive transgendered persons. *Journal of the Gay and Lesbian Medical Association*, 02(3), 103-111. doi:10.1023/B:JOLA.0000004052.12136.1b

- Sevelius, J. M. (2013). Gender affirmation: a framework for conceptualizing risk behavior among transgender women of color. *Sex Roles*, 68(11-12), 675-689. doi:10.1007/s11199-012-0216-5
- Sevelius, J. M., Carrico, A., & Johnson, M. O. (2010). Antiretroviral therapy adherence among transgender women living with HIV. *Journal of the Association of Nurses in AIDS Care*, 21(3), 256-264. doi:10.1016/j.jana.2010.01.005
- Sevelius, J. M., Patouhas, E., Keatley, J. G., & Johnson, M. O. (2014a). Barriers and facilitators to engagement and retention in care among transgender women living with human immunodeficiency virus. *Annals of Behavioral Medicine*, 47(1), 5-16. doi:10.1007/s12160-013-9565-8
- Sevelius, J. M., Saberi, P., & Johnson, M. O. (2014b). Correlates of antiretroviral adherence and viral load among transgender women living with HIV. *AIDS Care*, 26(8), 976-982. doi:10.1080/09540121.2014.896451
- Singh, A. A. (2013). Transgender youth of color and resilience: Negotiating oppression and finding support. *Sex Roles*, 68(11-12), 690-702. doi:http://dx.doi.org/10.1007/s11199-012-0149-z
- Singh, A. A., & McKleroy, V. S. (2011). "Just getting out of bed is a revolutionary act": The resilience of transgender people of color who have survived traumatic life events.

 *Traumatology, 17(2), 34-44. doi:10.1177/1534765610369261
- Snelgrove, J. W., Jasudavisius, A. M., Rowe, B. W., Head, E. M., & Bauer, G. R. (2012).

 "Completely out-at-sea" with "two-gender medicine": a qualitative analysis of physicianside barriers to providing healthcare for transgender patients. *BMC Health Services**Research, 12, 110. doi:10.1186/1472-6963-12-110

- Taylor, A., Hodgson, D., Gee, M., & Collins, K. (2017). Compassion in healthcare: a concept analysis. *Journal of Radiotherapy in Practice*, 16(4), 350-360. doi:10.1017/S14603969 17000322
- Taylor, E. T. (2013). Transmen's health care experiences: Ethical social work practice beyond the binary. *Journal of Gay & Lesbian Social Services: The Quarterly Journal of Community & Clinical Practice*, 25(1), 102-120. doi:http://dx.doi.org/10.1080/10538720.2013.750575
- Testa, R. J., Sciacca, L. M., Wang, F., Hendricks, M. L., Goldblum, P., Bradford, J., & Bongar,
 B. (2012). Effects of violence on transgender people. *Professional Psychology: Research*and Practice, 43(5), 452-459. doi:http://dx.doi.org/10.1037/a0029604
- Thornhill, L., & Klein, P. (2010). Creating environments of care with transgender communities.

 Journal of the Association of Nurses in AIDS Care, 21(3), 230-239.

 doi:http://dx.doi.org/10.1016/j.jana.2009.11.007
- Travers, R., Pyne, J., Bauer, G., Munro, L., Giambrone, B., Hammond, R., & Scanlon, K. (2013). 'Community control' in CBPR: Challenges experienced and questions raised from the Trans PULSE project. *Action Research*, 11(4), 403-422. doi:10.1177/1476750313507093
- Trickey, A., May, M. T., Vehreschild, J.-J., Obel, N., Gill, M. J., Crane, H. M., . . . Sterne, J. A. C. (2017). Survival of HIV-positive patients starting antiretroviral therapy between 1996 and 2013: a collaborative analysis of cohort studies. *The Lancet HIV*, 4(8), e349-e356. doi:10.1016/S2352-3018(17)30066-8
- Ulett, K. B., Willig, J. H., Lin, H. Y., Routman, J. S., Abroms, S., Allison, J., . . . Mugavero, M. J. (2009). The therapeutic implications of timely linkage and early retention in HIV care.

 **AIDS Patient Care and STDS, 23(1), 41-49. doi:10.1089/apc.2008.0132

- UNAIDS. (2014). 90-90-90: An ambitious treatment target to help end the AIDS epidemic.

 Retrieved from http://www.unaids.org/sites/default/files/media_asset/90-90-90_en.pdf
- Wagner, A. C., Hart, T. A., McShane, K. E., Margolese, S., & Girard, T. A. (2014). Health care provider attitudes and beliefs about people living with HIV: initial validation of the Health Care Provider HIV/AIDS Stigma Scale (HPASS). *AIDS and Behavior*, *18*(12), 2397-2408. doi:10.1007/s10461-014-0834-8
- Wagnild, G. (2009). A review of the resilience scale. *Journal of Nursing Measurement*, 17(2), 105-113.
- Wansom, T., Guadamuz, T. E., & Vasan, S. (2016). Transgender populations and HIV: unique risks, challenges and opportunities. *Journal of Virus Eradication*, 2(2), 87-93.
- Ware, J., Kosinski, M., & Keller, S. D. (1996). A 12-Item Short-Form Health Survey: construction of scales and preliminary tests of reliability and validity. *Medical Care*, 34(3), 220-233.
- Warren, N., Portillo, C. J., Dawson-Rose, C., Monasterio, E., Fox, C. B., Freeborn, K., . . . Strngari-Murray, S. (2018). HIV primary care curriculum improves HIV knowledge, confidence and attitudes. *The Journal for Nurse Practitioners*, *14*(6), e113-e120. doi:http://dx.doi.org/10.1016/j.nurpra.2018.03.008
- White Hughto, J. M., & Reisner, S. L. (2016). A systematic review of the effects of hormone therapy on psychological functioning and quality of life in transgender individuals.

 *Transgender Health, 1(1), 21-31. doi:10.1089/trgh.2015.0008
- White Hughto, J. M., Reisner, S. L., & Pachankis, J. E. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science and Medicine*, 147, 222-231. doi:10.1016/j.socscimed.2015.11.010

- Williams, C. C., Curling, D., Steele, L. S., Gibson, M. F., Daley, A., Green, D. C., & Ross, L. E. (2017). Depression and discrimination in the lives of women, transgender and gender liminal people in Ontario, Canada. *Health & Social Care in the Community*, 25(3), 1139-1150. doi:http://dx.doi.org/10.1111/hsc.12414
- Wilson, E. C., Arayasirikul, S., & Johnson, K. (2013). Access to HIV care and support services for African American transwomen living with HIV. *International Journal of Transgenderism*, *14*(4), 182-195. doi:10.1080/15532739.2014.890090
- Wilson, E. C., Garofalo, R., Harris, R. D., Herrick, A., Martinez, M., Martinez, J., & Belzer, M. (2009). Transgender female youth and sex work: HIV risk and a comparison of life factors related to engagement in sex work. AIDS and Behavior, 13(5), 902-913. doi:10.1007/s10461-008-9508-8
- Wolitski, R. J., Pals, S. L., Kidder, D. P., Courtenay-Quirk, C., & Holtgrave, D. R. (2009). The effects of HIV stigma on health, disclosure of HIV status, and risk behavior of homeless and unstably housed persons living with HIV. *AIDS and Behavior*, *13*(6), 1222-1232. doi:10.1007/s10461-008-9455-4
- World Health Organization. (2016). Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: Recommendations for a public health approach, Second Edition. Retrieved from http://apps.who.int/iris/bitstream/handle/

Appendices

Appendix A. Characteristics of Studies Focused on HIV-related Healthcare Access for Trans Women Living with HIV (n=26)

Source	Country	Purpose	Participants	Theoretical framework	Research design	Participant recruitment	Data collection tools	Data analysis methods
Baguso et al. (2016)	California US	To examine demographic and clinical factors related to self-reported medication adherence among transgender women	22 trans WLWH, 273 cis PLWH	Not stated	Quantitative, Cross- sectional Survey, Secondary Data Analysis	Convenience	From visit: anthropometric measures, urine sample, blood sample; From chart: CD4, viral load; From survey: Sociodemographics, HIV diagnosis characteristics, adherence outcome (AIDS Clinical Trials Group Adherence Questionnaire	Bivariate analyses
Beckwith et al. (2017)	District of Columbia, US	To describes baseline characteristics including risk behaviors and HIV care indicators stratified by gender, among people living with HIV recently involved in the criminal justice system	110 participants, including 16 trans women	Not stated	Quantitative, Cross- sectional Survey; Secondary Data Analysis	Purposive, Convenience	Demographic characteristics, criminal justice history, HIV care engagement, medication adherence, sexual and substance use behaviours, mental health, co-morbid conditions (self-report); standardized measures: TCU Drug Dependence Scale; Primary Care PTSD Screen; CES-D; adherence measured by a visual analog scale (0-100% of prescribed doses taken during previous 30 days) (blood) viral load and C4 count	Bivariate analyses – chi- square or Fisher's exact tests; t-tests or Wilcoxon rank sum tests

Denson et al. (2017)	Chicago, Houston, Los Angeles County, US	To describe characteristics of trans women of color, to inform HIV prevention efforts	227 trans women, including black (n=139) and Latina (n=88) trans women	Not stated	Quantitative; Cross- sectional survey; Secondary data analysis	Respondent- driven sampling	ACASI questionnaire: sociodemographic characteristics, health care utilization, HIV- associated risk behaviours, HIV prevention experiences	Descriptive statistics (proportions)
Dowshen et al. (2016)	US and Puerto Rico	To describe HIV-related health and psychosocial outcomes of HIV+ young trans women engaged in care compared to their behaviorally infected youth (BIY) counterparts; examine whether particular isolating psychosocial risk factors modify the likelihood of having a detectable viral load among HIV+ YTW compared to matched BIY	1,584 BIY including 66 young trans women	Not stated	Quantitative, cross- sectional, Secondary data analysis; Matched controls	Convenience, Adolescent Trials Network	Sociodemographics, depression (BSI), substance use (CRAFFT), sexual activity (38-item questionnaire developed), adherence (number of missed doses over 7 days), viral load taken from biomedical chart abstraction	Weighted bivariate analyses; multiple imputation; survey weighted logistic regression predicting detectable viral load
Fennie et al. (2016)	Florida US	The objective of this descriptive study is to compare individual factors such as demographic and transmission risk category, and area-level factors such as social determinants of poverty, unemployment, and education, between HIV-infected transgender and cisgender individuals in Florida	48, 583 people diagnosed with HIV between 2006 and 2014, including 7 trans men and 142 trans women	Not stated	Quantitative, Cross- sectional, drawing on administrative data from the Florida Department of Health (DOH) Enhanced HIV/AIDS Reporting System	Diagnostic and clinical laboratories; Medical chart review	Age, Race and ethnicity, transmission risk category, delayed diagnosis (viral load OR AIDS-defining illness), employment, income, education, rurality (some self-report, some biomedical)	Chi square tests and Kruskal- Wallis tests; Bonferonni correction for p values; multi- level logistic regression
Hines et al. (2017)	Indiana, US	To describe the circumstances influencing HIV testing and entry to care by 18 trans women living with HIV in Central Indiana	18 trans women living with HIV	Network Episode Model (sociological health utilization model that explains how	Qualitative, in-depth individual interviews	Convenience, venue-based	Interview guide, explored how participants came to be tested for HIV, how they entered care, and what social factors	Conventional content analysis

influenced that process

social, psychological, cultural,
economic, and medical factors influence an individual's
health and health behaviours over time)

Kalichman Atlanta, US et al. (2017)

To examine linkage/ engagement to HIV care services, receipt and adherence to ART, and HIV viral suppression in a sample of transgender women living with HIV in a large city in the southeastern US 1101 people living with HIV, including 70 trans WLWH

eople Not stated Qu
with Cro
sec
ng 70 sur

Quantitative, Crosssectional, survey & chart review Convenience sampling (passive community sampling, venue-based sampling, snowball sampling)

Demographic characteristics, clinical characteristics (years since HIV diagnosis, HIV symptoms), health outcomes (hepatitis C co-infection, viral load, CD4 count); self-report, rapid test, medical chart review; Linkage: current medical care provider; engagement: visit in past 6 months; viral load; perceived access to HIV-related services; perceived selfefficacy; receipt of antiretroviral therapy; adherence (unannounced phonebased pill counts); viral suppression; depressive symptoms (CESD); HIV-related stressful events; alcohol and drug use (AUDIT-C); conspiracy beliefs and medical mistrust (medical mistrust index, trust in physician scale); social support (14-item scale)

Chi-square tests and one-way ANOVA; logistic regression analyses to test the independent effects of intrapersonal and social factors in relation to gender subgroups and HIV-related health disparities on the HIV cascade

Logie et al. (2011)	Ontario, Canada	To explore experiences of stigma and coping among HIV positive women in Ontario, Canada	104 WLWH, including 21 trans WLWH	Intersectionality, Ecological approach	Qualitative, Focus groups	Purposive and convenience	Focus group guide: research priorities, challenges and strengths in daily life, medical issues and needs, community and academic partnerships, issues that were silenced in one's community among WLWH in Ontario	Thematic analyses, inductive approach
Logie et al. (2012)	Ontario, Canada	To explore challenges in daily life and experiences of accessing HIV services among LBQT WLWH in Toronto, Canada	7 lesbian, bisexual and/or queer WLWH, 16 trans WLWH	Intersectionality	Qualitative, Focus groups	Purposive and convenience	Focus group guide: personal, social and healthcare challenges and experiences; issues silenced in one's communities; and engagement in and knowledge of HIV research	Thematic analysis
Melendez et al. (2006)	NY, NY, US	To examine whether trans PLWH face greater difficulties accessing health services than cis PLWH	59 trans WLWH, 300 cis PLWH	Not stated	Quantitative, Cross- sectional survey	Convenience	No detailed description, state that survey included questions about demographic characteristics, health status, use of health services	Descriptive, Bivariate
Melendez et al. (2009)	NY, NY, US	To examine how a community-based clinic that offers free or low-cost care addresses the health care needs of trans women	20 trans women (including 4 trans WLWH)	Ecological approach	Qualitative, Individual interviews	Purposive and convenience	Interview protocol: gender identity, HIV risks, and healthcare experiences	Content analysis
Mizuno et al. (2015)	US	To compare demographic, behavioral, and clinical characteristics, and met and unmet needs for supportive services of trans WLWH with those of cis PLWH	13,167 PLWH, including 166 trans WLWH	Not stated	Quantitative; Retrospective cohort study	Medical Monitoring Project (MMP): National HIV Surveillance Data	Not stated	Bivariate analyses: Roa- Scott chi-square tests
Mizuno et al. (2017)	US	To examine factors associated with ART	258 trans WLWH	Not stated	Quantitative; Retrospective	Medical Monitoring	Outcome: ART adherence (Dose	Rao-Scott chi- square tests and

		adherence among trans women living with HIV			cohort study	Project (MMP): National HIV Surveillance Data	adherence); Correlates: viral suppression (<200 copies/mL);healthcare coverage, depression (PHQ-8); binge drinking; once daily ART dose; side effects; medication taking self-efficacy; medication beliefs (benefits, resistance); satisfaction with social support; age, race	Multivariable logistic regression
Munro et al. (2017)	Ontario, Canada	To contribute to the development of a theoretical understanding of the ways in which social exclusion, transphobia, and erasure work in combination to pro- duce unique health-related needs for trans people living with HIV, as well as barriers to effective HIV-related care for trans women living with HIV in Ontario, Canada	14 trans women living with HIV and 10 service providers	Anderson's Model (Healthcare Utilization)	Qualitative; Semi- structured, in- depth interviews	Convenience sampling, venue-based sampling	Interview guide (for trans WLWH): gender identity, transition, perceptions of health and mental health, healthcare and social service utilization, support from family, friends, and communities	Modified version of grounded theory in combination with collaborative coding methods
Pitasi et al. (2017)	US (27 States and Guam)	To describe HIV testing among transgender women and men and two cisgender comparison groups in 27 states and Guam	transgender women, 451 transgender men, 3798 cisgender gay and bisexual men, and 301 524 cisgender heterosexual men and women	Not stated	Quantitative, cross-sectional, population-based survey (Behavioral Risk Factor Surveillance System (BRFSS)	Random digit- dialled cellular and landline telephone survey	Demographic characteristics; HIV testing	Descriptive (proportions, unadjusted prevalence ratios and 95% confidence intervals to identify characteristics associated with ever testing); multivariate logistic regression models compared self-reported prevalence of

	ever and past year testing among transgender women and men with cisgender gay and bisexual men
ory x use;	Chi-square, t- tests, followed by multivariate logistic regression modelling to model HIV prevention and
n	care continua outcomes
n; v	
in er oast	
elt ty at	
l	
ast n d f or	
l	

								mon
Reisner et al. (2017)	US	To characterize trans youth's experiences of engagement in the HIV prevention and care continua by gender identity and by HIV serostatus	181 trans youth ages 16-24, including 139 trans women and, more specifically, 56 trans women with HIV	Social determinants of health	Quantitative, cross sectional, secondary data analysis of parent study (Affirming Voices for Action)	Purposively sampled from 14 Adolescent Medicine Trials Unit (AMTU) sites based on factors: engagement in care at an AMTU site/not engaged in care at an AMTU site; youth living with HIV/not living with HIV/of unknown status)	Sociodemographics, poverty, lifetime history of homelessness, lifetime history of sex work; substance use (CRAFFT); sexual practices; substance use; HIV testing; HIV serostatus; HIV disclosure; medication use; adherence; viral load; non-suppression; retention in care (how many doctor's appointments missed in last 6 months); gender affirmation: "In the past 12 months, how supported have you felt in your gender identity or gender expression at place(s) where you accessed HIV-related services (score 1-4); Stigma: during the past 12 months, how often have you been treated negatively because of your gender identity or expression at places where you have accessed HIV-related services? (1 to 5)	Chi-square, t- tests, followed by multivariate logistic regression modelling to model HIV prevention and care continua outcomes
Remien et al. (2015)	New York City, US	To explore system, social, and individual barriers to	80 participants,	Not stated	Qualitative; in-depth	Convenience sampling,	Interview guide which explored personal	Thematic content analysis

		and facilitators of engagement in HIV care among HIV-positive African immigrants, previously incarcerated adults, young men who have sex with men, and trans women	including 20 trans women		individual interviews	venue-based sampling	experiences with medical visits, reasons for engagement or non- engagement in care for themselves and others like them, nonmedical services, strategies for improving HIV care engagement	
Santos et al. (2014)	San Francisco, US	The aims of this study were to estimate population-level HIV treatment cascade indicators and to evaluate correlates of HIV virological suppression among trans women in San Francisco	314 trans women, including 123 trans WLWH	Not stated	Quantitative, cross-sectional survey, secondary data analysis	Respondent-driven sampling	Self-reported data on linkage and access to care, most recent HIV viral load, current antiretroviral treatment (ART) use and age, race/ethnicity, injection drug use and insurance status; Cascade indicators: previous awareness of HIV infection; linkage to care within 3 months of diagnosis; access to care in the prior 6 months; current ART use; HIV virological suppression; correlates: social/demographic/behavioural factors (age, education, race/ethnicity, hormone use, relationship status, mental health conditions and sexual behaviours)	Population-based estimates and 95% CIs of HIV cascade indicators using sampling weights adjusted for homophily and probability of being recruited into the study using established RDS methods; RDS-weighted multivariable logistic regression models
Schilder et al. (1998)	Vancouver, Canada	To characterize the relationship between social identity and health care experience and the use of HIV therapies within the trans community in Vancouver British Columbia	10 trans WLWH with current or previous street- involvement and/or substance use	Not stated	Qualitative, Focus groups	Convenience	Focus group guide: healthcare delivery and primary care services, ART treatment and adherence, addiction programs, gender care	Grounded theory

Schilder et al. (2001)	Vancouver, Canada	To characterize the relationship between identity and healthcare experiences (including antiretroviral therapy utilization) among HIV-positive sexual minority males (and trans women)	37 sexual minority men and 10 trans women	Not stated	Qualitative, Focus groups and Individual interviews	Purposive	Focus group guide: experience with doctors and other healthcare providers, awareness of HIV medications, medicines, stigma and invisibility in healthcare experiences	Grounded theory
Sevelius et al. (2010)	San Francisco & LA, California, NY, NY, Milwaukee, Wisconsin, US	To examine the rates of self-reported ART adherence among trans WLWH compared to other respondents; to contextualize adherence by examining well-established correlates of nonadherence, including depression, adherence self-efficacy, patient perceptions of interactions with their providers, and perceived adverse effects of ART	2770 PLWH currently using ART, including 35 trans WLWH	Not stated	Quantitative, Cross- sectional survey	Convenience	Sociodemographics, ART adherence (three day period using an adherence survey), frequency of ART- related side effects (AIDS Clinical Trials Group symptom checklist); depression (12-item BDI-affective subscale), adherence self-efficacy (HIV adherence self-efficacy scale), positive provider interaction scale	Bivariate, Multivariate binary logistic regression analyses
Sevelius et al. (2014b)	San Francisco, California, US	To explore demographic/psychosocial and transgender-relevant correlates of ART adherence and viral loads among transgender women living with HIV	59 trans WLWH (analysis focuses on 35 trans WLWH currently using ART)	Gender affirmation	Quantitative, Cross- sectional survey	Convenience	Sociodemographics, Adherence (excellent vs less than excellent), viral load (detectable vs undetectable), transphobia, stress appraisal, gender affirmation, hormone adherence, sex work, alcohol use (AUDIT), PTSD (PTSD Checklist), depression (BDI-SF), suicidality, healthcare empowerment	Bivariate, Multivariate binary logistic regression analyses
Sevelius et al. (2014a)	San Francisco, California,	To examine culturally unique barriers and facilitators to engagement	38 trans WLWH	Gender affirmation, Healthcare	Qualitative, Focus groups and individual	Purposive	Interview guide: experiences of HIV testing and diagnosis,	Template analysis

		and strengthen efforts to mitigate health disparities		Intersectionality	Interviews		diagnosis, accessing treatment, treatment regimens, experiences of and concerns about adverse side effects, access to and relationships with providers, issues and concerns around treatment, adherence and retention in care; Focus group guide: experiences seeking or avoiding healthcare, housing, food, experiences of and challenges with accessing, engaging, and adhering to HIV care
Weiwel et al. (2016)	NY, NY, US	To compare newly diagnosed trans women and MSM, on demographic characteristics, stage of disease at diagnosis, clinical status, and engagement at the various stages of the HIV continuum of care	23 805 persons diagnosed with HIV (n=260 trans women; n=10 675 men who have sex with men)	Not stated	Quantitative, Retrospective cohort study, drawing on medical records; cross- sectional	Health admin data	Outcomes: timeliness of diagnosis or concurrent HIV/AIDS (implying late diagnosis); viral load and CD4 tests; delayed linkage as having no laboratory evidence of care within 8 to 91 days of diagnosis; non-achievement of viral suppression as having no suppressed viral load results within 365 days following diagnosis; Covariates: diagnosing facility type; HIV transmission risk (IDU, sex with male, sex with female, unknown);

empowerment,

interviews

US

and retention in HIV care

social support around

Chi-square for

variables; t test

for continuous variables; Mann-

Whitney U test

for median CD4

count; multivariable logistic

regression analyses of

concurrent

HIV/AIDS,

of viral

history of injection drug use; poverty level at time of diagnosis;

suppression

delayed linkage to care, and

nonachievement

categorical

							history of homelessness; history of incarceration; CD4 count at time of diagnosis	
Wilson et al. (2013)	Oakland, California, US	To fill a gap in the literature about the structural and individual-level barriers to care among African American trans WLWH who live outside of San Francisco	10 African American WLWH	Not stated	Qualitative, Individual Interviews	Purposive and convenience	Interview guide: HIV story, support service and care experiences, barriers and facilitators to HIV care and support services	Thematic content analysis
Yehia et al. (2013)	US	To examine whether retention in care, use of ART, and HIV suppression differs between trans and cis PLWH	36845 PLWH, including 285 trans PLWH	Not stated	Quantitative; Retrospective cohort study	Health admin data	Sociodemographics, HIV risk factor category, type of insurance, CD4 count, viral load, retention in care (≥2 primary HIV visits ≥90 days apart), received ART (yes or no), HIV suppression (less than versus greater than or equal to 400 copies/mL)	Bivariate, Multivariate logistic regression analyses

Appendix B. Research Ethics Approvals and Data Sharing Agreements

B1: Data Agreement with Women's College Hospital

Principles of Collaboration and Data Sharing Agreement For the Canadian HIV Women's Sexual and Reproductive Health Cohort Study



<u>Created December 22nd 2015 -</u> By the Women and HIV Research Program

Background & Mandate:

- The Canadian HIV Women's Reproductive Health Cohort Study (CHIWOS) is a nation-wide community-based research longitudinal cohort study that enrolled over 1,400 women living with HIV from British Columbia, Ontario and Quebec to answer questions on their health delivery and outcomes; there is a plan to enroll an additional 400 women living with HIV from Saskatchewan and Manitoba into the cohort.
- The CHIWOS data is houses at Women's College Hospital (WCH) by the Women and HIV Research Program (WHRP).

Purpose of the Principles of Collaboration and Data Sharing Agreement:

 This document summarizes the principles that will guide the collaboration of and agreement for CHIWOS data sharing between any investigator, student or organization (i.e. collaborator) and between CHIWOS and WHRP who houses the CHIWOS data at WCH.

Mission, guiding frameworks and values that guide CHIWOS and therefore this collaboration:

• CHIWOS is guided by a mission statement and a set of guiding frameworks and values. These same principles are to be met by the collaborator of this agreement.

Mission: CHIWOS is committed to creating new knowledge that will be used to support women living with HIV in Canada to achieve optimal health and wellbeing through meaningfully involving them in every stage of the research process by providing a safe, innovative, and transformational research environment.

Guiding Frameworks:

- Women-specific Community-Based Research
- Critical Feminist Approach
- Intersectionality
- Anti-Oppression and Anti-Racism

- Social Justice and Human rights
- MIWA: Meaningful Involvement of Women living with HIV
- GIPA: Greater Involvement of Persons living with HIV/AIDS
- OCAP: Ownership, Control, Access, and Possession

Values:

- Integrity
- Respect
- Accountability
- Inclusivity
- Equity
- Partnership and Collaboration
- Empowerment
- Social Action

The following sections will outline the conditions of the collaboration and the data sharing agreement:

Communication:

- Collaborators will communicate freely by email, phone and in person as needed.
- Open, free and frequent communication is encouraged between collaborators.
- In the event of a miscommunication, collaborators will assume that the other party was working from good intentions and action aimed to rectify matters will be sought as soon as possible.

Data Sharing Agreement:

- CHIWOS, WHRP, WCH and collaborators must abide by the Ontario laws around Privacy. Collaborators are asked to abide within this law.
- Collaborators are asked not have or use identifying data in databases and research and present all data in aggregate format.
- Collaborators are asked to acquire the data from WHRP at WCH using an encrypted USB key and having the database protected on this key.
- Once transferred to the collaborator's computer, the database needs to be protected by a password on the collaborator's computer.
- Within the collaboration, the collaborator must understand that the CHIWOS data is owned by WHRP at WCH and must notify the CHIWOS nominated principal applicant (Dr. Mona Loutfy) of plans.
- When data is shared with a collaborator, the collaborator cannot use the data for any
 purpose without approval from the nominated principal applicant including but not
 limited to: analysis, student projects, conference abstracts, presentations,
 manuscripts and grant preparation. The approval must be requested in a timely
 fashion either at a research team meeting and documented in the minutes or via
 email with written approval.
- All approved uses of the data including but not limited to analysis, student projects, conference abstracts, conference posters and presentations, other presentations,

- manuscripts and grant preparation, must be reviewed and approved by all authors and collaborators prior to submission in a timely fashion.
- Authorship must be agreed upon by all parties in a timely fashion prior to student projects, conference abstracts, conference posters and presentations, other presentations, manuscripts and grant preparations (see CHIWOS Authorship Policy).
- Appropriate acknowledgment of all authors, investigators, funders, Project Advisory Committee/Community Advisory Board (PAC/CAB) members, coordinators and participants must be made on all student projects, conference abstracts, conference posters and presentations, other presentations, manuscripts and grant preparations.
- Once a project is finished, database containing the data used by the collaborator must be either returned or destroyed by the collaborator and a written confirmation to this effect be sent to the principal applicant.

Decision-Making Processes:

- The collaboration will strive for consensus amongst all research team members in all aspects of decision-making.
- In emergency situations when an urgent decision is required, the nominated principal applicant will make an executive decision, which is considered in the best interest of the collaboration and in keeping with the mandate and values of the collaboration and the Research Program. In such a situation, the principal applicant will inform the rest of the research team as soon as possible.

Resolving Conflicts & Complaints:

- Conflict will be dealt with in a positive manner by naming, sharing and discussing issues as they arise in a timely fashion, and taking all steps necessary to resolve them.
- Where possible, collaborators will to resolve conflict at the operational/individual level.
- Collaborators share equal responsibility to bring unresolved issues of conflict or instances of unfulfilled responsibilities to each other for resolution.
- Collaborators will address conflicts involving 2 or more individuals/organization in a face-to-face meeting where the conflict/complaint is named and described, and where a mutually acceptable solution is decided on.

Principles of Collaboration and Data Sharing Agreement

For the Canadian HIV Women's Sexual and Reproductive Health Cohort Study



Signatures

• By signing this Collaboration and Data Sharing Agreement, each agent in the partnership agrees to comply with the terms and conditions set out in this agreement.

	23-12-2015
Name:	Date (DD-MMM-YYYY)
Collaborator	
	Date (DD-MMM-YYYY)
Nominated Principal Applicant, Objector, Women and HIV Rese	

B2: University of Toronto Research Ethics Approval



Office of the Vice-President, Research and Innovation

February 27, 2017



Re: Your research protocol entitled, "Understanding access to HIV-related and gender-affirming healthcare for trans women with HIV in Canada: A mixed methods study"

ETHICS APPROVAL	Original Approval Date: February 27, 2017
	Expiry Date: February 26, 2018
	Continuing Review Level: 2

We are writing to advise you that the HIV Research Ethics Board (REB) has granted approval to the above-named research protocol, for a period of **one year**. Ongoing research under this protocol must be renewed prior to the expiry date.

Any changes to the approved protocol or consent materials must be reviewed and approved through the amendment process prior to its implementation. Any adverse or unanticipated events in the research should be reported to the Research Oversight and Compliance Office - Human Research Ethics Program as soon as possible.

Please ensure that you submit an Ethics Renewal Form or a Study Completion/Closure Report 15 to 30 days prior to the expiry date of your current ethics approval. Note that ethics renewals for studies cannot be accepted more than 30 days prior to the date of expiry.

If your research is funded by a third party, please contact the assigned Research Funding Officer in Research Services to ensure that your funds are released.

Please note, all approved research studies are eligible for a routine Post-Approval Review (PAR) site visit. If chosen, you will receive a notification letter from our office. For information on PAR, please see

http://www.research.utoronto.ca/wp-content/uploads/documents/2014/09/PAR-Program-Description-1.pdf.

Best wishes for the successful completion of your research.

Yours sincerely,



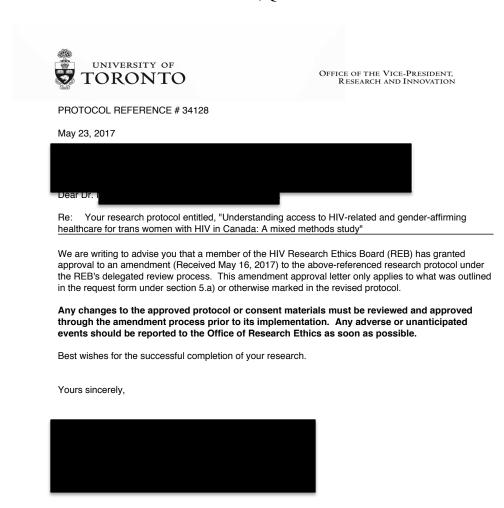
Research Oversight and Compliance Office - Human Research Ethics Program

McMurrich Building, 12 Queen's Park Crescent West, 2nd Floor, Toronto, ON M5S 1S8 Canada

Tel: +1 416 946-3273 • Fax: +1 416 946-5763 • ethics.review@utoronto.ca • http://www.research.utoronto.ca/for-researchers-administrators/ethics/

B3: University of Toronto Research Ethics Amendment # 1 Approval

This amendment requested the addition of the three CHIWOS co-principal investigators as co-investigators on the study protocol, to account for possible transcription of qualitative interviews by a third party, and to provide the opportunity for French interviews to be conducted by a hired and trained research assistant in Montreal, Quebec.



B4: University of Toronto Research Ethics Amendment # 2 Approval

This amendment requested approval for the addition of the Indigenous PRA already involved in CHIWOS to conduct 3-5 of the qualitative interviews that were already approved by the REB.



OFFICE OF THE VICE-PRESIDENT. RESEARCH AND INNOVATION

Page 7 of 7

RIS Protocol

34128 Number:

Approval Date: 9-Nov-17

PI Name: Dr Peter Newman

Division Name:

Dear Dr Peter Newman:

Re: Your research protocol application entitled, "Understanding access to HIV-related and gender-affirming healthcare for trans women with HIV in Canada: A mixed methods study"

The "HIV REB" has conducted a "" review of your application and has granted approval to the attached protocol for the period 2017-11-09 to 2018-02-26.

Please be reminded of the following points:

- An Amendment must be submitted to the FBB for any proposed changes to the approved protocol. The amended protocol must be reviewed and approved by the RB prior to implementation of the changes.
- An annual Renewal must be submitted for ongoing research. You may submit up to 6 renewals for a maximum total span of 7 years. Penewals should be submitted between 15 and 30 days prior to the current expiry date.
- A Protocol Deviation Report (PDR) should be submitted when there is any departure from the REB-approved ethics review application form that has occurred without prior approval from the PEB (e.g., changes to the study procedures, consent process, data protection measures). The submission of this form does not necessarily indicate wrong-doing; however follow-up procedures may be required.
- An Adverse Events Report (AER) must be submitted when adverse or unanticipated events occur to participants in the course of the research process.
- A Protocol Completion Report (PCR) is required when research using the protocol has been completed. For ongoing research, a PCR on the protocol will be required after 7 years, (Original and 6 Penewals). A continuation of work beyond 7 years will require the creation of a new protocol.
- If your research is funded by a third party, please contact the assigned Research Funding Officer in Research Services to ensure that your funds are released.

Best wishes for the successful completion of your research.

Protocol #:5898 Status: Delegated Review App Version:0001 Sub Version:0000 Approved On:9-Nov-17 Expires On:26-Feb-18

B5: University of Toronto Research Ethics Annual Approval



OFFICE OF THE VICE-PRESIDENT. RESEARCH AND INNOVATION

RIS Protocol

Number: 34128

Approval Date: 31-Jan-18

PI Name: Dr Peter Newman

Division Name

Dear Dr Peter Newman:

Re: Your research protocol application entitled, "Understanding access to HIV-related and gender-affirming healthcare for trans women with HIV in Canada: A mixed methods study"

The "HIV REB" has conducted a "" review of your application and has granted approval to the attached protocol for the period 2018-01-31 to 2019-01-30.

Please be reminded of the following points:

- An Amendment must be submitted to the PEB for any proposed changes to the approved protocol. The amended protocol must be reviewed and approved by the PEB prior to implementation of the changes.
- An annual Renewal must be submitted for ongoing research. You may submit up to 6 renewals for a maximum total span of 7 years. Penewals should be submitted between 15 and 30 days prior to the current expiry date.
- A Protocol Deviation Report (PDR) should be submitted when there is any departure from the REB-approved ethics review application form that has occurred without prior approval from the PEB (e.g., changes to the study procedures, consent process, data protection measures). The submission of this form does not necessarily indicate wrong-doing; however follow-up procedures may be required.
- An Adverse Events Report (AER) must be submitted when adverse or unanticipated events occur to participants in the course of the research process.
- A Protocol Completion Report (PCR) is required when research using the protocol has been completed. For ongoing research, a PCR on the protocol will be required after 7 years, (Original and 6 Penewals). A continuation of work beyond 7 years will require the creation of a new protocol.
- If your research is funded by a third party, please contact the assigned Research Funding Officer in Research Services to ensure that your funds are released.

Best wishes for the successful completion of your research.

Protocol #:6993 Page 7 of 7 Status: Delegated Review App Sub Version:0000 Expires On:30-Jan-19 Version:0001 Approved On:31-Jan-18 OFFICE OF RESEARCH ETHICS

McMurrich Building, 12 Queen's Park Crescent West, 2nd Floor, Toronto, ON M5S 1S8 Canada
Tel: +1 416 946-3273 ● Fax: +1 416 946-5763 ● ethics.review@utoronto.ca ● http://www.research.utoronto.ca/for-researchers-administrators/ethics



Certificate of Ethical Approval: Amendments for Harmonized Above Minimal Risk Behavioural Study

UBC-Providence Health Care Research Institute Office of Research Services
10th Floor Hornby Site - SPH c/o 1081 Burrard St. Vancouver, BC V6Z 1Y6 Tel: 604-806-8567

Also reviewed and approved by:

- Interior Health Authority
- Simon Fraser University



Principal Investigator:	Primary Appointment:	Board of Record REB Number:	REB Number:
Angela Kaida	PHCRI/PHC	o lo i	H12-03326
Cohort (CANOC) Affiliated S for trans women with HIV	tudy Sub-study: Understand	lealth Cohort Study (CHIWOS ing access to HIV-related and	gender-affirming healthca
Approval Date: August '	16, 2017	Expiry Date: July 25, 20)18
Research Team Membei	Jean-Guy Baril Ariel C E Nesbitt Saara Greene Chris Tsoukas Charu Kaushic Charlotte Reading Wangari Tharao Alexandra King Angela Kaida Marina Klein Deborah Money Mary Kestler Kelly O'Brien Cecile Tremblay Alexandra de Pokom Cattherine Worthingto Sean B. Rourke Joanne Otis Viviane Dias Lima Mark Yudin Gina Ogilvie Carmen Logie Anita Benoit Catherine Hankins Lynne Leonard Sharon Walmsley Janet Raboud Shari Margolese Jacqueline Gahagan Ann Burchell Elisa M. Lloyd-Smith Neora Pick		

	Danielle Rouleau Caroline Miller Vivian Ramsden Jonathan Angel Mona Loutfy Lori Brotto Surita Parashar Eric Roth Aranka Anema Jason Brophy Trevor A. Corneil Anita Rachlis Allison Carter Benoit Trottier Sylvie Trottier		
Sponsoring Agencies:	Alexis Palmer-Fluevog - Canadian Institutes of Health Research (CIHR) - "Canse Sexual and Reproductive Health Cohort Study (CHIWO) into Action through Peer-Led Knowledge Translation in I - Canadian Institutes of Health Research (CIHR) - "Canse Sexual and Reproductive Health Cohort Study - Prioritiz Positive Aboriginal Women (CHIWOS PAW)" - Canadian Institutes of Health Research (CIHR) - "Canse Sexual and Reproductive Health Cohort Study (CHIWOS - Canadian Institutes of Health Research (CIHR) - "Grar 111041" - Social Sciences and Humanities Research Council of Coumber# 752-2016-1107 "Advancing a critical theoretical services and the services of	S): Mobiliz Local Con adian HIV ing the He adian HIV S)-Renew at ID numb Canada (S	ring Knowledge Imunities" Women's ealth Needs of Women's al" oer: MOP- SSHRC) - "Grar
	intersectional stigma and coping among trans women liv		
	Document Name	Version	Date
	Consent Forms: CHIWOS Trans Sub-study Qualitative Consent Clean CHIWOS Trans Sub-study Qualitative Consent Tracked	3	August 15, 2017 August 15, 2017
	Advertisements: CHIWOS Trans Sub-study PRA Script Clean	3	August 15, 2017
	CHIWOS Trans Sub-study Flyer	2	August 1, 2017
	CHIWOS Trans Sub-study PRA Script Tracked	3	August 15, 2017
Documents included in this approval:	Questionnaire, Questionnaire Cover Letter, Tes CHIWOS Phase 2 - Trans* Substudy Interview	sts: N/A	July 12, 201
	Guide		
	Guide Other Documents: CHIWOS Trans Sub-study Community Resource Tracked	2	August 1, 2017
	Other Documents: CHIWOS Trans Sub-study Community Resource	2 N/A	
••	Other Documents: CHIWOS Trans Sub-study Community Resource Tracked CHIWOS Phase 2 - Trans* Substudy UofT Ethics Approval CHIWOS Trans Sub-study Community Resource Clean	_	2017 February 27
••	Other Documents: CHIWOS Trans Sub-study Community Resource Tracked CHIWOS Phase 2 - Trans* Substudy UofT Ethics Approval CHIWOS Trans Sub-study Community Resource	N/A 2 attached	2017 February 27 2017 August 1, 2017

approvals required from individual institutions before research activities can commence.

The Board of Record (as noted above) has reviewed and approved this study in accordance with the requirements of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2, 2014).

The "Board of Record" is the Research Ethics Board delegated by the participating REBs involved in a harmonized study to facilitate the ethics review and approval process.

The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.

This study has been approved either by the Board of Record's full REB or by an authorized delegated reviewer.



Appendix C. Study Recruitment Materials

C1: Peer Research Associate Recruitment Script (Toronto)

Thank you for mentioning your interest in participating in other studies. There is a PhD student from Social Work at the University of Toronto who is interested in hearing about your experiences accessing different types of healthcare as a trans woman living with HIV. She is interested in hearing about your experiences – good and bad – with HIV healthcare, transspecific healthcare, and primary healthcare during a 60 to 90 minute interview at a location of your choice. Anything you tell her will be kept confidential. Would you like me to pass on your contact information (name, phone number) to her to contact you?

[if yes] Thank you.

[if no] Would you like to take her business card or a card about the study? [distribute as requested]

C2: Peer Research Associate Recruitment Script (Vancouver)

There is a PhD candidate and CHIWOS co-investigator from Social Work at the University of Toronto who is interested in hearing about your experiences with different types of healthcare as a trans woman living with HIV. She is interested in hearing about your experiences – good and bad – with HIV healthcare, trans-specific healthcare, and primary healthcare

The interview would be 60 to 90 minutes at a location of your choice. Anything you tell her will be kept confidential. She is hoping to conduct these interviews in September.

Would you like me to pass on your contact information (name, phone number or email) to her to contact you?

[if yes] Thank you.

If Yes - please call me with participants first name and phone number (or the participant's email, whichever they'd prefer) 647 832 1004 OR email me at ashley.lacombe.duncan@utoronto.ca

Or you can contact:

Becky Gormley BC CHIWOS Provincial Coordinator 604-558-6688 or rgormley@cfenet.ubc.ca

[if no] Would you like to take a flyer about the study? [distribute as requested]

If they ask: \$50 plus two bus passes for participation

C3: Recruitment Flyer (Vancouver)





Are you a CHIWOS participant who identifies as a trans woman or with trans experience?

We would like to talk with you in a **60 to 90 minute confidential interview** for a research study about your experiences – good and bad – accessing HIV healthcare, trans-specific healthcare, and primary healthcare.

You will receive \$50 + 2 bus passes for your time and participation.

For more information please contact:



This study is approved by the University of British Columbia Office of Research Ethics.

Appendix D. Study Consent Forms

D1: Interview Consent Form (Toronto and Montreal, English)





Qualitative Interview Consent Form

Title. Understanding access to HIV-related and gender-affirming healthcare for trans women with HIV in Canada: A mixed methods study – Consent to Participate in Qualitative Component

This study is in partial fulfillment for Ashley Lacombe-Duncan's doctoral dissertation for the Factor-Inwentash Faculty of Social Work, University of Toronto.

Investigator. Supervisor.

You are being asked to take part in a research study. Before agreeing to participate in this study, it is important that you read and understand the following explanation of the proposed study procedures. The following information describes the purpose, procedures, benefits, and risks associated with this study. It also describes your right to refuse to participate or withdraw from the study at any time. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is known as the informed consent process. Please ask me to explain any words you don't understand before signing this consent form. Make sure all your questions have been answered to your satisfaction before signing this document.

What is this study about?

There has been very little research about healthcare needs or experiences for trans women living with HIV in Canada. The aim of this study is to understand the experiences of trans women living with HIV in HIV healthcare, trans-specific healthcare, and primary healthcare. By talking about both good and bad experiences, we may be to use this research ways to build on current successes and improve health services for trans women living with HIV.

Why am I being asked to participate?

You are being asked to take part in this study because you identify as a trans woman living with HIV who completed the Canadian HIV Women's Sexual and Reproductive Health Cohort Survey (CHIWOS survey).

Do I have to take part?

No. Participation is completely voluntary will not impact or have any consequences on the current services you may be receiving at any health or social service agency. It is up to you whether or not

to participate. If you do take part, please keep this information sheet. If you decide to participate, you may withdraw without giving a reason. By choosing to participate in the study, you are in no way waiving your legal rights.

What does participation involve?

If you choose to participate, you will participate in a one-on-one interview about your experiences in different healthcare settings. I will begin by asking you questions about yourself, your transition experiences, and your health. I will then ask you about your experiences in HIV healthcare, followed by trans-specific healthcare, and primary healthcare. I will ask you about both good and bad experiences, and how things could be changed to make your experience better. I will also ask you questions about your identities, and how these identities impact your experiences with different services. I will ask you questions as we talk, but you may choose not to answer any questions, and may withdraw at any time. If you agree, I will audio-record our conversation. I anticipate that our conversation will last one hour to one and a half-hours, with up to two hours maximum, with a washroom break after one hour if needed, and to check in to see how you are doing in the interview and if you are still consenting to continue the interview. Only research findings as a whole will be shared, there will be nothing reported that could identify you. We will remove all identifying information (e.g. names) from your interview transcript. The interview data will be matched to your quantitative survey data, to help me to understand your experiences both qualitatively and quantitatively.

What are the risks?

It is possible that some of the questions may be upsetting if they remind you of bad experiences you have had accessing healthcare. You will be asked specifically about any experiences of discrimination, which may also be upsetting. You do not have to answer any of the questions if you do not want to – you may leave a question blank or ask to skip any of the questions. If you become upset during the interview, please let me know. I will also check with you periodically during the interview to make sure you would like to continue. If you choose to stop the interview or withdraw, your information will not be used. It will be destroyed. If you change your mind after the interview, you may contact Ashley Lacombe-Duncan **within one month**, and your information will be withdrawn from the study.

What are the benefits?

While there are no direct benefits, some people may feel good about telling part of their story, and about being part of a study that may improve healthcare services for trans women living with HIV.

Is there an honorarium for participation?

In recognition of your time, \$50 cash will be provided as well as two TTC tokens to cover transportation costs.

Is my participation in the study confidential?

Yes, your participation will remain confidential. However, due to a legal duty to report certain risks, confidentiality will not be maintained in the following circumstances:

- if you reveal any risk for harming yourself or someone else, I will either contact a local mental health crisis intervention team to provide support, and/or I will call 911 for assistance.
- if you reveal any risk of harm to a child under the age of 16 or exposure to abuse and/or neglect, I will need to inform the local children's aid society.
- if my research files are subpoenaed (I receive a letter with a court-order to provide research information to a legal court), I will need to provide the court-ordered information.

Your Identifiable information will only be collected to schedule the interview. We will not link your name to the qualitative interview, or your survey responses. If you agree to audio recording, your interview will be transcribed and audio recordings will be destroyed immediately after transcription. Translation (of French interviews) and transcription may be completed by a translator and transcriptionist who have signed a confidentiality agreement. For those who do not consent to be audio recorded, notes will be taken. The information from the interviews (transcripts and notes) will be kept on a password protected, encrypted USB key and periodically backed-up on the private, encrypted, password-protected computer kept in the investigator's locked office at the Factor-Inwentash Faculty of Social Work, University of Toronto. After five years we will destroy consent forms and transcribed audio files. No identifying information will be used in data analysis, publications and/or presentations.

Who will see my information?

The only other people who may see your transcript are my supervisors for my doctoral research, who may help me understand and summarize the information in the transcript, a transcriptionist, who will help turn your audio recording into a written document, and a translator, who will help translate French interviews into English. Quotations from your story may be used to help demonstrate women's experiences within healthcare settings.

The research study you are participating in may be reviewed for quality assurance to make sure that the required laws and guidelines are followed. If chosen, (a) representative(s) of the Human Research Ethics Program (HREP) may access study-related data and/or consent materials as part of the review. All information accessed by the HREP will be upheld to the same level of confidentiality that has been stated by the research team.

Can I have a copy of this form?

You can ask the investigator (Ashley Lacombe-Duncan) for a copy of this form if you would like to take a copy with you today. If you would like a copy of this form at another time you can contact Ashley Lacombe-Duncan

What if I have questions or concerns about the study?

You may contact the investigator, Ashley Lacombe-Duncan at			

	☐ I understand that my participation is voluntary			
	I understand the potential benefits and risks associated with this study			
	I understand that I can direct any questions to the investigator (Ashley Lacombe-Duncan), her supervisor (Dr. Peter A. Newman), or Research Ethics at University of Toronto.			
	I consent to participate			
	☐ I do not consent to participate			
Do you give me permission to audio-record our conversation?				
Yes		No		
Partici	pant Name	Participant Signature	Date	
I confirm that I have explained the nature and purpose of the study to the participant named above. have answered all questions.				
Investi	gator Name	Investigator Signature	Date	

Do you have any questions?

Formulaire de consentement pour l'entretien qualitatif

Titre. Comprendre l'accès aux soins de santé relatifs au VIH et à l'affirmation du genre pour les femmes transgenres séropositives au Canada : Une recherche à méthode mixte – Consentement à participer au volet qualitatif

Cette étude s'inscrit dans les obligations d'Ashley Lacombe-Duncan pour sa thèse de doctorat pour la Faculté de travail social Factor-Inwentash de l'Université de Toronto.



Vous avez été invitée à participer à cette étude. Avant d'accepter de participer, il est important que vous lisiez et compreniez les explications ci-dessous sur la façon de procéder proposée pour l'étude. Les informations qui suivent décrivent le but, les méthodes, les avantages et les risques de cette étude. Elles décrivent également votre droit de refuser de participer et votre droit de vous retirer de l'étude à tout moment. Pour décider de participer ou non à cette étude, vous devriez comprendre suffisamment bien les risques et les avantages, afin de pouvoir prendre une décision éclairée. C'est ce que l'on appelle le processus de consentement éclairé. Je vous invite à me demander d'expliquer les termes que vous ne comprenez pas avant de signer le présent formulaire de consentement. Assurez-vous d'avoir obtenu une réponse satisfaisante à toutes vos questions avant de signer le présent document.

Sur quoi porte cette étude?

Très peu de recherches ont été faites sur les besoins et le vécu des femmes transgenres séropositives au Canada en matière de soins de santé. Le but de cette étude est de comprendre l'expérience des femmes transgenres séropositives avec les soins de santé pour le VIH, les soins de santé spécifiques pour les personnes transgenres et les soins de santé primaires. En parlant de ce qui se passe bien et mal, nous espérons pouvoir utiliser ce travail de recherche pour tirer des enseignements des réussites et améliorer les services de santé pour les femmes transgenres séropositives.

Pourquoi me demande-t-on de participer?

Nous vous invitons à participer à cette étude parce que vous vous identifiez comme femme transgenre vivant avec le VIH et avez participé à l'Étude sur la santé sexuelle et reproductive des femmes vivant avec le VIH au Canada (Étude CHIWOS).

Est-ce que je dois participer?

Non. La participation est totalement facultative et n'aura aucune incidence sur les services que vous recevez actuellement des différents organismes de santé ou de services sociaux. Vous êtes libre de participer ou non. Si vous décidez de participer, veuillez conserver cette feuille d'information. Si vous participez, vous pourrez vous retirer si vous le souhaitez, sans avoir à donner de raison. En choisissant de participer à l'étude, vous ne renoncez en rien à vos droits juridiques.

Qu'implique la participation?

Si vous choisissez de participer, vous aurez un entretien individuel sur votre expérience dans divers établissements de soins de santé. Je commencerai par vous poser des guestions sur vous, comment vous avez vécu votre transition et votre santé. Je vous poserai ensuite des questions sur votre expérience des soins de santé pour le VIH, puis des soins de santé pour les transgenres et enfin des soins de santé primaires. Je vous interrogerai sur ce qui s'est bien ou mal passé et sur ce qui pourrait être changé pour améliorer votre expérience. Je vous poserai aussi des questions sur vos identités et l'impact qu'elles ont sur votre expérience avec différents services. Au cours de notre conversation, je vous poserai des questions mais vous êtes libre de ne pas y répondre et vous pouvez vous retirer à n'importe quel moment. Si vous êtes d'accord, je ferai un enregistrement audio de notre conversation. Je prévois que notre entretien durera entre une heure et une heure et demie, pas plus de deux heures, avec une courte pause après une heure si nécessaire, pour nous dégourdir les jambes et pour voir avec vous comment vous vivez l'entretien et si vous êtes d'accord pour continuer. Seuls les résultats collectifs de la recherche seront partagés et rien dans ce qui sera rapporté ne permettra de vous identifier. Nous enlèverons toutes les informations qui pourraient permettre de vous identifier (comme les noms) de la transcription de votre entretien. Les données de votre entrevue seront reliées à vos données pour l'enquête quantitative pour m'aider à mieux comprendre votre expérience, tant au niveau qualitatif que quantitatif.

Quels sont les risques?

Il est possible que certaines des questions soient dérangeantes si elles vous rappellent des situations déplaisantes en matière d'accès aux soins de santé. Vous aurez des questions portant spécifiquement sur la discrimination, ce qui pourrait aussi vous ébranler. Vous n'êtes pas obligée de répondre aux questions si vous ne voulez pas le faire – vous pouvez laisser une question sans réponse ou demander de passer aux questions suivantes. Si l'entretien vous déstabilise, dites-le moi. Je vérifierai régulièrement avec vous, pendant notre conversation, si vous souhaitez toujours continuer. Si vous choisissez de mettre fin à l'entretien ou de vous retirer de l'étude, votre information ne sera pas utilisée. Elle sera détruite. Si vous changez d'avis après l'entretien, vous pouvez contacter Ashley Lacombe-Duncan dans un délai d'un mois et votre information sera retirée de l'étude.

Quels sont les avantages?

Il n'y a pas d'avantage direct mais certaines personnes sont contentes de raconter une partie de leur histoire et de participer à une étude qui pourrait aider à améliorer les services de soins de santé pour les femmes transgenres séropositives.

Reçoit-on des honoraires quand on participe?

Pour vous remercier du temps que vous nous consacrez, nous vous remettrons 50 \$ en liquide ainsi que deux billets de la TTC pour couvrir vos frais de déplacements.

Est-ce que ma participation à l'étude est confidentielle?

Oui votre participation demeurera confidentielle. Cependant, du fait de notre obligation légale de signaler certains risques, la confidentialité ne sera pas maintenue dans les situations suivantes :

- si vous révélez un risque de vous faire du mal ou de vous attaquer à quelqu'un, je contacterai une équipe locale d'intervention d'urgence en santé mentale et/ou j'appellerai le 911 pour obtenir de l'aide.
- si vous révélez un risque qu'un enfant de moins de 16 ans souffre ou soit victime de maltraitance ou de négligence, je devrai informer la société locale d'aide à l'enfance.
- si je suis assigné à produire mes dossiers de recherche (si je reçois par courrier une ordonnance des tribunaux de remettre de l'information sur mes recherches à un tribunal), je devrai fournir l'information demandée dans l'ordonnance.

Des informations personnelles permettant de vous identifier seront collectées seulement pour programmer l'entretien. Nous n'attacherons pas votre nom à l'entretien qualitatif ou à vos réponses au sondage. Si vous acceptez que nous enregistrions l'entretien avec vous, celui-ci sera transcrit et l'enregistrement sera immédiatement détruit après la transcription. La traduction (pour les entretiens en français) et la transcription seront effectuées par un traducteur/une traductrice et un transcripteur/une transcriptrice ayant signé un accord de confidentialité. Pour les participantes qui n'ont pas autorisé l'enregistrement de l'entretien, nous prendrons des notes. L'information concernant les entretiens (transcriptions et notes) sera conservée sur une clé USB cryptée et protégée par un mot de passe dont le contenu sera régulièrement sauvegardé sur un ordinateur privé, crypté et protégé par un mot de passe dans le bureau fermé à clé de la chercheuse à la Faculté de travail social Factor-Inwentash de l'Université de Toronto. Au bout de cinq ans, nous détruirons les formulaires de consentement et les transcriptions des enregistrements. Aucune information personnelle ne sera utilisée dans l'analyse de données, les publications et/ou les présentations.

Qui verra mon information?

Les seules autres personnes qui verront la transcription de votre entretien sont mes directeurs de recherches pour mon doctorat qui pourront m'aider à comprendre et à résumer l'information contenue dans la transcription, la personne qui fera la transcription et m'aidera à transformer l'enregistrement de votre entretien en un document écrit et la personne qui traduira en anglais les entretiens en français. Il est possible que j'utilise des citations de votre histoire pour aider à montrer l'expérience des femmes dans le milieu des soins de santé.

L'étude à laquelle vous participez pourra être examinée à des fins d'assurance de la qualité, pour s'assurer que les lois et les directives applicables sont respectées. Si votre entretien est choisi, il est possible qu'un ou plusieurs représentants du Humann Research Éthiques Program (HREP) consultent des données en rapport avec l'étude ou les documents concernant votre consentement dans le cadre de leur examen. La protection de toutes les informations consultées par le HREP sera assurée au moyen des mêmes mesures que celles décrites par l'équipe de recherche pour l'ensemble du projet.

Est-ce que je peux avoir un exemplaire de ce formulaire?

Vous pouvez demander un exemplaire de ce formulaire à la chercheuse (Ashley Lacombe-Duncan) si vous souhaitez l'emporter avec vous aujourd'hui. Si vous en souhaitez un exemplaire à un autre moment, il vous suffira de contacter Ashley Lacombe-Duncan (ashley.lacombe.duncan@utoronto.ca).

Et si j'ai des questions ou des préoccupations au sujet de l'étude?

Est-ce que vous avez des questions?			
Lst-ce que vous avez des questions :			
☐ Je comprends que ma participation est facultative			
☐ Je comprends les avantages et risques potentiels de cette étude ☐ Je comprends que je peux poser n'importe quelle question à la chercheuse (Ashley Lacombe-Duncan), à son superviseur, (Peter A. Newman), ou à Human Research Ethics Program à l'Université de Toronto.			
☐ Je consens à participer	☑ Je consens à participer		
☐ Je ne consens pas à participer			
M'autorisez-vous à enregistrer notre conversation?			
Oui Non			
Nom de la participante Signature de la participante Date			
Je confirme que j'ai expliqué la nature et l'objectif de l'étude à la participante nommée ci-dessus. J'a répondu à toutes ses questions.			

Signature de la chercheuse

Date

Nom de la chercheuse





















Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS), a Canadian Observational Cohort (CANOC) Affiliated Study

Sub-study: Understanding access to HIV-related and gender-affirming healthcare for trans women with HIV

PARTICIPANT INFORMED CONSENT FORM

BC Principal Investigator of CHIWOS: Dr. Angela Kaida
Co-Investigator of CHIWOS and Trans Women and Access to Care Project: Ashley Lacombe-Duncan, MSW, PhD(c)
BC Provincial Coordinator: Rebecca Gormley,
Funders: Canadian Institute of Health Research (CIHR) & CIHR Canadian HIV Trials Network (CTN)
This study is in partial fulfillment for Ashley Lacombe-Duncan's doctoral dissertation for the Factor-Inwentash Faculty of Social Work, University of Toronto, supervised by Dr. Peter A. Newman, Factor-Inwentash Faculty of Social Work, University of Toronto; Email Telephone:

You are being invited to take part in a research study. Before agreeing to participate in this study, it is important that you read and understand the following explanation of the proposed study procedures. The following information describes the purpose, procedures, benefits, and risks associated with this study. It also describes your right to refuse to participate or withdraw from the study at any time. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is known as the informed consent process. Please ask the study coordinator to explain any words you don't understand before signing this consent form. Make sure all your questions have been answered to your satisfaction before signing this document.

What is this study about?

There has been very little research about healthcare needs or experiences for trans women living with HIV in Canada. The aim of this study is to understand the experiences of trans women living with HIV in HIV healthcare, trans-specific healthcare, and primary healthcare. By talking about both good and bad experiences, we may be to use this research ways to build on current successes and improve health services for trans women living with HIV.

Why am I being asked to participate?

You are being invited to take part in this study because you identify as a trans woman living with HIV who completed the Canadian HIV Women's Sexual and Reproductive Health Cohort Survey (CHIWOS survey) in Vancouver, British Columbia. This study is a sub-study of CHIWOS. Your decision whether or not to enroll in this study will not affect your status within the main CHIWOS study.

Do I have to take part?

No. Participation is completely voluntary will not impact or have any consequences on the current services you may be receiving at any health or social service agency. It is up to you whether or not to participate. If you do take part, please keep this information sheet. If you decide to participate, you may withdraw without giving a reason.

What does participation involve?

If you choose to participate, you will participate in a one-on-one interview about your experiences in different healthcare settings. The interview will begin with questions about yourself, your transition experiences, and your health. You will then be asked about your experiences in HIV healthcare, followed by trans-specific healthcare, and primary healthcare. You will be asked about both good and bad experiences, and how things could be changed to make your experience better. You will also be asked questions about your identities, and how these identities impact your experiences with different services. You will be asked questions throughout the interview, but you may choose not to answer any questions, and may withdraw at any time. If you agree, you will be audio-recorded during the interview. It is anticipated that the interview will last one hour to one and a half-hours, with a washroom break after one hour if needed, and to check in to see how you are doing in the interview and if you are still consenting to continue the interview. Only research findings as a whole will be shared, there will be nothing reported that could identify you. We will remove all identifying information (e.g. names) from your interview transcript. The interview data will be matched to your quantitative survey data, to help me to understand your experiences both qualitatively and quantitatively.

What are the risks?

It is possible that some of the questions may be upsetting if they remind you of bad experiences you have had accessing healthcare. You will be asked specifically about any experiences of discrimination, which may also be upsetting. You do not have to answer any of the questions if you do not want to – you ask to skip any of the questions. If you become upset during the interview, please let the interviewer know. The interviewer will also check with you periodically during the interview to make sure you would like to continue. The interviewer will distribute a list of community resources to you which include a broad range of services such as crisis and mental health counselling, LGBTQ and two-spirit community supports, healthcare and HIV/AIDS service organizations, and legal support. If you choose to stop the interview or withdraw, your information will not be used. It will be destroyed. If you change your mind after the interview, you may contact Ashley Lacombe-Duncan within one month, and your information will be withdrawn from the study.

What are the benefits?

While there are no direct benefits, some people may feel good about telling part of their story, and about being part of a study that may improve healthcare services for trans women living with HIV.

Is there an honorarium for participation?

In recognition of your time, \$50 cash will be provided as well as two bus tickets to cover transportation costs.

Is my participation in the study confidential?

Yes, your participation will remain confidential. However, due to a legal duty to report certain risks, confidentiality will not be maintained in the following circumstances:

- if you reveal any risk for harming yourself or someone else, I will either contact a local mental health crisis intervention team to provide support, and/or I will call 911 for assistance.
- if you reveal any risk of harm to a child under the age of 19 or exposure to abuse and/or neglect, I will need to inform the local children's aid society.
- if my research files are subpoenaed (I receive a letter with a court-order to provide research information to a legal court), I will need to provide the court-ordered information.

To protect your personal identity, all information provided by you will be identified by a unique pseudonym. Your name or other identifying information will not appear on any study materials, publications, or reports produced by the study. The information you share will not be shared with any disability support program, immigration authorities, the police, or the Canada Revenue Agency. However, records identifying you may be inspected in the presence of the Research Coordinator by representatives of the University of British Columbia and Simon Fraser University Research Ethics Boards to monitor the research and ensure it is being done ethically. These individuals will only be allowed to see these records under the supervision of the Research Coordinator and will be obligated to protect your privacy and not disclose your personal information.

How will my data be secured?

Your identifiable information will only be collected to schedule the interview. We will not link your name to the qualitative interview, or your survey responses. This consent form will be secured in a locked filling cabinet in the locked office of Rebecca Gormley, BC Provincial Coordinator for CHIWOS, and stored separately from any data. If you agree to audio recording, the audio recordings will be stored on the password protected computer of Rebecca Gormley, BC Provincial Coordinator for CHIWOS and will be deleted from the recording device that was used during the interview. Each audio recording file will be password protected, and only Ashley Lacombe-Duncan will know the password and have access to the recordings. The audio recordings will be transcribed by Ashley Lacombe-Duncan, and any information that could identify you, including: names of organizations, names of people, names of specific locations, or other personal information (e.g., birthday) will be removed. For example, if you name a specific hospital, this will be replaced with the generic term 'hospital'. Similarly, if you name a specific doctor, this will be replaced with the generic term 'doctor'. Personally identifiable information (for example, your birthday), will be deleted. The audio recording files will be deleted immediately after transcription. For those who do not consent to be audio recorded, notes will be taken which do not include any identifiable information. The de-identified information from the interviews (transcripts and notes) will be kept on a password protected, encrypted USB key and periodically backed-up on the private, encrypted, password-protected computer kept in the investigator's locked office at the Factor-Inventash Faculty of Social Work. University of Toronto, where data analysis will be conducted by Ashley Lacombe-Duncan. After five years we will destroy consent forms and transcripts. No identifying information will be used in data analysis, publications and/or presentations. These data will not be used for any other purpose other than the research outlined in the consent form.

Who will see my information?

The only other people who may see your transcript are the supervisors for Ashley Lacombe-Duncan's doctoral research, who may help her understand and summarize the information in the transcript. Ashley Lacombe-Duncan will be the only person with access to the audiorecording of your interview, and will complete the transcription. The audiorecording will be deleted as soon as the interview is transcribed. Quotations from your story may be used to help demonstrate women's experiences within healthcare settings.

What if I have questions or concerns about the study?

If you have any questions concerning the study, you may contact:

BC Principal Investigator:		
Dr. Angela Kaida		
Co-Investigator/Interviewer:		
Ashley Lacombe-Duncan		
, , , , , , , , , , , , , , , , , , , ,	•	
BC Provincial Coordinator:		
Rebecca Gormley,		
- · · · · · · · · · · · · · · · · · · ·	7, 0	

If you have any questions or concerns about your rights as a research participant, please contact:

Director, SFU Office of Research Ethics

Dr. Jeff Toward, 778-782-6593, itoward@sfu.ca (Ethics Application Number 2012s0959)

The Research Subject Information Line in the UBC Office of Research Services

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the University of British Columbia Office of Research Ethics by e-mail at RSIL@ors.ubc.ca or by phone at 604-822-8598 (Toll Free: 1-877-822-8598).

The Chair of the Interior Health Research Ethics Board:

Phone: 250-870-4602, Email: researchethics@interiorhealth.ca

Do you have any questions?

Participant Consent and Signature page

The Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS), a Canadian Observational Cohort (CANOC) Affiliated Study

Sub-Study: Understanding access to HIV-related and gender-affirming healthcare for trans women with HIV in Canada

Participant: Please keep a copy of this document for your information throughout the study. Once you have signed the Consent Form, your interviewer will give you a copy for your own reference. I am aware that by initialling each page of the Consent Form and signing the signature page:

- I have read the entire document and all my questions have been answered to my satisfaction. I am aware that I can ask questions at any time during the study, and that I will receive a copy of this Consent Form for my records.
- □ I have received an explanation of the nature, purpose, duration and foreseeable effects of the study and what I will be expected to do. The possible risks and benefits of the study have been explained to me.
- I was given time and opportunity to inquire about the study and all my questions were answered to my satisfaction.
- My participation in the study is voluntary and that I am completely free to refuse to participate or to withdraw from this study at any time without this changing in any way the quality of care that I will receive.
- □ I am not waiving any of my legal rights nor am I freeing the investigators, sponsors or the health establishment from their legal and professional responsibilities.
- There is no guarantee that this study will provide any benefit to me.
- All personal data collected will remain confidential and that any resulting publication will maintain my anonymity.

study

I agree that results of the study may be passed on to regulatory authorities (Health Canada). Any information that identifies me will be kept confidential.

Name of Participant please print)	Signature of Participant	Date
nave been fully explained to the	e potential benefits, risks and procedures volunteer and he or she has had ample to or not to participate in this study.	
Name of Person Obtaining Consent (please print)	Signature of Person Obtaining Consent	Date

Appendix E. Community Resource Guides

E1: Toronto Resource Guide

If you're experiencing immediate distress...

24/7 Distress and Crisis Line 416-408-4357

Trans Lifeline 877-330-6366

Gerstein Centre 416-929-5200 (24/7) 100 Charles Street East, OR 1045 Bloor Street West gersteinonbloor@gersteincentre.org

If you're looking for mental health counselling...

Griffin Centre 1126 Finch Avenue West, Unit 16 416-222-1153 contact@griffincentre.org

Family Services Toronto, David Kelley Services 202-128A Sterling Road 416-595-9618

If you're looking for LGBTQ community supports...

The 519 519 Church Street 416-392-6874 info@the519.org

2 Spirited People of the 1st Nations 145 Front Street East, Unit 105 416-944-9300 kerrigan@2spirits.com

If you're looking for healthcare...

Sherbourne Health Centre 333 Sherbourne Street 416-324-4180 info@sherbourne.on.ca

Health Centre @ 410 410 Sherbourne 416-867-3728

If you're looking for an HIV/AIDS service organization...

Toronto People with AIDS Foundation (PWA) 200 Gerrard Street East 416-506-1400

ACAS Toronto 260 Spadina Avenue, Suite 410 416-963-4300 info@acas.org

PASAN 526 Richmond Street East 416-920-9567 claudia@pasan.org Africans in Partnership Against AIDS (APAA) 526 Richmond Street East 416-924-5256 info@apaa.ca

The Alliance for South Asian AIDS Prevention (ASAAP)
120 Carlton Street, Unit 315
416-599-2727

AIDS Committee of Toronto 542 Yonge Street, 4th Floor 416-340-2437 ask@actoronto.org

E2: Montreal Resource Guide

If you are experiencing immediate distress...

Trans Lifeline (24/7) 877-330-6366

L'Association québecoise de prevention du suicide (24/7) 1-866-277-3553

If you're looking for LGBTQ community supports...

Project 10 1575 Amherst 514-989-0001 514-989-4585 (Listening Line) questions@p10.qc.ca

ASTT(E)Q 1300 Sanguinet 514-847-0067 x 207

If you're looking for mental health counselling...

Aide aux transsexuelles et transsexuels du Québec (ATQ) 300 Ste. Catherine East 514-591-9038 (Admin) 514-254-9038 (Listening Line) admin@atq1980.org

If you're looking for healthcare...

Cactus Montreal/ ASTT(E)Q 1300 Sanguinet 514-847-0067 info@cactusmontreal.org

If you're looking for an HIV/AIDS service organization...

AIDS Community Care Montreal 2075 Rue Plessis 514-527-0928 info@accmontreal.org Maison Plein Coeur 1611, rue Dorion 514-597-0554 infompc@maisonpleincoeur.org

E3: Vancouver Resource Guide

If you're experiencing immediate distress...

Trans Lifeline 877-330-6366

Suicide Crisis Line 1-800-SUICIDE

Crisis Line Association of BC Mental Health Information Line 310-6789

If you're looking for LGBTQ and two-spirit?) community supports...

Catherine White Holman Centre (inside REACH clinic), 1145 Commercial 604-442-4352

Qmunity 1170 Bute Street 604-684-5307 x 100 resource@gmunity.ca

You can also contact the CHIWOS on-call counsellor from 5am-11pm PST:

Amanda Saunders, Social Worker (English only) 519-200-6807, amanda.saunders@wchospital.ca

If you're looking for mental health counselling...

Qmunity 1170 Bute Street 604-684-5307 x 100 resource@gmunity.ca

Prism Services, Vancouver Coastal Health Various Locations prism@bch.ca

If you're looking for healthcare...

Transgender Health Info Program 201-1290 Hornby Street 604-734-1514 866-999-1514 (BC Only) transhealth@vch.ca

Catherine White Holman Centre (inside REACH clinic), 1145 Commercial, 604-442-4352

Prism Services, Raven Song 2450 Ontario St. 200 604-658-1214

Access Central Detox 1-866-658-1221

If you're looking for an HIV/AIDS service organization...

AIDS Vancouver 803 East Hastings Street 604-893-2205 contact@aidsvancouver.org

AIDS Vancouver Hotline 604-253-0566 ext.299

Positive Living BC 604-893-2200

For Peer Navigators: 604-908-7710

If you're looking for legal support

Pivot Legal Society 121 Heatley Ave 604-255-9700 Canadian Aboriginal AIDS Network (CAAN) 6520 Salish Drive 604-266-7616

Dr. Peter AIDS Foundation 1110 Comox Street 604-608-1874

Appendix F. Confidentiality Agreement with Transcriptionist

Confidentiality Agreement with Translator and Transcriptionist

This form may be used for individuals hired to conduct specific research tasks, e.g., recording or editing image or sound data, transcribing, interpreting, translating, entering data, destroying data.

Project title - Understanding access to HIV-related and gender-affirming healthcare for trans women with HIV in Canada: A mixed methods study (Healthcare access for trans women with

I agree to -

- keep all the research information shared with me confidential by not discussing or sharing the research information in any form or format (e.g., audiofiles, transcripts) with anyone other than the Researcher(s).
- keep all research information in any form or format (e.g., audiofiles, transcripts) secure while it is in my possession.
- 3. return all research information in any form or format (e.g., audiofiles, transcripts) to the Researcher(s) when I have completed the research tasks.
- after consulting with the Researcher(s), erase or destroy all research information in any 4. form or format regarding this research project that is not returnable to the Researcher(s) (e.g., information stored on computer hard drive).

Researcher(s)		
(Print Name) (Date)	(Signature)	

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by HIV Research Ethics Board at the University of Toronto. If you have any questions you may contact the Human Research Ethics Program at ethics.review@utoronto.ca or 416-946-

Appendix G. Data Collection Instruments

G1: CHIWOS Baseline Survey

http://www.chiwos.ca/wp-content/uploads/2014/08/CHIWOS-May-13-2014-En.pdf

G2: English Interview Guide

Thank you for participating in this study. Do you have any other questions about the consent form or about the interview before we begin? Please remember that you can skip questions, take breaks, or withdraw at any point during the interview. Just let me know how you're feeling as we go along. Are you comfortable with me beginning the audio-recording now? Before we begin, what name or pseudonym would you like to use?

[START AUDIO-RECORDING]

General Questions

- 1. Can you tell me a bit about yourself? What do you like to do for fun?
- 2. How has your health been over the last year?
- 3. Tell me what is or has transition looked like for you? Probes: medical, physical, social, legal
- 4. How long have you been living with HIV? Where did HIV come along in your timeline of transition?

I'd really like to hear about your experiences – good and bad – in different healthcare settings and with different healthcare providers that you might be accessing (or accessed in the past year), including:

- HIV healthcare
- Trans-specific healthcare
- Primary healthcare

HIV Healthcare Access Experiences

- 5. When is the last time you accessed HIV healthcare? At that time, what was your viral load and CD4 count?
- 6. Are you currently taking HIV medications?
 - a. What concerns, if any, do you have about HIV and HIV medications? What has your experience been like discussing these concerns with an HIV specialist?
 - b. What, if anything, gets in the way of you taking your HIV medications? What supports you in taking your HIV medications?
- 7. Where do you access HIV healthcare? *Probes:* HIV specialist, trans-specific healthcare provider, primary care provider, combination
 - a. Where did you first access HIV healthcare?
 - b. Has this changed over time? If so, why? If not, why not?
- 8. [For those who have seen an HIV healthcare provider in the last year] What is your current experience like accessing HIV healthcare? Please walk me through a typical experience with your HIV healthcare provider from the time you enter the setting to the time you leave.
 - a. What, if anything, gets in the way of you accessing these services? *Probes:* sociodemographic, clinical, intrapersonal, interpersonal, structural, trans-specific factors
 - b. What helps you to access these services? *Probes:* individual, social, structural, etc.

- 9. Some studies have found that trans women with HIV experience poor treatment and negative attitudes from HIV healthcare providers based on their gender identity. What negative experiences, if any, have you had with an HIV doctor or in an HIV clinic?
 - a. What did that experience look like? How did it make you feel? What did you do? *Probes:* resiliency, empowerment
 - b. Have you had any other negative experiences in HIV healthcare settings? *Probes:* racism, sexism, substance use stigma, gender non-conformity stigma, sex work stigma, classism, sexual stigma
 - c. How did you cope with these bad experiences?
- 10. [If > 1 year since last accessing] I notice it has been a little while since you last accessed HIV healthcare. Can you tell me why that might be?
- 11. [For people who have never accessed HIV healthcare] People don't access HIV healthcare for a lot of different reasons. Can you tell me about some of the reasons why you don't access HIV healthcare? *Probes:* socio-demographic, clinical, intrapersonal, interpersonal, structural, trans-specific factors
 - a. What could be done differently to support you to access HIV healthcare? *Probes:* individual, social, structural

Trans-specific Healthcare Access Experiences

- 12. What, if any, trans-specific supports do you access? (e.g., Meal Trans, TSWEP, Sherbourne Health Centre, endocrinologist)
 - a. What is your experience like accessing these programs/providers?
- 13. Have you ever tried accessing trans-related surgeries while HIV positive? Could you describe this/these experiences?
- 14. Can you tell me about any times you experienced poor treatment from a trans-specific provider? *Probes:* HIV-related stigma, racism, sexism, substance use stigma, gender non-conformity stigma, sex work stigma, classism, sexual stigma
 - a. What did that experience look like? How did it make you feel? What did you do? *Probes:* resiliency, empowerment

Primary Care Healthcare Access Experiences

- 15. Where do you access primary healthcare? *Probes:* family health team, community health centre, doctors office, emergency department, walk-in clinics, combination
 - a. How long have you been accessing primary healthcare from this setting?
 - b. Why did you choose this setting to access primary healthcare?
- 16. What is your current experience like accessing primary healthcare? Walk me through a typical experience with your primary healthcare provider from the time you enter the setting to the time you leave.
 - a. What, if anything, gets in the way of you accessing these services? *Probes:* sociodemographic, clinical, intrapersonal, interpersonal, structural, trans-specific factors
 - b. What helps you to access these services? *Probes:* socio-demographic factors, clinical factors, intrapersonal factors, interpersonal factors, structural factors, transspecific factors

- 17. What, if any, negative experiences have you had with a primary healthcare provider? *Probes:* HIV-related stigma, transphobia, racism, sexism, substance use stigma, gender non-conformity stigma, sex work stigma, classism, sexual stigma
 - a. What did that experience look like? How did it make you feel? What did you do? *Probe:* resiliency, empowerment

Questions for Across Healthcare Settings

- 18. One of the things I am very interested in is how different kinds of identities (e.g., being a trans woman of colour living with HIV) impacts your access to healthcare. How are your experiences accessing healthcare different as:
 - a trans woman of colour living with HIV
 - an Indigenous trans woman living with HIV
 - a trans woman living with HIV who is also a newcomer or a refugee
 - a trans woman living with HIV who is also a sex worker
 - a trans woman living with HIV who is also a sexual minority woman
- 19. What doctors do you have [primary care doctor/specialist, HIV healthcare provider, transspecific healthcare provider] that are knowledgeable about HIV as well trans-related issues? How about HIV and primary care needs? Primary care and trans-specific needs?
 - a. How has the experience with that healthcare provider been to date?
 - b. [If no providers who are knowledgeable about HIV and trans issues] What has your search been like? What have you experienced?

Suggestions for Improvements

- 20. If you could change anything about the healthcare you receive, what would it be?
- 21. What do you think is the best way to structure healthcare to address HIV, trans-specific, and primary care needs?

Thank you so much for participating in this interview. Is there anything else you would like to tell me about before we end the interview?

G3: French Interview Guide

Accès aux soins de santé pour les femmes transgenres séropositives

Merci de participer à cette étude. Est-ce que vous avez des questions sur le formulaire de consentement ou sur cet entretien avant de commencer? Je vous rappelle que vous pouvez sauter des questions, faire des pauses ou vous retirer à n'importe quel moment pendant cet entretien. N'hésitez pas à me dire comment vous vous sentez. Ça va si je commence à enregistrer maintenant? Avant de démarrer, quel nom ou pseudonyme voulez-vous utiliser?

[LANCER L'ENREGISTREMENT AUDIO]

Questions générales

- 22. Pouvez-vous me parler un peu de vous? Qu'est-ce que vous aimez faire pour le plaisir?
- 23. Comment a été votre santé cette dernière année?
- 24. Racontez-moi comment se passe, ou s'est passée, la transition pour vous? *Pistes :* sur les plans médical, physique, social, juridique
- 25. Depuis combien de temps êtes-vous séropositive? À quel stade de votre transition le VIH est-il apparu?

J'aimerais beaucoup que vous me parliez de votre expérience – les bonnes et les mauvaises situations – dans les différents services de soins de santé et avec les différents fournisseurs de soins de santé que vous fréquentez (ou avez fréquentés cette dernière année), y compris :

- Soins de santé pour le VIH
- Soins de santé spécifiques pour les personnes transgenres
- Soins de santé primaires

Expérience de l'accès aux soins de santé pour le VIH

- 26. Quand avez-vous accédé à des soins de santé pour le VIH pour la dernière fois? À ce moment-là, quels étaient votre charge virale et la numération de vos CD4?
- 27. Prenez-vous actuellement des médicaments pour le VIH?
 - c. Quels sont vos inquiétudes, si vous en avez, au sujet du VIH et des médicaments pour le VIH? Quelle a été votre expérience lorsque vous avez discuté de ces inquiétudes avec un spécialiste du VIH?
 - d. Y a-t-il des choses qui compliquent votre prise de médicaments pour le VIH et, si oui, quelles sont-elles? Qu'est-ce qui vous aide à prendre vos médicaments pour le VIH?
- 28. Qui voyez-vous pour vos soins de santé pour le VIH? *Pistes :* spécialiste du VIH, fournisseur de soins de santé spécifiques pour les personnes transgenres, fournisseur de soins de santé primaires, ou une combinaison
 - c. Où avez-vous accédé pour la première fois à des soins de santé pour le VIH?
 - d. Est-ce que ca a changé depuis? Si oui, pourquoi? Sinon, pourquoi pas?
- 29. [Pour celles qui ont vu un fournisseur de soins de santé pour le VIH pendant la dernière année] Quelle est votre expérience actuelle de l'accès aux soins de santé pour le VIH? Décrivez-moi s'il vous plaît une visite typique à votre fournisseur de soins de santé pour le

VIH, depuis le moment où vous arrivez à son établissement jusqu'au moment où vous en repartez.

- c. Y a-t-il des choses qui compliquent votre accès à ces services et, si oui, quelles sont-elles? *Pistes :* facteurs socio-demographiques, cliniques, intrapersonnels, interpersonnels, structurels, spécifiques aux personnes transgenres
- d. Qu'est-ce qui vous aide à accéder à ces services? *Pistes :* facteurs individuels, sociaux, structuraux, etc.
- 30. Des études ont montré que les femmes transgenres séropositives sont confrontées à des mauvais traitements et des attitudes négatives de la part des fournisseurs de soins de santé pour le VIH du fait de leur identité de genre. Avez-vous eu des situations déplaisantes avec un docteur ou une clinique pour le VIH et, si oui, lesquelles?
 - d. Pouvez-vous me décrire cette expérience? Comment vous êtes-vous sentie? Qu'avez-vous fait? *Pistes :* résilience, découverte de ses pouvoirs
 - e. Avez-vous eu d'autres situations déplaisantes dans des services de soins pour le VIH? *Pistes*: racisme, sexisme, stigmatisation associée à la consommation de drogues ou d'alcool, à la non-conformité sexuelle, aux travailleurs du sexe, à la classe sociale ou à la sexualité
 - f. Comment avez-vous fait face à ces situations déplaisantes?
- 31. [Si l'accès remonte à > 1 an] Je note que cela fait un certain temps que vous n'avez pas accédé à des soins de santé pour le VIH. Vous pouvez me dire pourquoi?
- 32. [Pour celles qui n'ont jamais accédé à des soins de santé pour le VIH] Il y de nombreuses raisons pour lesquelles certaines personnes n'accèdent pas à des soins pour le VIH. Pouvez-vous me dire quelques-unes des raisons pour lesquelles vous n'y avez pas accédé? *Pistes :* facteurs sociodémographiques, cliniques, intrapersonnels, interpersonnels, structurels, spécifiques aux personnes transgenres
 - b. Qu'est-ce qu'on pourrait faire différemment pour vous aider à accéder à des soins de santé pour le VIH? *Pistes :* facteurs individuels, sociaux, structurels

Expérience de l'accès aux soins de santé spécifiques aux personnes transgenres

- 33. Quels sont les soutiens spécifiquement pour les personnes transgenres auxquels vous accédez? (par ex. Meal Trans, TSWEP, Sherbourne Health Centre, endocrinologue)
 - b. Quelle est votre expérience de l'accès à ces programmes/fournisseurs de services?
- 34. Avez-vous déjà essayé d'accéder à des opérations chirurgicales spécifiquement pour personnes transgenres alors que vous étiez séropositive? Pouvez-vous me décrire comme ça s'est passé?
- 35. Pouvez-vous me parler de situations où vous avez été mal traitée par un fournisseur de soins spécifiquement pour les personnes transgenres? *Pistes :* racisme, sexisme, stigmatisation associée à la consommation de drogues ou d'alcool, à la non-conformité sexuelle, aux travailleurs du sexe, à la classe sociale ou à la sexualité
 - a. Pouvez-vous me décrire cette expérience? Comment vous êtes-vous sentie? Qu'avez-vous fait? *Pistes :* résilience, découverte de ses pouvoirs

Expérience de l'accès à des soins de santé primaires

- 36. Où allez-vous pour vos soins de santé primaires? *Pistes :* équipe de médecine familiale, centre de santé communautaire, cabinet médical, service des urgences d'un hôpital, cliniques sans rendez-vous, combinaison
 - c. Depuis combien de temps allez-vous à cet endroit pour vos soins de santé primaires?
 - d. Pourquoi avez-vous choisi cet endroit pour accéder à des soins de santé primaires?
- 37. Quelle est votre expérience actuelle de l'accès à des soins de santé primaires? Décrivez-moi une visite typique à votre fournisseur de soins de santé primaires, depuis le moment où vous arrivez à son établissement jusqu'au moment où vous en repartez.
 - e. Y a-t-il des choses qui compliquent votre accès à ces services et, si oui, quelles sont-elles? *Pistes*: facteurs sociodémographiques, cliniques, intrapersonnels, interpersonnels, structurels, spécifiques aux personnes transgenres
 - f. Qu'est-ce qui vous aide à accéder à ces services? *Pistes :* facteurs sociodémographiques, cliniques, intrapersonnels, interpersonnels, structurels, spécifiques aux personnes transgenres
- 38. Avez-vous vécu des situations déplaisantes avec un fournisseur de soins de santé primaires? *Pistes :* stigmatisation liée au VIH, transphobie, racisme, sexisme, stigmatisation liée à la consommation de drogues ou d'alcool, à la non-conformité sexuelle, aux travailleurs du sexe, à la classe sociale, à la sexualité
 - a. Pouvez-vous me décrire cette expérience? Comment vous êtes-vous sentie? Qu'avez-vous fait? *Pistes :* résilience, découverte de ses pouvoirs

Questions sur l'ensemble des établissements de soins de santé

- 39. Une des choses qui m'intéresse beaucoup est la façon dont différents types d'identités (être une femme transgenre de couleur séropositive, par ex.) influent sur votre accès aux soins de santé. En quoi avez-vous une expérience différente en tant que :
 - une femme transgenre de couleur séropositive
 - une femme transgenre autochtone séropositive
 - une femme transgenre séropositive qui est aussi une nouvelle arrivante ou une réfugiée
 - une femme transgenre séropositive qui est aussi une travailleuse du sexe
 - une femme transgenre séropositive qui est aussi une femme appartenant à une minorité sexuelle
- 40. Parmi vos docteurs [médecin de soins primaires/spécialiste, fournisseurs de soins de santé pour le VIH, fournisseur de soins de santé spécifiquement pour les personnes transgenres] lesquels connaissent bien le VIH ainsi que les enjeux spécifiques aux personnes transgenres? Le VIH et les besoins en matière de soins primaires? Les soins primaires et les besoins spécifiques des personnes transgenres?
 - c. Quelle a été votre expérience avec ce fournisseur de soins de santé jusqu'à maintenant?
 - d. [Si aucun des fournisseurs ne connaît bien le VIH et les enjeux des personnes transgenres] Comment s'est passé votre recherche? Quelle a été votre expérience?

Suggestions pour des améliorations

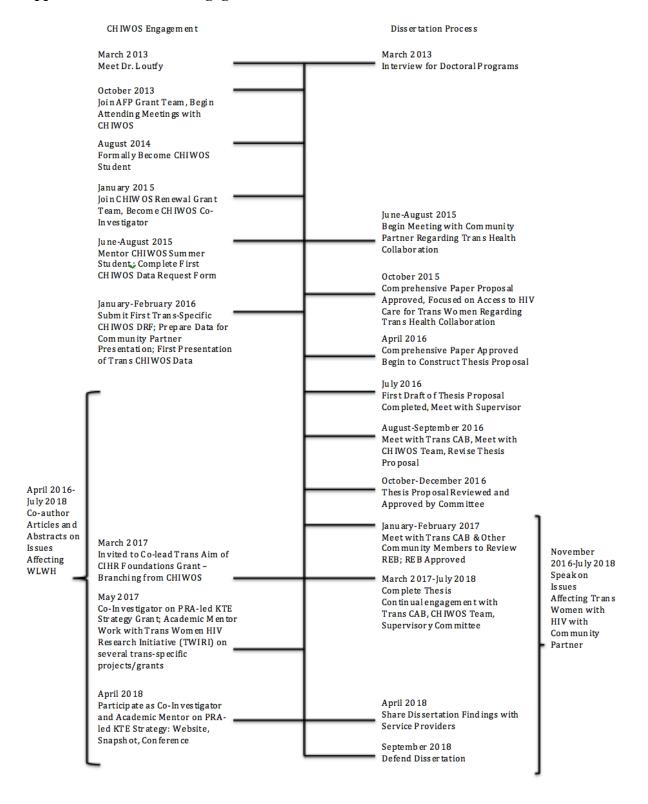
- 41. Si vous pouviez changer des choses dans les soins de santé que vous recevez, que changeriez-vous?
- 42. Quelle est selon vous la meilleure façon de structurer les soins de santé pour répondre aux besoins en matière de soins pour le VIH, de soins spécifiques aux personnes transgenres et de soins primaires?

Merci beaucoup d'avoir accepté cet entretien. Souhaitez-vous ajouter quelque chose avant que nous terminions?

[ARRÊTER L'ENREGISTREMENT AUDIO]

Merci encore. Si vous avez des questions ou des préoccupations, vous pouvez me contacter n'importe quand [DONNER VOTRE CARTE]. J'ai avec moi une liste de ressources communautaires où les personnes transgenres et séropositives sont bien accueillies, est-ce que vous la voulez? [SI LA RÉPONSE EST OUI, DONNER LA FEUILLE D'INFORMATION SUR LES RESSOURCES COMMUNAUTAIRES].

Appendix H. CHIWOS Engagement and Dissertation Process Timeline



Appendix I. Community Feedback

Incorporated into Thesis Proposal

This synthesis includes feedback from trans people (Trans CAB, members of "The Trans Priorities Project: Cross Country Trans Women and HIV Research Priority Setting" Research Team) and two cisgender woman-identified social workers who work with trans women who experience multiple forms of marginalization.

Overall thoughts on timeliness/importance of work

speaks to an emerging field of study, people in community would likely say we know
these things, value in developing this body of literature in a critical way that values and
honours lives of trans women (especially those most marginalized) through mixed
methods; qualitative component very important

Women whose perspectives are often overlooked in research

- Important to speak to the experiences of trans WLWH who have immigrated to Canada, who are refugees, and/or who have precarious status and to think about how status is connected to health care service access, particularly gender-affirming care
- Important to think about the relationship between trans women, sex work, and HIV risk –
 and how sex work shapes the material lives of trans WLWH and their exposure to
 everyday violence
 - Don't overlook the experiences of trans WLWH who are sex workers due to respectability politics
 - o Sex work and trans WLWH must be discussed in such a way as to include context
 - Think broadly about heterosexual trans WLWH who are sex workers as a population who is under-researched

Thesis framing

- Extend focus on resiliency and empowerment; in stigma-focus, do not overlook women's strengths
- Incorporate an SDoH framework that views HIV-related care within a holistic view of needs of trans WLWH
- Flush out more clearly blanket statement around focusing more on sexual minority trans women and trans women with disabilities
 - Particularly in relation to sexual stigma, in a lot of contexts trans women may also be stigmatized based on sexual stigma/perceived queer-ness – this can be related to gender non-conformity stigma/passing and sexual practices perceived to be similar to 'gay male culture'
 - Particularly in relation to disability, ensure a broad definition of disability to include mental health and HIV-related functional limitations; be conscious that women may not describe their experiences as disability or disabling – might not identify with this word

Theoretical considerations

• Carefully consider the strengths and limitations of stigma as theoretical framing; be conscious of the way that stigma is measured at the level of the individual and be conscious of the way that stigma-language has been taken up by the academy (Implications: think about systems and institutions as write thesis, including healthcare and social service providers, review several resources by Spade (2015) and Namaste (2015) that describe a critical trans politics; for full thesis, read two books: Namaste (2000): Invisible lives: The erasure of transsexual and transgendered people and Namaste

(2011): Sex Change, Social Change: Reflections on Identity, Institutions, and Imperialism).

Methodological considerations

- If possible, conduct interviews across Canada (at least in Toronto, Montreal, and Vancouver, but would be better to extend outside of these urban areas depending on distribution of trans WLWH in CHIWOS
- Framing of barriers to access to care; Make more explicit how I frame barriers to access to care link 'multilevel factors' to what is 'barrier' and what is 'facilitator' (Implication for interview guide: ask about experiences broadly not labeled experiences)

Pressing issues from a health and social service perspective

- Experiences of trans WLWH as it relates to health care across Canada may be very
 different –trans WLWH in BC are being told that they cannot take hormones and ART
 concurrently, leading to increased mental health issues (suicidality), negative coping
 strategies (substance use)
- Isolation of trans WLWH outside of Toronto a concern discrimination is a pervasive barrier to attendance of community-based (trans-specific) events
- Growing number of trans women who have immigrated to Canada from the Philippines
 and Latin America who are experiencing homelessness and heavy substance use
 (particularly meth)

Appendix J. Quantitative Data Supplementary Files

J1. Scaling of Continuous Measures from CHIWOS Wave 1 Survey and Missing Data Analyses SF-12

Standardized scoring methods were utilized, whereby first, numeric values were re-coded so that a higher score indicated better health; second, each item was scored on a 0 to 100 range; third, items in the same scale were averaged together to create the 8 subscale scores; fourth, each subscale score was standardized using a z-score transformation and normed to the Canadian female population means and standard deviations; fifth, the physical health and mental health summary scores were calculated by adding the relevant subscale z-scores, each of which were multiplied by varimax-rotated factor scoring coefficients; lastly, the summary scores were transformed to t-scores with a mean of 50 and a standard deviation of 10 (Hays et al., 1993; Hopman et al., 2000). All SF-12 items were filled in by 50 (92.6%) respondents; 4 (7.4%) respondents failed to answer at least one item. Most (n=2) participants omitted only one item, one person omitted two items, and one person omitted 3 items. According to Little's Missing Completely at Random (MCAR) test, data were considered not to be missing at random χ^2 (37) = 65.142, p < 0.01.

Table J1a *Item-by-item Description of the SF-12*

Item	Subscale	Subscale Combined	Minimum	Maximum	Mean	SD	Missing
Does your health limit you in moderate activities such as moving a table, pushing a vacuum cleaner, bowling, or playing golf?	Physical functioning	Physical health-related quality of life	1	3	2.68	0.58	1
Does your health limit you in moderate activities, such as climbing several flights of stairs?	Physical functioning	Physical health-related quality of life	1	3	2.55	0.67	1
During the past 4 weeks, have you accomplished less than you would like as a result of your physical health?	Physical role limitation	Physical health-related quality of life	1	2	1.58	0.49	1
During the past 4 weeks, have you felt limited in the kind of work or other activities you engage in due to your physical health?	Physical role limitation	Physical health-related quality of life	1	2	1.53	0.50	1
During the past 4 weeks, how much did pain interference with your normal work?	Bodily pain	Physical health-related quality of life	1	5	3.67	1.23	
How about now, in general, would you say your health is?*	General physical health	Physical health-related quality of life	2	5	3.40	0.84	
How much during the past 4 weeks did you have a lot of energy?*	Vitality	Mental health- related quality of life	1	5	3.89	1.09	
During the past four weeks, have you accomplished less than you would like as a result of emotional problems (such as feeling depressed	Emotional role limitation	Mental health- related quality of life	1	2	1.57	0.50	1

or anxious)?

During the past four weeks, have you felt limited in the kind of work or other activities you engage in than you would like as a result of emotional problems (such as feeling depressed or anxious)?	Emotional role limitation	Mental health- related quality of life	1	2	1.64	0.48 1	
During the past four weeks, how much time has your physical health or emotional problems interfered with your social activities?	Social emotional	Mental health- related quality of life	1	5	3.47	1.09 1	
How much in the past 4 weeks have you felt calm and peaceful?*	Mental health	Mental health- related quality of life	1	5	3.46	1.18	
How much in the past 4 weeks have you felt downhearted and blue?	Mental health	Mental health- related quality of life	1	5	3.47	1.09 1	

Note. Starred (*) items re-coded so that a higher score indicated poorer health-related quality of life.

AUDIT-C

The adapted measure of the AUDIT-C (Saunders et al., 1993) utilized in CHIWOS included the original questions: How often have in the last year have you had a drink containing alcohol (0 = never, 1 = monthly or less, 2 = 2 to 4 times a month, 3 = 2 to 3 times a week, 4 = 4or more times a week, don't know/prefer not to answer considered missing) and How many drinks containing alcohol do you have on a typical day when you are drinking (0 = 1 or 2 drinks)1 = 3 or 4 drinks, 2 = 5 or 6 drinks, 3 = 7 to 9 drinks, 4 = 10 or more, don't know/prefer not to answer considered missing). The third question was adapted to read, 'How many times in the past month have you had 4 or more drinks on any one single occasion' coded to be similar to the AUDIT-C (0 = never, 1 = 1 time, 2 = 2 to 9 times, 3 = 10 to 19 times, 4 to 20 or more). This was adapted to be able to use the same question in both a measure of hazardous alcohol use as well as a standalone question for binge drinking. Scores were summed from each question, creating a score between 0 and 12 with higher score indicating greater harm related to alcohol drinking. All AUDIT-C items were filled in by 43 (79.6%) respondents; 11 (20.4%) respondents failed to answer at least one item. Five participants (9.3%) omitted one item and 6 respondents (11.1%) omitted 3 items. According to Little's Missing Completely at Random (MCAR) test, data were considered to be missing at random χ^2 (4) = 7.445, p = 0.114.

Table J1b *Item-by-item Description of the AUDIT-C*

Item	Minimum	Maximum	Mean	SD	Missing
How often in the last year have you had a drink containing alcohol?	0	4	1.50	1.27	6
How many drinks containing alcohol do you have on a typical day when you are drinking?	0	4	0.72	1.06	7
In the past month, how many drinks did you have when you have had 4 or more drinks?	0	3	0.48	0.87	10

CES-D

The CES-D is a 10-item scale with questions detailing symptoms of depression (e.g., I was bothered by things that don't usually bother me.), with a total score ranging 0 to 30. The scale was scored by first coding all responses (0 = rarely or none of the time, 1 = some or little of the time, 3 = occasionally or a moderate amount of time, 4 = most or all of the time) to ensure a higher response number indicated worse depression severity. Then, all item scores were summed for those with complete data on all items to create a continuous score (Zhang et al., 2012). All CES-D items were filled in by 50 (92.6%) respondents; 4 (7.4%) respondents failed to answer at least one item. Most (n=3) omitted only one item, and one person omitted 10 items. According to Little's Missing Completely at Random (MCAR) test, data were considered missing at random χ^2 (27) = 26.662, p = 0.487.

Table J1c

Item-by-item Description of the CES-D

Item	Minimum	Maximum	Mean	SD	Missing
I was bothered by things that usually don't bother me	0	3	0.66	0.94	1
I had trouble keeping my mind on what I was doing	0	3	0.87	1.04	1
I felt depressed	0	3	0.96	1.08	2
I felt that everything I did was an effort	0	3	1.13	1.18	1
I felt hopeful about the future*	0	3	0.84	1.09	2
I felt fearful	0	3	0.89	1.09	1
My sleep was restless	0	3	1.02	1.05	1
I was happy*	0	3	0.85	1.12	1
I felt lonely	0	3	1.12	1.15	2
I could not get going	0	3	1.06	1.05	1

Note. Starred (*) items re-coded so that a higher score indicated more severe depressive symptoms.

PTSD Checklist – Civilian Form

Post-traumatic stress disorder (PTSD) was measured using the 6-item PTSD Checklist – Civilian Form (PCL-C) as a continuous measure (Lang & Stein, 2005; Lang et al., 2012). Participants ranked the severity of symptoms over the past month (e.g., repeated, disturbing memories, thoughts, or images of a stressful experience from the past) using a 5-point scale (1 = not at all, 2 = a little bit, 3 = moderately, 4 = quite a bit, 5 = extremely). The sum of items were used as the scores, with a higher score indicating a higher severity of PTSD. All PCL-C items were filled in by 53 (98.1%) of respondents; one person omitted all six items.

Table J1d

Item-by-item Description of the PCL-C

Item	Minimum	Maximum	Mean	SD	Missing
Repeated, disturbing memories, thoughts, or images of a stressful experience from the past	1	5	2.43	1.31	1
Feeling very upset when something reminded you of a stressful experience from the past	1	5	2.36	1.23	1
Avoid activities or situations because they remind you of a stressful experience from the past	1	5	2.19	1.32	1
Feeling distant or cut off from other people	1	5	2.26	1.16	1
Feeling irritable or having angry outbursts	1	5	2.32	1.15	1
Having difficulty concentrating	1	5	2.34	1.19	1

HIV-Related Stigma Scale

HIV-related stigma was measured in CHIWOS by using the HIV Stigma Scale (Berger et al., 2001; Wright et al., 2007). Total score and sub-scale scores for personalized stigma (e.g., I have been hurt by how people reacted to learning I have HIV), disclosure stigma (e.g., I am very careful who I tell that I have HIV), negative self-image stigma (e.g., I feel that I am not as good a person as others because I have HIV), and public attitudes stigma (e.g., most people think that a person with HIV is disgusting). Response options included 0 = strongly disagree, 1 = agree, 2 = neither agree nor disagree, 3 = agree, 4 = strongly agree). Items were summed across all items to compute a total score and then for each of the four subscales. Exploratory factor analysis, conducted on the full CHIWOS sample, confirmed the presence of the four sub-scales. All HIV-related stigma items were filled in by 52 (96.3%) of respondents; one person omitted two items; 1 person omitted 3 items. According to Little's Missing Completely at Random (MCAR) test, data were considered missing at random χ^2 (15) = 12.349, p = 0.652.

Table J1e *Item-by-item Description of the HIV Stigma Scale*

Item	Sub-scale	Minimum	Maximum	Mean	SD	Missing
I have been hurt by how people reacted to learning I have HIV	Personalized stigma	0	4	2.81	1.23	
I have stopped socializing with some people because of their reactions of my having HIV	Personalized stigma	0	4	2.78	1.16	
I have lost friends by telling them I have HIV	Personalized stigma	0	4	2.39	1.25	
I am very careful who I tell that I have HIV	Disclosure stigma	0	4	3.24	0.93	
I worry that people who know I have HIV will tell others	Disclosure stigma	1	4	3	1.13	
I feel that I am not as good a person as others because I have HIV	Negative self- image stigma	0	4	1.53	1.23	1
Having HIV makes me feel unclean	Negative self- image stigma	0	4	1.67	1.25	2
Having HIV makes me feel that I'm a bad person	Negative self- image stigma	0	4	1.26	1.09	1
Most people think that a person with HIV is disgusting	Public attitudes stigma	0	4	2.46	1.09	
Most people with HIV are rejected when others find out	Public attitudes stigma	0	4	2.6	1.01	1

Resilience Scale

Resilience was measured using the Resilience Scale (10 items) (Wagnild, 2009), with items responses options: 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4

= neither agree nor disagree, 5 = slightly agree, 6 = moderately agree, 7 = strongly agree. A total score obtained by summing each item. Possible scores range from 10 to 70; continuous form of this scale was used such that higher scores indicating higher resilience. There were no missing responses on any item.

Table J1f
Item-by-item Description of the Resilience Scale

Item	Minimum	Maximum	Mean	SD	Missing
I usually manage one way or another	3	7	6.56	0.84	
I feel proud that I have accomplished things in my life	1	7	6.19	1.48	
I usually take things in my stride	1	7	6.22	1.16	
I am friends with myself	3	7	6.24	1.11	
I am determined	1	7	6.41	1.04	
I keep interested in things	1	7	6.11	1.22	
My belief in myself gets me through hard times	1	7	6.39	1.19	
My life has meaning	1	7	6.20	1.37	
When I am in a difficult situation, I can usually find my way out of it	1	7	6.31	1.13	
I have enough energy to do what I have to do	1	7	6.04	1.30	

Medical Outcomes Study Social Support Survey (MOS-SSS)

Total social support was measured using a 4-item version of the Medical Outcome Study Social Support Survey (MOS-SSS) (Gjesfjeld et al., 2008). Responses were reverse coded and then summed so that a higher score indicated a greater amount of social support. All MOS-SSS items were filled in by 52 (96.3%) of respondents; one person omitted one item; one person omitted 2 items. According to Little's Missing Completely at Random (MCAR) test, data were

considered missing at random $\chi^2(5) = 5.154$, p = 0.397.

Table J1g
Item-by-item Description of the MOS-SSS

Item	Sub-scale	Minimum	Maximum	Mean	SD	Missing
Someone to turn to for suggestions about how to deal with a personal problem	Emotional/ informational support	1	5	3.85	1.20	
Someone to help with daily chores if you were sick	Tangible support	1	5	3.30	1.50	1
Someone to love and make you feel wanted	Affectionate support	1	5	3.58	1.31	1
Someone to do something enjoyable with	Positive social interaction	1	5	3.55	1.19	1

Everyday Racism Discrimination Scale

Everyday racism (Krieger et al., 2005; Williams et al., 1997) was measured using an 8item adapted version of the Everyday Racism Discrimination Scale. Two items were removed:
"You have been called names or insulted" and "You have been followed around in stores". These
items were likely removed to reduce the number of questions in a lengthy questionnaire;
however, the details of this decision were not documented and were not accessible upon request.
Items were reverse coded and summed so that a higher score indicated a greater degree of racism
experienced in one's everyday life. There were no missing items or, therefore, summary scores
for racism.

Table J1e

Item-by-item Description of the Everyday Discrimination – Racism Scale

Item Minimum	Maximum	Mean	SD	Missing
--------------	---------	------	----	---------

In your day-to-day life, how often have any of the following things happened to you because of

your race?					
You are treated with less courtesy	1	6	2.87	1.64	
You are treated with less respect	1	6	3.02	1.65	
You received poorer service	1	6	2.85	1.56	
People act as if you are not as smart	1	6	3.04	1.58	
People act as if they are afraid of you	1	6	2.78	1.63	
People act as if you are dishonest	1	6	2.57	1.54	
People act as if they are better	1	6	3.00	1.58	
You are threatened or harassed	1	6	2.63	1.55	

Barriers to Access to Care

Barriers to access to care were measured using the Barriers to Care (BACS) scale, a 12-item scale designed specifically to address barriers to access to care by asking about a range of barriers that may have made it difficult for people living with HIV to receive the care, services, or opportunities they wished to obtain over the past year, including: geographical, medical, psychological, stigma, and resource concerns (Heckman et al., 1998). For each potential barrier, response options included: 1 = no problem at all, 2 = very slight problem, 3 = somewhat of a problem, and 4 = major problem, with a score range of 12 to 48. All BACS items were filled in by 51 (94.4%) of respondents; 3 (5.6%) respondents failed to answer at least one item. One person omitted only one item, one person omitted two items, and one person omitted all 12 items. According to Little's Missing Completely at Random (MCAR) test, data were considered missing at random χ^2 (21) = 24.842, p = 0.254.

Table J1f
Item-by-item Description of the Barriers to Care (BACS) Scale

Item	Minimum	Maximum	Mean	SD	Missing
Long distances to medical facilities and personnel	1	4	1.63	0.97	1
Medical personnel (e.g., physicians, nurses) who decline to provide direct care to persons with HIV/AIDS	1	4	1.60	0.96	2
The lack of health care professionals who are adequately trained and competent in HIV/AIDS care	1	4	1.74	0.96	1
The lack of transportation to access the services you need	1	4	1.81	1.06	1
The shortages of psychologists, social workers, and mental health counsellors who can help address mental health issues	1	4	1.98	1.15	1
The lack of psychological support groups for persons with HIV/AIDS	1	4	2.00	1.21	1
The level of knowledge about HIV/AIDS among residents in the community	1	4	2.36	1.26	1
Community residents' stigma against persons living with HIV/AIDS	1	4	2.58	1.25	1
The lack of employment opportunities for people living with HIV/AIDS	1	4	2.37	0.04	2
The lack of supportive and understanding work environments for people with HIV/AIDS	1	4	2.32	1.27	1
Your personal financial resources	1	4	2.27	1.25	2
Lack of adequate and affordable housing	1	4	2.62	1.31	1

Trans Stigma

Trans stigma was measured using a 9-item scale adapted from a reliable and valid 11-item measure of transphobia utilized in the Trans PULSE Project, a community-based study of trans health (Longman Marcellin et al., 2013), initially adapted from a measure of sexual stigma

(Diaz et al., 2001) to be more specific to trans peoples' experiences. Total scores ranged from 0 to 30 (response options: 0 = never, 1 = once or twice, 2 = sometimes, 3 = many times). These items were likely removed to reduce the number of questions in a lengthy questionnaire; however, the details of this decision were not documented and were not accessible upon request. Items were summed so that a total score reflected a greater amount of stigma. Exploratory factor analysis was utilized to determine if separate sub-scales for perceived and enacted trans stigma could be identified as distinct constructs. Separate subscales could not be identified. All trans stigma items were filled in by 41 (75.9%) respondents; 13 (24.1%) of respondents failed to answer at least one item. Four participants (7.4%) omitted only one item; 9 participants (16.7%) omitted all 9 items. According to Little's Missing Completely at Random (MCAR) test, data were considered missing at random χ^2 (24) = 27.334, p = 0.289.

Table J1g *Item-by-item Description of the Trans Stigma Scale*

Item	Minimum	Maximum	Mean	SD	Missing
Have you been made fun of or called names for your trans identity or experience	0	3	2.42	0.87	9
Have you been hit or beaten up for your trans identity or experience	0	3	1.76	1.21	9
Have you heard that trans people are not normal	0	3	2.56	0.76	9
Have you been objectified or fetishized sexually because you are trans	0	3	2.18	1.07	9
Have you felt that being trans hurt and embarrassed your family	0	3	2.00	1.12	10
Have you had to try to pass as non-trans to be accepted	0	3	1.98	1.20	9
How often do you suspect you have been turned down for a job because of your trans	0	3	1.79	1.34	11

identity

Have you had to move away from your family or friends because you are trans	0	3	1.60	1.36 9
Have you experienced some form of police harassment for being trans	0	3	1.89	1.33 10

J2. Descriptive Statistics of All Variables Used in Paper 1 Analyses

	Na	%	Mean	SD^b	Missing
HIV Care Cascade Outcomes					
Ever accessed HIV care (n=50)					
Yes	46	92.0			
No	4	8.0			
Received any HIV care in the past					
year (n=46)					
Yes	42	91.3			
No	4	8.7			
Current ART use (n=46)					
Yes	36	78.3			
No	10	21.7			
ART adherence ($\geq 95\%$) (n=36)					
Yes	24	66.7			
No	12	33.3			
Undetectable self-reported viral					
<u> </u>					
Yes	23	95.8			
No	1	4.2			
Province					
	25	50.0			
	11				
			41.00	10.09	
					1
· · · · · · · · · · · · · · · · · · ·	8	16.3			
		00.7			2
` /	20	41 7			
	_0	00.0			
<u> </u>	46	92.0			
	10	J 2 .0			
	4	8.0			
	•	0.0			
1 , ,					1
	44	89.8			1
	3	10.2			
-					
	11	22.0			
±	11	22.0			
<u> </u>	20	70 0			
widowed	39	78.0			
Undetectable self-reported viral load (n=24) Yes No Sociodemographic factors	23 1 25		41.00	10.09	1 2

Ethnicity					
White	19	38.0			
Black/African/Caribbean	4	8.0			
Indigenous	17	34.0			
Other ethnicity	10	20.0			
Immigration status					
Canadian citizen	42	84.0			
Landed immigrant/					
permanent resident	5	10.0			
Refugee/other	3	6.0			
Source of income (n=49)					1
Paid job	6	12.2			
Social assistance	38	77.6			
Sex work	5	10.2			
Clinical factors					
CD4 count (n=39) ^c					7 ^d
$\leq 500 \text{ cells/mm}^3$	20	51.3			
> 500 cells/mm ³	19	48.7			
Years living with HIV (n=49)			10.57	7.28	1
Physical HR-QoL ^b (n=48)			47.22	11.43	2
Intrapersonal factors			.,	111.10	
Mental HR-QoL (n=48)			41.60	15.69	2
Hazardous alcohol use (n=41)			2.51	2.60	9
History of injection drug use					_
(n=46)					4
Never	31	67.4			
Ever	15	32.6			
History of recreational drug use					
(n=46)					4
Never	15	32.6			
Ever	31	67.4			
Depressive symptoms (n=46)			9.50	8.36	4
PTSD symptoms (n=49)			14.04	5.88	1
Negative HIV-related self-image					
(n=48)			4.54	3.33	2
Resilience			62.48	9.08	
Interpersonal factors					
Total social support (n=48)			14.17	4.56	2
Emotional/informational support			3.80	1.23	
Tangible support (n=49)			3.25	1.54	1
Affectionate support (n=49)			3.55	1.34	1
Positive social interaction (n=49)			3.51	1.21	1
Personalized HIV-related stigma			8.02	3.24	
HIV disclosure concerns			6.26	1.97	
Any adulthood violence (n=48)					2
Yes	38	79.2			

No	10	20.8			
Structural factors					
Housing security					
Unstable	14	28.0			
Secure	36	72.0			
Food security					
Insecure	33	66.0			
Secure	17	34.0			
History of incarceration					
Ever	27	54.0			
Never	23	46.0			
Total HIV-related stigma (n=48)			23.71	8.03	2
HIV public attitudes (n=49)			4.98	1.95	1
Racism			22.02	11.05	
Access to a family physician					
$(n=44)^{d}$					
Yes	24	54.5			
No	20	45.5			
Barriers to access to care (n=47)			25.45	11.14	3
Trans-specific factors ^d					
Situation regarding transitioning					
(n=37)					7
Fully transitioned	9	24.3			
Planning to transition/in					
progress	24	64.9			
Not planning to transition/does					
not apply	4	10.8			
Ever accessed care from a trans-					
specific clinic or doctor (n=37)					7
Yes	22	59.5			
No	15	40.5			
Hormone use (n=44)					
Yes	30	68.2			
No	14	31.8			
Informed HIV physician taking					
hormones (n=27) ^e					
Yes	26	96.3			
No	1	3.7			
HIV physician aware of trans					
identity (n=36) ^f					4^{f}
Yes	35	97.2			
No	1	2.8			
HIV physician discussed potential					
$DDI's^b(n=26)^g$					
Yes	18	69.2			
No	8	30.8			

Perceived knowledge of HIV physician about trans health issues					
$(n=36)^{f}$					4^{f}
Very/somewhat knowledgeable	25	69.4			
Not very/not at all					
knowledgeable/Physician has never					
talked to me about trans health	11	30.6			
Comfort discussing trans					
healthcare needs with HIV					
physician (n=35) ^f					$5^{\rm f}$
Very comfortable/comfortable	30	85.7			
Uncomfortable/very					
uncomfortable	5	14.3			
Trust in doctor-patient					
confidentiality of HIV physician					
with regards to trans-related care					
$(n=36)^{f}$					4 ^f
Completely/mostly	32	88.8			
Not much/not at all	4	11.2			
Transphobic experience in HIV					
care					
Yes	8	17.4			
No	38	1			
Total trans stigma (n=39)			18.15	7.40	5 ^h
N-50 unless otherwise specified					

N=50 unless otherwise specified.

^b SD=standard deviation; CAD=Canadian dollar; HR-QoL=Health-related quality of life; DDI's=drug-drug interactions between ART and feminizing hormones.

Only computed among those who reported ever accessing care (n=46); 7 missing represents n=46-39.

^a Only computed among those who completed the trans module of the survey and had access to care data (n=44); 6 participants did not complete the trans module of the survey because of a survey logic flaw whereby participants who reported being labeled male sex at birth and only chose 'woman' as their primary gender identity (and not trans woman) were not prompted to complete the trans module of the survey.

[•]Completed among participants who identified as ever accessed HIV care, completed the trans module of the survey, and reported currently taking hormones (n=27).

Completed among participants who identified as having ever accessed HIV care and completed the trans module of the survey (n=40); 4 missing represents n=40-36.

⁵ Completed among participants who identified as ever accessed HIV care, completed the trans module of the survey, reported currently taking hormones, and reported that their physician knew they were currently taking hormones (n=26).

^h Missing calculated from n=44 participants who completed trans module (n=44-39).

J3. Full Bivariate Analyses of Factors Associated with HIV Care Cascade Outcomes

Table J3a
Socioecological Factors Associated with Ever Accessing HIV Care Among a Sample Of Trans Women with HIV in Canada (n=50)

	Ever Accessed HIV Care				
	Yes (n=46)	No (n=4)	Proportion Difference (95% CI) or Mean Difference	p value∙	
	N (%) or Mean (SD _°)	N (%) or Mean (SD)	(Standard Error)		
Sociodemographic factors					
Province				0.167	
Ontario	21 (45.7)	4 (100.0)	54.3 (3.3, 67.8)		
British Columbia	11 (23.9)	0 (0.0)	-23.9 (-37.9, 26.1)		
Quebec	14 (30.4)	0 (0.0)	-30.4 (-44.8, 19.9)		
Age (years)	41.24 (10.37)	38.25 (6.24)	-2.99 (5.30)	0.575	
Education				1.00	
Less than high school	8 (17.8)	0(0.0)	-17.8 (-31.3, 31.9)		
High school or higher	37 (82.2)	4 (100.0)	17.8 (-31.9, 31.3)		
Sexual orientation				0.631	
Sexual minority	19 (43.2)	1 (25.0)	-18.2 (-43.3, 28.7)		
Heterosexual	25 (56.8)	3 (75.0)	18.2 (-28.7, 43.3)		
Gender presentation				1.000	
Woman	42 (91.3)	4 (100.0)	-8.7 (-20.3, 40.1)		
Sometimes man, sometimes woman	4 (8.7)	0 (0.0)	8.7 (-40.1, 20.3)		
Annual personal income (CAD ^a)				0.359	
< \$20 000	41 (91.1)	3 (75.0)	-16.1 (-61.4, 7.5)		
≥ \$20 000	4 (8.9)	1 (25.0)	16.1 (-7.5, 61.4)		
Relationship status	, ,	. ,		1.000	
Married/common law/in a relationship	10 (21.7)	1 (25.0)	-3.4 (-49.2, 21.4)		
Single/separated/divorced/widowed	36 (78.3)	3 (75.0)	3.4 (-21.4, 49.2)		

Ethnicity				0.629
Person of colour	17 (37.0)	2 (50.0)	13.0 (-50.2, 24.8)	
White	29 (63.0)	2 (50.0)	-13.0 (-24.8, 50.2)	
Immigration status				1.00
Canadian citizen	8 (17.4)	0(0.0)	-17.4 (-30.7, 32.3)	
Immigrant/refugee	38 (82.6)	4 (100.0)	17.4 (-32.3, 30.7)	
Source of income				0.652
Paid job	5 (11.1)	1 (25.0)	13.9 (-10.0, 59.3)	
Social assistance	35 (77.8)	3 (75.0)	-2.8 (-48.7, 22.0)	
Sex work	5 (11.1)	0(0.0)	-11.1 (-23.5, 38.3)	
Clinical factors				
	11.08 (7.21)	2.69 (1.22)	-8.38 (1.27)	<
Years living with HIV				0.001
Physical HR-QoL ^a	46.55 (11.71)	54.49 (2.28)	7.94 (2.10)	0.001
Intrapersonal factors				
Mental HR-QoL	41.38 (15.77)	44.02 (16.87)	2.64 (8.27)	0.751
Hazardous alcohol use	2.44 (2.48)	4.00 (5.66)	1.56 (1.89)	0.413
History of injection drug use				0.288
Never	27 (64.3)	4 (100.0)	35.7 (-50.8, 14.9)	
Ever	15 (35.7)	0(0.0)	-35.7 (-14.9, 50.8)	
History of recreational drug use				0.587
Never	13 (31.0)	2 (50.0)	-19.0 (-19.1, 55.9)	
Ever	29 (69.0)	2 (50.0)	-19.0 (-55.9, 19.1)	
Depressive symptoms	9.86 (8.45)	5.75 (7.22)	-4.11 (4.38)	0.354
PTSD symptoms	14.22 (5.97)	12.00 (4.90)	-2.22 (3.08)	0.474
Negative HIV-related self-image	4.45 (3.47)	5.50 (1.00)	1.05 (0.72)	0.174
Resilience	62.33 (9.30)	64.25 (6.75)	1.92 (4.78)	0.689
Interpersonal factors	, ,	, , ,	,	
Total social support	13.95 (4.54)	16.5 (4.73)	2.54 (2.46)	0.290
Emotional/informational support	3.76 (1.25)	4.25 (0.96)	0.45 (0.64)	0.451
Tangible support	3.18 (1.54)	4.0 (1.41)	0.80 (0.80)	0.309
Affectionate support	0.40 (1.00)	1.05 (0.06)	0.76 (0.70)	0.226
	3.49 (1.36)	4.25 (0.96)	0.76 (0.70)	0.336

Personalized HIV-related stigma	7.89 (3.23)	9.50 (3.32)	1.61 (1.69)	0.345
HIV disclosure concerns	6.26 (1.96)	6.25 (2.36)	-0.01 (1.04)	0.992
Any adulthood violence	, ,	` ,	,	0.025
Yes	37 (84.1)	1 (25.0)	-59.1 (-81.04, -12.18)	
No	7 (15.9)	3 (75.0)	59.1 (12.18, 81.04)	
Structural factors	,	, ,		
Housing security				0.061
Unstable	11 (23.9)	3 (75.0)	51.1 (4.0, 73.8)	
Secure	35 (76.1)	1 (25.0)	-51.1 (-73.8, 4.0)	
Food security	, ,	, ,		1.000
Insecure	30 (65.2)	3 (75.0)	9.8 (-3.7, 34.8)	
Secure	16 (34.8)	1 (25.0)	-9.8 (-34.8, 3.7)	
History of incarceration				0.614
Ever	22 (47.8)	1 (25.0)	-22.8 (-47.6, 24.2)	
Never	24 (52.2)	3 (75.0)	22.8 (-24.2, 47.6)	
Total HIV-related stigma	23.43 (8.14)	26.75 (6.90)	3.32 (4.21)	0.435
HIV public attitudes	4.93 (1.97)	5.50 (1.91)	0.57 (1.03)	0.583
Racism	21.67 (11.41)	26.0 (4.0)	4.33 (2.61)	0.134
Access to a family physician				0.114
Yes	20 (50.0)	4 (100.0)	50.0 (-1.8, 64.8)	
No	20 (50.0)	0(0.0)	-50.0 (-64.8, 1.8)	
Barriers to access to care	24.35 (10.68)	37.25 (10.11)	12.91 (5.31)	0.025
Trans-specific factors				
Situation regarding transitioning				1.00
Fully transitioned	8 (24.2)	1 (25.0)	0.8 (-26.7, 46.5)	
Planning to transition/in progress	21 (63.6)	3 (75.0)	9.4 (-37.7, 36.2)	
Not planning to transition/does not apply	4 (12.1)	0(0.0)	-12.1 (-28.1, 37.0)	
Accessed care from a trans-specific clinic or doctor	•			0.283
Ever	21 (63.6)	1 (25.0)	-38.6 (-63.5, 9.4)	
Never	12 (36.4)	3 (75.0)	38.6 (-9.4, 63.5)	
Hormone use				0.581
Yes	12 (30.0)	2 (50.0)	20.0 (-18.2, 56.9)	
No	28 (70.0)	2 (50.0)	-20.0 (-56.9, 18.2)	

Trans stigma 17.49 (7.32) 24.0 (6.0) 6.51 (3.81) 0.096

^aCI=confidence interval; SD=standard deviation; CAD=Canadian dollar; HR-QoL=Health-related quality of life.

Proportion difference and mean difference calculated by subtracting ever accessed (Yes) proportion or mean from never accessed (No) proportion or mean.

[•]Chi-square or Fischer's exact tests (in the presence of cell sizes < 5) were used to examine significant associations between proportions. T-tests were used to examine significant associations between means.

Table J3b Socioecological Factors Associated with Receiving any HIV Care in the Past Year Among a Sample Of Trans Women with HIV in Canada (n=46)

	Received any HIV Care in the Past Year				
	Yes (n=42)	No (n=4)	Proportion Difference (95% CI) or Mean	p value	
		Proportion (95%	Difference (Standard		
	CI ^a) or Mean (SD ^a)	CI) or Mean (SD)	Error) ^b		
Sociodemographic factors				0.556	
Province					
Ontario	18 (42.9)	3 (75.0)	35.9 (-11.3, 59.9)		
British Columbia	11 (26.2)	0(0.0)	-26.2 (-40.38, 23.9)		
Quebec	13 (31.0)	1 (25.0)	-6.0 (-30.9, 40.37)		
Age (years)	42.07 (10.13)	32.50 (9.98)	-9.57 (5.29)	0.077	
Education				1.00	
Less than high school	8 (19.5)	0(0.0)	-19.5 (-34.0, 30.3)		
High school or higher	33 (80.5)	4 (100.0)	19.5 (-30.3, 34.0)		
Sexual orientation				0.300	
Sexual minority	16 (40.0)	3 (75.0)	35.0 (-12.5, 59.6)		
Heterosexual	24 (60.0)	1 (25.0)	-35.0 (-59.6, 12.5)		
Gender presentation				1.000	
Woman	38 (90.5)	4 (100.0)	9.5 (-39.8, 22.1)		
Sometimes man, sometimes woman	4 (9.5)	0 (0.0)	-9.5 (-22.1, 39.8)		
Annual personal income (CAD ^a)				1.000	
< \$20 000	37 (90.2)	4 (100.0)	9.8 (-39.5, 22.6)		
≥ \$20 000	4 (9.8)	0 (0.0)	-9.8 (-22.6, 39.5)		
Relationship status				1.000	
Married/common law/in a relationship	9 (21.4)	1 (25.0)	3.6 (-21.5, 49.6)		
Single/separated/divorced/widowed	33 (78.6)	3 (75.0)	-3.6 (-49.6, 21.5)		
Ethnicity				0.619	
White	15 (35.7)	2 (50.0)	14.3 (-23.8, 51.5)		
Person of colour	27 (64.3)	2 (50.0)	-14.3 (-51.5, 23.8)		

Immigration status				0.548
Canadian citizen	35 (83.3)	3 (75.0)	-8.3 (-54.0, 16.4)	
Immigrant/refugee	7 (16.7)	1 (25.0)	8.3 (-16.4, 54.0)	
Source of income				0.649
Paid job	4 (9.8)	1 (25.0)	15.2 (-8.9, 60.6)	
Social assistance	32 (78.0)	3 (75.0)	-3.0 (-49.1, 22.2)	
Sex work	5 (12.2)	0 (0.0)	-12.2 (-25.5, 37.3)	
Clinical factors				
Years living with HIV	11.58 (7.31)	5.81 (3.17)	-5.77 (3.72)	0.128
Physical HR-QoL ¹	46.97 (11.15)	42.43 (17.98)	-4.54 (6.17)	0.467
Intrapersonal factors				
Mental HR-QoL	41.48 (15.13)	40.43 (24.20)	-1.05 (8.34)	0.901
Hazardous alcohol use	2.41 (2.53)	3.00 (1.41)	0.60 (1.82)	0.746
History of injection drug use				0.279
Never	23 (60.5)	4 (100.0)	39.5 (-11.4, 55.3)	
Ever	15 (39.5)	0(0.0)	-39.5 (-55.3, 11.4)	
History of recreational drug use				0.576
Never	11 (28.9)	2 (50.0)	21.1 (-17.4, 58.0)	
Ever	27 (71.1)	2 (50.0)	-21.1 (-58.0, 17.4)	
Depressive symptoms	9.92 (8.41)	9.25 (10.18)	-0.67 (5.27)	0.882
PTSD symptoms	14.36 (5.99)	12.33 (6.51)	-2.02 (3.59)	0.576
Negative HIV-related self-image	4.49 (3.57)	4.0 (1.73)	-0.49 (2.10)	0.817
Resilience	61.76 (9.53)	68.25 (2.06)	6.49 (4.82)	0.185
Interpersonal factors				
Total social support	13.56 (4.44)	18.0 (4.0)	4.45 (2.31)	0.061
Emotional/informational support	3.69 (1.26)	4.5 (1.0)	0.81 (0.65)	0.220
Tangible support	3.10 (1.50)	4.0 (2.0)	0.90 (0.80)	0.269
Affectionate support	3.37 (1.36)	4.75 (0.50)	1.38 (0.69)	0.003
Positive social interaction	3.34 (1.17)	4.75 (0.50)	1.41 (0.60)	0.023
Personalized HIV-related stigma	7.71 (3.30)	9.75 (1.50)	2.04 (1.68)	0.233
HIV disclosure concerns	6.24 (1.99)	6.50 (1.91)	0.26 (1.04)	0.802
Any adulthood violence				0.513
Yes	34 (85.0)	3 (75.0)	-10.0 (-55.6, 14.8)	

No	6 (15.0)	1 (25.0)	10.0 (-14.8, 55.6)	
Structural factors				
Housing security				0.238
Unstable	9 (21.4)	2 (50.0)	28.6 (-9.3, 64.9)	
Secure	33 (78.6)	2 (50.0)	-28.6 (-64.9, 9.3)	
Food security				0.282
Insecure	26 (61.9)	4 (100.0)	38.1 (-12.6, 53.2)	
Secure	16 (38.1)	0 (0.0)	-38.1 (-53.2, 12.6)	
History of incarceration				0.336
Ever	19 (45.2)	3 (75.0)	29.8 (-17.6, 54.6)	
Never	23 (54.8)	1 (25.0)	-29.8 (-54.6, 17.6)	
Total HIV-related stigma	23.24 (8.25)	26.0 (7.21)	2.76 (4.91)	0.577
HIV public attitudes	4.80 (1.96)	6.25 (1.71)	1.45 (1.02)	0.164
Racism	21.21 (11.69)	26.50 (7.14)	5.29 (5.99)	0.382
Access to a family physician	, ,	, ,	, ,	0.605
Yes	17 (47.2)	3 (75.0)	27.8 (-19.9, 53.3)	
No	19 (52.8)	1 (25.0)	-27.8 (-53.3, 19.9)	
Barriers to access to care	24.28 (11.02)	25.0 (7.57)	0.72 (5.67)	0.900
Trans-specific factors				
Situation regarding transitioning				1.00
Fully transitioned	7 (23.3)	1 (33.3)	10.0 (-22.4, 57.3)	
Planning to transition/in progress	19 (63.3)	2 (66.7)	3.3 (-44.9, 35.8)	
Not planning to transition/does not apply	4 (13.3)	(0.0)	-13.3 (-29.7, 43.4)	
Accessed care from a trans-specific clinic or doctor		,	,	1.000
Yes	18 (62.1)	3 (75.0)	12.9 (-34.5, 40.2)	
No	11 (37.9)	1 (25.0)	-12.9 (-40.2, 34.5)	
Hormone use	,	()	, , ,	1.000
Yes	25 (69.4)	3 (75.0)	5.6 (-41.1, 31.7)	
No	11 (30.6)	1 (25.0)	-5.6 (-31.7, 41.1)	
Informed HIV physician taking hormones	()	()	(, , , , , , , , , , , , , , , , , , ,	1.00
Yes	24 (96.0)	2 (100.0)	4.0 (-61.8, 19.5)	
No	1 (4.0)	0 (0.0)	-4.0 (-19.5, 61.8)	
HIV physician aware of trans identity	(/	. ()	(== , ==)	N/A^{d}

Yes	35 (97.2)	0 (0.0)	N/A	
No	1 (2.8)	0 (0.0)	N/A	
HIV physician discussed potential DDI's ^a				1.000
Yes	21 (58.3)	2 (66.7)	8.3 (-39.8, 39.9)	
No	15 (41.7)	1 (33.3)	-8.3 (-39.9, 39.8)	
Perceived knowledge of HIV physician about trans				N/Ad
health issues				
Very/somewhat knowledgeable	25 (69.4)	0 (0.0)	N/A	
Not very/not at all knowledgeable/Physician has	11 (30.6)	0 (0.0)	N/A	
never talked to me about trans health				
Comfort discussing trans healthcare needs with HIV				N/A^{d}
physician				
Very comfortable/comfortable	30 (85.7)	0 (0.0)	N/A	
Uncomfortable/very uncomfortable	5 (14.3)	0 (0.0)	N/A	
Trust in doctor-patient confidentiality of HIV				N/A^{d}
physician with regards to trans-related care				
Completely/mostly	32 (94.1)	0 (0.0)	N/A	
Not much/not at all	2 (5.9)	0 (0.0)	N/A	
Ever experienced transphobia in HIV care				1.00
Yes	8 (19.0)	4 (100.0)	81.0 (29.9, 90.0)	
No	34 (81.0)	0 (100.0)	-81.0 (-90.0, -29.9)	
Trans stigma	17.49 (7.32)	24.0 (6.0)	8.20 (3.68)	0.033
CI-confidence interval: SD-standard deviation: CAD-Canadia	n dollar: HR_Ool =Heal	th_related quality of life: D	DI's-drug-drug interactions bet	ween ART

^aCI=confidence interval; SD=standard deviation; CAD=Canadian dollar; HR-QoL=Health-related quality of life; DDI's=drug-drug interactions between ART and feminizing hormones.

Proportion difference and mean difference calculated by subtracting received any HIV care visit in the past year (Yes) proportion or mean from did not receive any HIV care in the past year (No) proportion or mean.

[•]Chi-square or Fischer's exact tests (in the presence of cell sizes < 5) were used to examine significant associations between proportions. T-tests were used to examine significant associations between means.

[«]N/A=no bivariate analyses conducted because 100% of participants with complete data engaged in HIV care in the past year.

Table J3d Socioecological Factors Associated with Currently Using Anti-retroviral Therapy Among a Sample Of Trans Women with HIV in Canada (n=46)

	ART Use				
	Yes (n=36)	No (n=10)	Proportion Difference (95% CI) or Mean	p value	
	Proportion (95%	Proportion (95%	Difference (Standard		
	CI ^a) or Mean (SD ^a)	CI) or Mean (SD)	Error) ^b		
Sociodemographic factors					
Province				< 0.001	
Ontario	11 (30.6)	10 (100.0)	69.4 (37.3, 82.0)		
British Columbia	11 (30.6)	0(0.0)	-30.6 (-46.9, 1.0)		
Quebec	14 (38.9)	0(0.0)	-38.9 (-55.1, 7.8)		
Age (years)	43.03 (9.79)	34.8 (10.30)	-8.23 (3.54)	0.025	
Education				1.00	
Less than high school	7 (19.4)	1 (11.1)	-8.3 (-26.4, 25.5)		
High school or higher	29 (80.6)	8 (88.9)	8.3 (-25.5, 26.4)		
Sexual orientation				0.074	
Sexual minority	12 (35.3)	7 (70.0)	34.7 (0.4, 58.4)		
Heterosexual	22 (64.7)	3 (30.0)	-34.7 (-58.4, 0.4)		
Gender presentation	,	,		1.000	
Woman	33 (91.7)	9 (90.0)	-1.7 (-32.6, 14.1)		
Sometimes man, sometimes woman	3 (8.3)	1 (10.0)	1.7 (-14.1, 32.6)		
Annual personal income (CAD ^a)		,	, ,	1.000	
< \$20 000	32 (91.4)	9 (90.0)	-1.4 (-32.4, 14.6)		
≥ \$20 000	3 (8.6)	1 (10.0)	1.4 (-14.6, 32.4)		
Relationship status	- ()	(3.73)	, ,	0.089	
Married/common law/in a relationship	10 (27.8)	0 (0.0)	-27.8 (-44.0, 2.4)		
Single/separated/divorced/widowed	26 (72.2)	10 (100.0)	27.8 (-2.4, 44.0)		
Ethnicity	20 (,2.2)	10 (100.0)	(,)	0.462	
White	12 (33.3)	5 (50.0)	16.7 (-14.3, 46.1)	0.102	
Person of colour	24 (66.7)	5 (50.0)	-16.7 (-46.1, 14.3)		

Immigration status				0.171
Canadian citizen	28 (77.8)	10 (100.0)	22.2 (-7.5, 38.1)	
Immigrant/refugee	8 (22.2)	0(0.0)	-22.2 (-38.1, 7.5)	
Source of income				0.810
Paid job	5 (13.9)	0(0.0)	-13.9 (-28.7, 17.0)	
Social assistance	27 (75.0)	8 (88.9)	13.9 (-20.4, 32.4)	
Sex work	4 (11.1)	1 (11.1)	0.0 (-16.7, 33.1)	
Clinical factors				
CD4 count (n=46)				0.661
≤ 500 cells/mm ³	16 (48.5)	4 (66.7)	18.2 (-21.9, 46.7)	
> 500 cells/mm ³	17 (51.5)	2 (33.3)	-18.2 (-46.7, 21.9)	
Years living with HIV	12.61 (7.32)	5.56 (2.83)	-7.05 (1.51)	< 0.001
Physical HR-QoL ^a	44.99 (12.79)	51.85 (3.87)	6.86 (2.51)	0.009
Intrapersonal factors				
Mental HR-QoL	41.10 (14.11)	42.33 (21.36)	1.23 (5.74)	0.831
Hazardous alcohol use	2.73 (2.57)	0.83 (0.98)	-1.89 (0.60)	0.005
History of injection drug use				0.222
Never	20 (58.8)	7 (87.5)	28.7 (-9.0, 48.2)	
Ever	14 (41.2)	1 (12.5)	-28.7 (-48.2, 9.0)	
History of recreational drug use				0.083
Never	8 (23.5)	5 (62.5)	23.5 (3.1, 65.2)	
Ever	26 (76.5)	3 (37.5)	-23.5 (-65.2, -3.1)	
Depressive symptoms	10.21 (7.86)	8.70 (10.52)	-1.52 (3.61)	0.626
PTSD symptoms	14.67 (5.93)	12.44 (6.15)	-2.22 (2.22)	0.323
Negative HIV-related self-image	4.26 (3.25)	5.10 (4.25)	0.84 (1.26)	0.509
Resilience	62.17 (8.99)	62.90 (10.85)	0.73 (3.36)	0.828
Interpersonal factors				
Social support	13.53 (4.45)	15.40 (4.81)	1.87 (1.63)	0.257
Emotional/informational support	3.69 (1.26)	4.00 (1.25)	0.31 (0.45)	0.500
Tangible support	3.06 (1.55)	3.60 (1.51)	0.54 (0.55)	0.332
Affectionate support	3.40 (1.38)	3.80 (1.32)	0.40 (0.49)	0.418
Positive social interaction	3.31(1.18)	4.00 (1.15)	0.69 (0.42)	0.111
Personalized HIV-related stigma	7.31 (3.31)	10.00 (1.83)	2.69 (0.80)	0.002

HIV disclosure concerns	6.17 (2.10)	6.60 (1.35)	0.43 (0.71)	0.542
Any adulthood violence Yes	33 (97.1)	4 (40.0)	-57.1 (-80.4, -25.9)	< 0.001
No	1 (2.9)	6 (60.0)	57.1 (25.9, 80.4)	
Structural factors	1 (2.9)	0 (00.0)	37.1 (23.9, 60.4)	
Housing security				0.043
Unstable	6 (14.3)	5 (50.0)	33.3 (2.9, 61.1)	0.043
Secure	30 (85.7)	5 (50.0)	-33.3 (-61.1, -2.9)	
Food security	30 (03.7)	3 (30.0)	33.3 (01.1, 2.3)	0.130
Insecure	21 (58.3)	9 (90.0)	31.7 (-2.0, 49.8)	0.150
Secure	15 (41.7)	1 (10.0)	-31.7 (-49.8, 2.0)	
History of incarceration	15 (41.7)	1 (10.0)	31.7 (15.0, 2.0)	1.000
Ever	17 (47.2)	5 (50.0)	2.8 (-27.9, 33.2)	1.000
Never	19 (52.8)	5 (50.0)	-2.8 (-33.2, 27.9)	
Total HIV-related stigma	22.24 (7.76)	27.50 (8.47)	5.26 (2.85)	0.072
HIV public attitudes	4.69 (1.98)	5.80 (1.75)	1.11 (0.69)	0.116
Racism	19.81 (10.85)	28.40 (11.35)	8.59 (3.92)	0.034
Access to a family physician	13.61 (10.65)	20110 (11100)	0.03 (0.52)	0.044
Yes	13 (40.6)	7 (87.5)	46.9 (8.3, 65.2)	0.011
No	19 (59.4)	1 (12.5)	-46.9 (-65.2, -8.3)	
Barriers to access to care	21.76 (9.29)	32.90 (10.94)	11.14 (3.49)	0.003
Trans-specific factors		()	()	
Situation regarding transitioning				0.084
Fully transitioned	8 (28.6)	0 (0.0)	-28.6 (-47.1, 16.9)	
Planning to transition/in progress	18 (64.3)	3 (60.0)	-4.3 (-44.2, 29.5)	
Not planning to transition/does not apply	2 (7.1)	2 (20.0)	-32.9 (-70.1, 0.6)	
Accessed care from a trans-specific clinic or doctor	,	` '	,	0.420
Yes	17 (68.0)	4 (50.0)	-27.1 (-57.6, 5.6)	
No	8 (32.0)	4 (50.0)	27.1 (-5.6, 57.6)	
Hormone use	,	,	,	0.677
Yes	23 (71.9)	5 (62.5)	-9.4 (-43.7, 20.0)	
No	9 (28.1)	3 (37.5)	9.4 (-20.0, 43.7)	
Informed HIV physician taking hormones	,	,	, , ,	1.00

Yes	22 (95.7)	4 (100.0)	4.3 (-44.8, 21.0)	
No	1 (4.3)	0 (0.0)	-4.3 (-21.0, 44.8)	
HIV physician aware of trans identity				1.000
Yes	30 (96.8)	5 (100.0)	3.2 (-40.3, 16.2)	
No	1 (3.2)	0 (0.0)	-3.2 (-16.2, 40.3)	
HIV physician discussed potential DDI's ^a				0.415
Yes	20 (62.5)	3 (42.9)	-19.6 (-50.4, 16.8)	
No	12 (37.5)	4 (57.1)	19.6 (-16.8, 50.4)	
Perceived knowledge of HIV physician about trans				0.664
health issues				
Very/somewhat knowledgeable	21 (67.7)	4 (80.0)	12.3 (-32.3, 36.3)	
Not very/not at all knowledgeable/Physician has	10 (32.3)	1 (20.0)	-12.3 (-36.3, 32.3)	
never talked to me about trans health				
Comfort discussing trans healthcare needs with HIV				0.139
physician				
Very comfortable/comfortable	27 (90.0)	3 (60.0)	-30.0 (-67.5, 2.3)	
Uncomfortable/very uncomfortable	3 (10.0)	2 (40.0)	30.0 (-2.3, 67.5)	
Trust in doctor-patient confidentiality of HIV				0.276
physician with regards to trans-related care				
Completely/mostly	28 (96.6)	4 (80.0)	-16.6 (-59.1, 4.8)	
Not much/not at all	1 (3.4)	1 (20.0)	16.6 (-4.8, 59.1)	
Ever experienced a transphobia in HIV care				0.664
Yes	7 (19.4)	1 (10.0)	-9.4 (-27.1, 22.5)	
No	29 (80.6)	9 (90.0)	9.4 (-22.5, 27.1)	
Trans stigma	15.96 (6.45)	22.63 (8.16)	6.66 (2.76)	0.021

[·]CI=confidence interval; SD=standard deviation; CAD=Canadian dollar; HR-QoL=Health-related quality of life; DDI's=drug-drug interactions between ART and feminizing hormones.

Proportion difference and mean difference calculated by subtracting currently use ART (Yes) proportion or mean from does not currently use ART (No) proportion or mean.

Chi-square or Fischer's exact tests (in the presence of cell sizes < 5) were used to examine significant associations between proportions. T-tests were used to examine significant associations between means.

Table J3e Socioecological Factors Associated with Anti-retroviral Therapy Adherence Among a Sample Of Trans Women with HIV in Canada (n=36)

	ART Adherence			
	Yes (n=24)	No (n=12)	Proportion Difference (95% CI) or Mean	p value
	Proportion (95%	Proportion (95% CI) or Mean (SD)	Difference (Standard Error)	
	CI ^a) or Mean (SD ^a)			
Sociodemographic factors	,		,	
Province				1.00
Ontario	7 (29.2)	4 (33.3)	4.2 (-23.8, 35.2)	
British Columbia	8 (33.3)	3 (25.0)	-8.3 (-34.0, 23.8)	
Quebec	9 (37.5)	5 (41.7)	-4.2 (-35.2, 25.7)	
Age (years)	44.67 (10.47)	39.75 (7.63)	-4.92 (3.41)	0.158
Education				1.00
Less than high school	5 (20.8)	2 (16.7)	-4.2 (-27.2, 26.3)	
High school or higher	19 (79.2)	10 (83.3)	4.2 (-26.3, 27.2)	
Sexual orientation				0.705
Sexual minority	9 (39.1)	3 (27.3)	-11.9 (-38.5, 22.0)	
Heterosexual	14 (60.9)	8 (72.7)	11.9 (-22.0, 38.5)	
Gender presentation				0.253
Woman	23 (95.8)	10 (83.3)	-12.5 (-40.8, 7.5)	
Sometimes man, sometimes woman	1 (4.2)	2 (16.7)	12.5 (-7.5, 40.8)	
Annual personal income (CAD ^a)				0.227
< \$20 000	23 (95.8)	9 (81.8)	-14.0 (-43.7, 6.7)	
≥ \$20 000	1 (4.2)	2 (18.2)	14.0 (-6.7, 43.7)	
Relationship status				0.438
Married/common law/in a relationship	8 (33.3)	2 (16.7)	-16.7 (-39.9, 15.4)	
Single/separated/divorced/widowed	16 (66.7)	10 (83.3)	16.7 (-15.4, 39.9)	
Ethnicity				0.479
White	7 (29.2)	5 (41.7)	12.5 (-17.5, 42.5)	
Person of colour	17 (70.8)	7 (58.3)	-12.5 (-42.5, 17.5)	

Immigration status				0.691
Canadian citizen	18 (75.0)	10 (83.3)	8.3 (-22.7, 31.6)	
Immigrant/refugee	6 (25.0)	2 (16.7)	-8.3 (-31.6, 22.7)	
Source of income				1.000
Paid job	3 (13.0)	2 (18.2)	5.1 (-17.9, 35.9)	
Social assistance	18 (78.3)	9 (81.8)	-3.6 (-27.6, 28.3)	
Sex work	2 (8.7)	1 (9.0)	0.4 (-19.2, 29.7)	
Clinical factors				
CD4 count (n=46)				1.000
≤ 500 cells/mm ³	11 (50.0)	5 (45.5)	4.5 (-28.3, 35.5)	
> 500 cells/mm ³	11 (50.0)	6 (54.5)	-4.5 (-35.5, 28.3)	
Years living with HIV	13.35 (8.02)	11.14 (5.74)	-2.22 (2.60)	0.400
Physical HR-QoL ^a	45.23 (14.37)	44.57 (9.82)	-0.67 (4.66)	0.887
Intrapersonal factors				
Mental HR-QoL	43.57 (11.72)	36.58 (17.34)	-6.99 (4.99)	0.171
Hazardous alcohol use	2.14 (1.91)	3.91 (3.33)	1.77 (0.91)	0.125
History of injection drug use				0.717
Never	12 (54.5)	8 (66.7)	12.1 (-21.1, 40.0)	
Ever	10 (45.5)	4 (33.3)	-12.1 (-40.0, 21.1)	
History of recreational drug use				1.00
Never	5 (22.7)	3 (25.0)	22.7 (-24.0, 33.2)	
Ever	17 (77.3)	9 (75.0)	-22.7 (-33.2, 24.0)	
Depressive symptoms	8.36 (6.81)	14.30 (8.82)	5.94 (2.85)	0.046
PTSD symptoms	12.33 (3.75)	19.33 (6.84)	7.00 (2.12)	0.005
Negative HIV-related self-image	3.74 (5.36)	5.36 (3.56)	1.62 (1.18)	0.177
Resilience	62.67 (9.81)	61.17 (7.37)	-1.50 (3.21)	0.644
Interpersonal factors				
Total social support	13.21 (4.32)	14.30 (4.88)	1.09 (1.69)	0.523
Emotional/informational support	3.63 (1.21)	3.83 (1.40)	0.21 (0.45)	0.647
Tangible support	2.92 (1.53)	3.36 (1.63)	0.45 (0.57)	0.437
Affectionate support	3.33 (1.41)	3.55 (1.37)	0.21 (0.51)	0.677
Positive social interaction	3.33 (1.17)	3.27 (1.27)	-0.06 (0.44)	0.891
Personalized HIV-related stigma	7.17 (3.28)	7.58 (3.50)	0.42 (1.19)	0.727

HIV disclosure concerns Any adulthood violence	6.17 (1.95)	6.17 (2.48)	0.00 (0.75)	1.000 1.000
Yes	21 (95.5)	12 (100.0)	4.5 (-20.0, 21.8)	1.000
No	1 (4.5)	0 (0.0)	-4.5 (-21.8, 20.0)	
Structural factors	1 (1.3)	0 (0.0)	1.5 (21.0, 20.0)	
Housing security				1.000
Unstable	4 (16.7)	2 (16.7)	0.0 (-29.9, 22.6)	
Secure	20 (83.3)	10 (83.3)	0.0 (-22.6, 29.9)	
Food security	,	,	,	0.499
Insecure	15 (62.5)	6 (50.0)	-12.5 (-19.1, 42.1)	
Secure	9 (37.5)	6 (50.0)	12.5 (-42.1, 19.1)	
History of incarceration	,	,	, , ,	1.000
Ever	11 (45.8)	6 (50.0)	4.2 (-34.6, 27.0)	
Never	13 (54.2)	6 (50.0)	-4.2	
Total HIV-related stigma	21.30 (6.88)	24.18 (9.41)	2.88 (3.18)	0.379
HIV public attitudes	4.50 (1.98)	5.09 (2.02)	0.59 (0.73)	0.421
Racism	20.75 (10.54)	17.92 (11.70)	-2.83 (3.86)	0.468
Access to a family physician	, ,	, ,	, ,	0.721
Yes	8 (38.1)	6 (54.5)	16.5 (-17.4, 46.2)	
No	13 (61.9)	5 (45.5)	-16.5 (-46.2, 17.4)	
Barriers to access to care	22.87 (10.19)	19.55 (7.08)	-3.32 (3.04)	0.341
Trans-specific factors				0.560
Situation regarding transitioning				
Fully transitioned	6 (31.6)	2 (22.2)	-9.4 (-36.8, 26.9)	
Planning to transition/in progress	11 (57.9)	7 (77.8)	19.9 (-17.7, 46.7)	
Not planning to transition/does not apply	2 (10.5)	0 (0.0)	10.5 (-31.4, 20.3)	
Ever accessed care from a trans-specific clinic or				1.00
doctor				
Yes	11 (64.7)	6 (75.0)	10.3 (-39.7, 28.2)	
No	6 (35.3)	2 (25.0)	-10.3 (-28.2, 39.7)	
Hormone use	•	• •		1.000
Yes	15 (71.4)	8 (72.7)	1.3 (-31.5, 29.0)	
No	6 (28.6)	3 (27.3)	-1.3 (-29.0, 31.5)	

Informed HIV physician taking hormones				1.00
Yes	14 (93.3)	8 (100.0)	6.7 (-26.2, 29.8)	
No	1 (6.7)	0 (0.0)	-6.7 (-29.8, 26.2)	
HIV physician aware of trans identity				0.355
Yes	20 (100.0)	10 (90.9)	-9.1 (-37.3, 8.7)	
No	0 (0.0)	1 (9.1)	9.1 (-8.7, 37.7)	
HIV physician has discussed potential DDI's	, ,	, ,		0.139
Yes	11 (52.4)	9 (81.8)	29.4 (-5.8, 53.3)	
No	10 (47.6)	2 (18.2)	-29.4 (-53.3, 5.8)	
Perceived knowledge of HIV physician about trans				0.262
health issues				
Very/somewhat knowledgeable	12 (60.0)	9 (81.8)	21.8 (-12.8, 46.8)	
Not very/not at all knowledgeable/Physician has	8 (40.0)	2 (18.2)	-21.8 (-46.8, 12.8)	
never talked to me about trans health				
Comfort discussing trans healthcare needs with HIV				1.000
physician				
Very comfortable/comfortable	17 (89.5)	10 (90.9)	1.4 (-28.2, 23.6)	
Uncomfortable/very uncomfortable	2 (10.5)	1 (9.1)	-1.4 (-23.6, 28.2)	
Very uncomfortable				
Trust in doctor-patient confidentiality of HIV				1.00
physician with regards to trans-related care (n=36)				
Completely/mostly	17 (94.4)	11(100.0)	5.6 (-20.7, 25.8)	
Not much/not at all	1 (5.6)	0 (0.0)	-5.6 (-25.8, 20.7)	
Experienced transphobia in HIV care				1.00
Yes	5 (20.8)	2 (16.7)	-4.2 (-27.2, 26.3)	
No	19 (79.2)	10 (83.3)	4.2 (-26.3, 27.2)	
Trans stigma	16.17 (7.72)	15.56 (2.88)	-0.61 (2.06)	0.769

[·]CI=confidence interval; SD=standard deviation; CAD=Canadian dollar; HR-QoL=Health-related quality of life; DDI's=drug-drug interactions between ART and feminizing hormones.

Proportion difference and mean difference calculated by subtracting ART adherence (Yes) proportion or mean from ART non-adherence (No) in the past year (No) proportion or mean.

Chi-square or Fischer's exact tests (in the presence of cell sizes < 5) were used to examine significant associations between proportions. T-tests were used to examine significant associations between means.

Appendix K. Qualitative Data Supplementary Files

K1. COREQ 32-Item Checklist

Reporting Criteria	Addressed (Yes/No)
Domain 1: Research Team and Reflexivity	
Personal Characteristics	
1. Interviewer or facilitator identified	Yes
2. Credentials	Yes
3. Occupation	Yes
4. Gender	Yes
5. Experience and training	Yes
Relationship with Participants	
6. Relationship established before study start	Yes
7. Participant knowledge of the interviewer	Yes
8. Interviewer characteristics	Yes
Domain 2: Study Design	
Theoretical Framework	
9. Methodological orientation and theory	Yes
Participant Selection	
10. Sampling method	Yes
11. Method of approach	Yes
12. Sample size	Yes
13. Number or reasons for non-participation	Yes
Setting	
14. Setting of data collection	Yes
15. Presence of non-participants	Yes
16. Description of sample	Yes
Data Collection	
17. Interview guide	Yes
18. Repeat interviews	Yes
19. Audio/visual recording	Yes
20. Field notes	Yes
21. Duration of interviews or focus groups	Yes
22. Data saturation	Yes
23. Transcripts returned to participants	Yes
Domain 3: Analysis and Findings	
Data Analysis	
24. Number of data coders	Yes
25. Description of the coding tree	Yes
26. Derivation of themes	Yes
27. Software used	Yes
28. Participant checking	Yes
Reporting	

29. Quotations presented	Yes
30. Data and findings consistent	Yes
31. Clarity of major themes	Yes
32. Clarity of minor themes	Yes

K2. Final Coding Frameworks

K2a. Final Coding Framework, Paper 2

1) Transition experiences and gender-affirming care access				
Pressure to transition in a particular way	From healthcare providers, from peers; gender policing; including 2spirit identities/experiences; how participants understand/describe their genders			
Importance of gender-affirming care access	When participants describe how important it was that they receive gender-affirming care, including feelings of extreme distress in the absence of access			
Transition Experiences Legal transition	Updating legal identity documents; impact of not legally transitioning on access to care and other facets of one's life			
Medical transition – feminizing hormones	Experiences taking feminizing hormones; drug-drug interactions (experienced or concerns about)			
Medical transition – surgical procedures	Experiences accessing gender-affirming surgical care (vaginoplasty, breast augmentation, laser hair removal, etc.) Fear of surgery/risks of surgery; surgical regret			
Social transition	Participant's describe changing clothing, wearing make up; includes narratives of when participants began socially transitioning/what it looked like the first time they expressed their gender			
2) Barriers and facilitators to access				
Financial	Cost of uncovered services, including resources necessary to support one to access surgery (e.g., transportation); lack of financial resources; implications for lack of coverage (e.g., non-prescribed hormone use); costs of letters; need to be on social assistance to facilitate access			
Bureaucratic processes	Process for gaining access: Psychiatric assessment; program cuts (lack of availability of programs); having to go to particular locations to access gender-affirming care (e.g., from unknown providers)			
HIV stigma	Interpersonal and structural HIV stigma as a barrier to access to gender-affirming care (e.g., lack of access to surgeries); impacts of not being able to access gender-affirming care as a result of HIV stigma (e.g., frustration, distress); how heard about HIV stigma as a barrier to access to gender-affirming care (e.g., personal experience, word-of-mouth)			
Trans and intersecting stigmas	Interpersonal and structural trans stigma as a barrier to access to gender-affirming care (e.g., binary gender forms/body silhouettes, misgendering); lack of access due			

	to classism, able-ism (and how this intersects with being trans and HIV positive)
Geography/ accessibility of gender-affirming care providers	e.g., living downtown versus uptown (location of services), what province women lived in
Physician support	Physicians increase access to gender-affirming care by going above and beyond (e.g., re-prescribing hormones, talking to physicians who have denied care)
Physical and mental health	HIV clinical health (e.g., high CD4 count) a facilitator to access to gender-affirming care
3) Interpersonal relationship between	n trans women and HIV care providers
Relationship qualities	Positive: Acceptance, warmth, empathy, holistic, collaboration (e.g., respects patient self-determination with respect to ART use), mitigate opportunities for discrimination; treats as a person (e.g., eye contact, personal disclosure); Negative: Trans stigma (perceived, anticipated, enacted)
Implications of the interpersonal relationship	Trust; Provider can anticipate health issues/when mental health is not well OR avoidance of care, reduction in safety
4) Recommendations moving forward	ard
Structure of healthcare	Pros and cons of integrated care (receipt of care all in one location); participant desires regarding trans-specific versus trans-inclusive healthcare spaces; suggestions regarding increased accessibility of access to gender-affirming care (e.g., geographic reach)
Trans-inclusive and trans- specific research	Topics that are excluded from research (e.g., HIV prevention for trans people, post-operative healthcare); impact of inclusion in research

K2b. Final Coding Framework, Paper 3

1) Responses to stigma and discrimination	Refusing care from particular providers (e.g.,
Refusing care	
Duivete celf advences	students); changing care settings
Private self-advocacy	Correcting language (misgendering); making
	complaints against particular staff or with
D 11: 1 / .: :	regards to particular issues
Public advocacy/activism	Fighting for rights/working to change
	discriminatory laws/policies; participant in
	marches; purposeful disclosure, extending
	beyond healthcare
Engagement in trans/HIV services	Working as service provider, volunteer, or
	board member in non-profit organizations
	(ASO or LGBT)
Research and education	Participation as a participant or as a research
	assistant/associate; includes participation in
	any community consultations to inform
	changes to care; Education of students and
	education of others through workshops, patien
	simulation, and other mechanisms
Resilience in healthcare	Brush it off/interpret discrimination as more to
	do with others than self (strong sense of self);
	use of positive attitude, humour, spirituality to
	cope with stigmatizing experiences
4) Motivations, Benefits, and Consequence	s of Responding to Stigma and Discrimination in
Healthcare	
Motivations	Altruistic (protect others); personal
	growth/benefits to self
Benefits	Intrapersonal (e.g., increased self-worth,
	challenging internalized stigma), interpersonal
	(e.g., reduced social isolation), and structural
	(e.g., increased economic resources, leverage
	for better treatment)
Consequences	Labeled as aggressive; treated even more
Consequences	poorly (e.g., left in waiting room); provider
	reactions (e.g., defensiveness, laissez-faire);
	burnout; increased targeting due to visibility;
	don't access services; increased social isolatio
	(e.g., not being able to date people who don't
	want to be with an out trans person or out tran
2) Pagammandations	person living with HIV); tokenism
3) Recommendations Education and training	
3) Recommendations Education and training	Participant recommendation of increased

	methods of delivering training (e.g., peer led)
Trans inclusion	Include trans people in service delivery,
	service development, and service oversight

K3. Sample Charting of Themes and Sub-themes

$K3a. \, Sample \, Charting \, of \, Themes \, and \, Sub-themes, \, Paper \, 2$

	Theme 1: Transition Experiences and Importance of Gender-affirming Care Access						
Participant	Importance of Gender-Affirming Care Access	Pressure to Transition in a Particular Way	Social Transition	Legal Transition	Medical Transition – Feminizing Hormones	Medical Transition – Surgical Procedures (e.g., vaginoplasty, breast augmentation)	
1	Having money for clothes, make-up and hormones so important – on the same level as eating Other forms of transition not necessary to participant – such as breast augmentation; grown up normal		Young age, grew up as a girl in school Gender conformity as a girl from a young age Came out when I was a kid. And I live as a kid. And as a teenager and my whole adult life I live as a woman	Currently has legally transitioned (and fought for rights to gender marker change) (2008) Described pervasive stigma and discrimination (misgendering, looks of confused, shocked, fear in healthcare settings without legal name and gender marker change	Takes feminizing hormones Takes ART No concerns about potential interactions between feminizing hormones and ART Describes other trans women's fears of being diagnosed with HIV due to the impact it may have on their access to feminizing hormones	Does not believe in breast augmentation; I don't have any surgery on me It's all mine Idea of natural gender diversity (if God gives you big boobs go ahead) Fear of potential death after implants (friend in '90s who died after implants) – reference to Viviane Namaste's work Fear of surgical regret after plastic surgery – women fuck their lives because the surgery goes wrong	
2	Recommends a miracle injection that could do everything automatically and turn me into the woman that I		Would <u>play and do</u> <u>things</u> since 5 years old Transitioned in teens			Wanted to access gender- affirming surgery (vaginoplasty) but felt like gate keeped (blocked by gender identity clinic at psychiatric institution)	

	want to be					Also felt blocked due to HIV status/stigma Cannot afford to access gender-affirming surgery elsewhere (Thailand/US) Spoke with multiple physicians regarding vaginoplasty (Canada and Thailand) Has had cosmetic surgery (laser hair removal)
3	Story of denial of breast augmentation and participant's frustration and crying Most distressing element of having an infection was the potential of having breast implants removed	Awareness of norms around what a woman looks like – evident through process of teaching/trying to teach diversity of gender expression (she herself subscribes to feminine gender expression) Stays away from community described as backstabbing bitches Jealousy after drag performance due to others' lack of selfconfidence; concern participant looks better than them, has better clothes	Started transition process by doing drag Early 20s had an a-ha moment re: sense of (not) living in two worlds, need to transition Disclosed trans identity to family member Supportive family facilitated social transition	Has not changed all forms of legal identification – has changed health card but not passport Described how experiences crossing the border vary depending on attendant (worsened in current socio-political climate in the US); mostly positive experiences	Chose not to go on feminizing hormones long term Used feminizing hormones for a week and experienced side effects Family members also concerned about side effects	Breast augmentation – very proud – family support to pay for breast augmentation Botox to address with lipodystrophy from HIV medications
4	Described doing	Felt pressure to 'do	Moved to urban centre	Has not changed health	Takes feminizing	Breast augmentation done

	anything to gain access to feminizing hormones – I would lie if I had to and sure enough that's what I did	the whole transition' - medically transition after starting to socially transition Concern others would not accept her where she was at	(Vancouver) and started officially wearing women's clothing Roommate did make up and life was never the same – felt like a different person; didn't consider it 'transitioning', more so expressing her gender	card (still male on cards); for frequented healthcare locations, not worried about it, for new places, sometimes misgendered (called Sir as a result of health card)	hormones Takes ART Experienced an adverse DDI (feeling sick periodically due to taking medications too close together)	five years prior
			Eventually changed name and pursed medical transition			
5		At first used the term trans and now identifies more as non-binary Dresses like a woman, identifies more like a woman, but not going to go through the 'whole' transition	Described process of gender and sexual discovery – at one point I wanted to be a girl; at one point I thought I was gay Ultimately, does not subscribe to male pronouns, using she/her/they/them Dresses in 'male' form for work		Never desired to and does not take feminizing hormones	Thought about breast augmentation (and pursued opportunity – met with physicians) but declined because doing it for all the wrong reasons Concerned something would go wrong with breast augmentation Considered going through whole transitioning and consulted with other trans women, asked questions Come to love self as is and not desire to access vaginoplasty/bottom surgery
6		Aware of trans people accessing surgeries but wants	Came out as trans in public school or high school (dressing		Took feminizing hormones a long time ago and	Only sees the purpose of accessing surgeries if can be <u>passable</u> ; in the

			I a			
		to just be self,	female, wearing make		stopped taking	absence of achieving a
		regardless of gender	<u>up</u>)		them because they	particular ideal, just
		conformity – <u>if I'm</u>			were not	wants to be left alone
		passable, I'm	' <u>Dresses down'</u> in		contributed to	
		passable, right on, if	order to be safe; lack		passing enough,	
		I'm not I don't give a	of safety tied to idea of		such that the	
		<u>fuck</u>	not passing – being		participant was	
			able to socially		more of a target	
			transition is tied to a		due to visible	
			lot of privilege		trans-ness	
7	Describes	Has experienced	Socially transitioned in	Described bureaucratic	Takes feminizing	Spoke with surgeon
	floundering in the	gender policing; past	her early adulthood	"gong show" of trying to	hormones	regarding vaginoplasty
	system waiting	5 years things have	-	sync two files in a		and was denied due to
	for vaginoplasty	started to change		hospital system – one	Takes ART	HIV positive status
				with inaccurate gender		_
		Ties gender policing		marker, (M) one with	Experienced	Waited seven years to
		to colonialism		correct (updated) gender	adverse DDI such	access vaginoplasty
		(Indigenous person)		marker (F), despite	that believes the	(accessed after hearing
				having changed birth	interaction of these	policy had changed from
		Colonialism erases		certificate; took several	two medications	another trans person
		diverse gender		months and a number of	led to decreased	living with HIV)
		identities and		documents	effectiveness of	
		expressions			feminizing	
		enpressions			hormones at time	
					of importance in	
					transition	
					transition	
					A lot of possible,	
					positive effects of	
					HRT haven't	
					happened because	
					of my ARVs and	
					nobody talked	
					about it	
8	Prior to being	Experiences gender	Describes having		Took hormones for	Does not believe in
0	diagnosed with	policing in trans-	previously socially		awhile, but	surgically altering her
	HIV god I was	specific spaces; <u>feel</u>	transitioned, and		experienced	body – tied closely to two
	interested in					
		out of place there	currently holding her		negative side	spirit identity; <u>it's a</u>
	social transition	with the other trans,	two spirit identity		effects (mood	special thing our great
	and some medical	particularly because	closely and no longer		swings, similar to	god has given us to be

	transition	of not wearing a wig	socially transitioned in		Participant 3) and	two spirits in one body
	(removal of facial	of not wearing a wig	gender-conforming		then stopped	two spirits in one body
	hair)		ways		then stopped	
	nun)		"ays		Currently does not	
	Does not believe				take feminizing	
	in most surgical				hormones	
	procedures – tied				normones	
	to two-spirit					
	identity					
9	racinity	Participant won't	At three years old	Legally changed gender	Took hormones for	Laser hair removal
		disclose to other	would wear mother's	to F on all documents,	six months of life,	Easer hair removar
		community members	clothes	including provincial	but experienced	Breast augmentation
		that she doesn't take	21001100	health card, passport,	side effects (mood	21743t augmentum
		hormones – fear that	Halloween would wear	driver's license	swings, weight	Heard stories of surgical
		others will have	women's clothes		gain), and decided	regret – lack of sensation,
		<u>jealousy</u> or feel she's	cillen b cionics	Having proper gender	to stop	unhappiness
		not a <u>real</u> trans	Socially transitioned	marker facilitates access	to stop	amappiness
		woman	20 years prior	and comfort in healthcare	Describes self as	Talked to a surgeon
		Wollian	20 years prior	spaces/gender affirming	feminine enough	regarding vaginoplasty,
		Not just community		experiencing (e.g.,	does not need to	ultimately decided not to
		members who push		accessing gastroscopy	take hormones	do it
		trans women in a		and being asked if	tunio nonnonos	
		particular gender		pregnant or		Similar to Participant 6,
		experience, but also		breastfeeding)		describes how surgery is
		psychologists		oreastreeamg)		only beneficial in the
				Prior to change of health		context of passing – <u>it's</u>
				card, experienced		not because you have a
				purposeful misgendering		pussy that they call you
				in healthcare settings		Mrs. They don't see your
				(e.g., called ahead to		pussy
				indicate that she should		
				be referred to using		Describes how
				she/her, and was refused)		vaginoplasty is used as a
				as well as accidental		prerequisite for 'woman-
				misgendering		ness' by institutional
				_		standards (e.g., entry into
				Lived more than 15 years		swinger clubs)
				with other papers - that's		
				long		
10					Takes feminizing	Laser hair removal

			T	1	Г
				hormones	C1
				Takes ART	Gender-affirming surgery
				Takes ART	(vaginoplasty) < 5 years prior to interview
				Easternate to bosse	prior to interview
				Fortunate to have	
				doctors who are	
				competent at co-	
				delivery of both	
				medications	
				Has discussed	
				potential DDIs and	
				physicians have	
				indicated that the	
				two drugs can	
				interact and it is a	
				fine balance	
				between the two	
				Concerned about	
				other trans women	
				with HIV who use	
				non-prescribed	
				feminizing	
				hormones, greater	
				increasing their	
				risk of DDIs	
11	Described sex	Socially transitioned	Police also more apt to be	Takes feminizing	Has not accessed any
	work as a way to	after meeting another	discriminatory without	hormones	gender-affirming
	make money and	trans person and	legal name or gender		surgeries; in process of
	get rid of	experience depression	marker change on	Takes ART	applying to get letters
	masculinity		documentation		
	D: 6	Found freedom in	D	Never had a	Dreams about being a
	Discomfort going	transition	Participant describes	concern about	complete woman
	out during the day	m	being taunted by police	DDIs	physically and mentally
	until a particular	Transition occurred	who would call her birth	DI	
	point in transition	after a leap of faith,	name through a	Physician	Has been unable to access
	when more	now or never moment	megaphone	discussed potential	surgeries due to
	comfortable with		D	DDIs	immigration status and
	self		Prior trauma resulted in		resultant healthcare

		recent poor current day	Even if a concern,	coverage
After having a		experiences with police	would not matter	
stroke was told		onponens with pones	to participant as	
may need to stop		Has lived more than 20	feminizing	
hormone therapy		years without legal	hormones are of	
and threatened		documentation; cannot	utmost importance	
suicide		change legal	utiliost illiportalice	
suicide		documentation until		
٨ ٤٠٠٠ : ١				
Afraid		becomes a Canadian		
government will		citizen; cannot become a		
stop paying for		Canadian citizen easily		
vaginoplasty		because of history with		
before able to		police; history with		
have it done		police because of sex		
		work; sex work because		
		of trans stigma and		
		discrimination (catch 22)		
		Hassle when you have an		
		appointment - have to		
		tell people would you		
		mind calling me by this		
		name; frequently		
		misgendered and then		
		apologized too		
		ap 212 51224 100		
		Can't update bank		
		account, apartment lease,		
		etc.		
		CiC.		

Note. Underlined indicates portion of text is a direct quote.

K3b. Sample Charting of Themes and Sub-themes, Paper 3

	Theme 1: Responses to stigma and discrimination in healthcare							
Participant	Refusing care	Private self-advocacy	Public advocacy/activism	Engagement in trans/HIV services	Research and Education	Resilience		
1	Refuses care from nurses or students (autonomy over own body and who sees her); describes it as pushing people out	Asserts self to gain access to providers who assumes will be less discriminatory Describes being vocal about her rights (and being told to calm down); idea of having to be 'aggressive' or confrontational to assert rights	Activist in the community; knows rights Highly visible (completed documentaries, on posters) Corrects microaggressions by people in public (using purposeful disclosure) – this is seen as life or death (maybe not for her but for other trans women) Participants in trans marches – again to promote visibility	Represents trans women in multiple ASOs; make sure trans women are represented in there because the trans community is scared about service/health providers	Participants as a PI in a study Participants as a collaborator in another study Participant of research (participating in my study)	Brushes off others' negative judgment; fine, is your life, or whatever Describes others' negative judgment as jealousy (strong sense of self) Inner strength helps her to be visible for trans WLWH		
2	How do you fight it? You go somewhere else (changing providers)	Describes correcting misgendering by providers; don't call me man, don't call me man, I'm a miss			Participant of research (participating in my study)			
3		Describes holding impromptu trans 101 while acute inpatient – told staff why it was inappropriate to house her in a room with three men Called the supervisor to describe trans stigma experienced when accessing a prostate exam; I said this shouldn't be happening and she agreed	Created an advocacy group to support trans women as well s trans women's family members (parents)	Was working full time at an ASO on reception Also conducting trans 101 training (got called to an agency when a client was misgendered)	Has represented the needs of trans WLWH at conferences Does a lot of training in the community with all health professionals (social work, medical students) Participant of research (participating in my study) Conducts trainings for HIV service	Uses humour as a way to combat discrimination Strong sense of self as winning most battles		

					organizations	
4	Describes distancing self from providers who are negative – isn't really something I want to go through (privilege associated with this, as Participant 7 describes, you may not be able to access another provider)	Describes politely correcting the language of others (misgendering)			Participates as a peer research associate on multiple projects (role is to increase engagement of trans WLWH in research) Presents research work to numerous community based organizations Participant of research (participating in my study)	Recognizes the source of discrimination/ stigma as external to herself (something in others' life is lacking for them to treat her in a particular way) Uses humour to not feel hurt or dragged down by stigma and discrimination
5			Describes self as an activist Stands up for rights of others; if there's something that needs to be focused on I make known of it Does marches (for multiple issues) Raises money for non- profit organizations	Volunteer and board member of sexual health organization Board of directors on an ASO Applied to be a peer navigator for an ASO Trying to implement a trans staff person at an ASO Sits on a committee for WLWH as a trans representative	Has received scholarships to attend research conferences representing trans WLWH Participant of research (participating in my study)	
6		Addresses misgendering in a <u>calm</u> and reasonable manner; when providers become really ignorant raises voice to assert rights			Participant of research (participating in my study)	

7	Feels stuck with providers, even if they are incompetent, insensitive, transphobic, where else to go; describes as tolerates	Similarly to Participant 3, exasperated that in the year it is, we are still needing to correct language Called to make a formal complaint against health system that continually misgendered her (due to a bureaucratic issue with duplicate files); did not end up making formal complaint (resignation?)	Part of group of trans people fighting the provincial government after trans health services were suspended (rallies, emails, phone calls) Part of activist network (names famous activists from Toronto) Leader in Trans Day of Remembrance	On the board of an ASO (many challenges associated with this); put on a shiny face and did the best I felt I could	Participated in consultations to inform the development of new programs Participant of research (participating in my study) Holds stigmareduction workshops	
8					Participant of research (participating in my study)	Has leaned to ignore and overlook criticism from others Describes standing up for self, an how that supports her in being able to access care, in a way that others can't
9	Decides to go to another doctor, when one is discriminatory, talks to others, weighs pros and cons of different options of providers	Corrects providers language, requests that receptionists update their files, requests doctor puts correct name on prescriptions; not afraid of standing up for self when people are not too rude (more apt to change providers)	Visible as a trans person, participating in media campaigns to dispel myths about trans people; represented organization at a national LGBT laws meeting and then provincial laws meeting, was really happy about changes that came as a result	Actively volunteered for > 15 years in the trans community; many things would not have been built without her service Works for a trans crisis line	Participates in some HIV conferences, but not openly living with HIV Participant of research (participating in my study)	
10		Worked with clinic where accessing care to			Participated in biomedical	Describes <u>laughing</u> , <u>letting go, and</u>

	try to get them to use		research with	learning to pick
	more gender neutral		gender-affirming	battles in this life
	language on forms and		surgery, found that	
	silhouettes		yielded some	
	After experiencing HIV		interesting	
	stigma when accessing		information for her	
	laser treatment, went			
	back to HIV service		Wants to	
	organization to find out		participate in more	
	if there was actually a		research/create	
	risk		more research	
			opportunities for	
			trans WLWH	
			Participant of	
			research	
			(participating in	
			my study)	
11	Calls ahead at		Participant of	Tries to find her
	appointments to ensure		research	connections with
	properly gendered in		(participating in	others (rather than
	interactions with		my study)	her differences)
	healthcare staff		Provides training	Maintains a positive
	Talked to		within	attitude, and
	endocrinologist after		organizations	optimism to lead to
	being misgendered by		where she accesses	self acceptance of
	appointment reminder		care, when	her diagnosis
	system, asserted self to		approached	Uses spirituality to
	request that she not			process bad
	receive a reminder call			experiences, focuses
	and receive a reminder			on points of
	email instead			privilege rather than
				oppression

Note. Underlined indicates portion of text is a direct quote.