M.Sc. Thesis – Eugenia Ling	McMaster University – School of Nursing

PRIMARY HEALTH CARE REGISTERED NURSES AS FACILITATORS OF HEALTHCARE ACCESS AMONG RECENT IMMIGRANTS: AN INTERPRETIVE DESCRIPTIVE STUDY

By Eugenia Ling, RN, BScN

A Thesis Submitted to the School of Graduate Studies in Partial Fulfillment of the Requirement for the Degree Master of Science

McMaster University © Copyright by Eugenia Ling, May 2024

M.Sc. Thesis – Eugenia Ling

McMaster University MASTER OF SCIENCE IN NURSING (2024) Hamilton, Ontario

TITLE: Primary health care Registered Nurses as facilitators of healthcare access among recent

immigrants: An interpretive descriptive study

AUTHOR: Eugenia Ling, RN, BScN (McMaster University)

SUPERVISOR: Rebecca Ganann, RN, MSc, PhD

NUMBER OF PAGES: ix, 198

ABSTRACT

Background and Objectives: Recent immigrants experience unique challenges when accessing health services. Registered Nurses (RNs) working in primary health care (PHC) have the competencies and are well-positioned to facilitate healthcare access for immigrants.

Aim: This study explored how PHC-RNs in Ontario support healthcare access and address barriers among recent immigrants.

Methods: This study used a qualitative, interpretive descriptive approach and was informed by Levesque et al.'s (2013) access framework. Semi-structured interviews were conducted with 10 PHC RNs practising in Toronto, Ottawa-Gatineau, Hamilton, Kitchener-Cambridge-Waterloo, and London. Data were collected and analyzed concurrently using an inductive and deductive approach.

Results: Findings show that PHC-RNs play instrumental roles in supporting recent immigrants through facilitating healthcare access across 9 dimensions of Levesque et al.'s (2013) access framework: (1) appropriateness, (2) availability and accommodation, (3) ability to perceive, (4) ability to engage, (5) ability to seek, (6) ability to reach, (7) affordability, (8) ability to pay, and (9) acceptability. RNs addressed significant challenges to health service access for recent immigrants, including language, geographical, and financial barriers. Several opportunities were identified to enhance the PHC RN clinical practice role to improve the delivery of PHC for recent immigrants, such as increasing organizational resources, utilizing their expertise and role beyond the PHC clinic, and promoting culturally competent care.

Conclusions: PHC-RNs are key facilitators of healthcare access for recent immigrants by coordinating their care, educating, and connecting this population to services across the health system. However, there are opportunities to optimize nursing roles and more effectively utilize their scope of practice within interdisciplinary teams to promote the health of immigrants.

iv

ACKNOWLEDGEMENTS

My graduate nursing journey would not be possible without the love and encouragement of friends, family, and mentors in my life. This acknowledgement recognizes only a handful of these individuals.

I would like to express gratitude to my supervisor, Dr. Rebecca Ganann, and supervisory committee members, Dr. Olive Wahoush and Dr. Melissa Northwood, who offered their guidance in every step of this graduate journey.

Rebecca, thank you for the endless guidance and opportunities you provided to support my success in this graduate program. Although I had many doubts along the way, you recognized my potential and strengths which enabled me to flourish over the past three years. It has been a privilege to learn from you and be mentored by you.

Melissa and Olive, thank you for willingness to offer your perspective and expertise in the field of health systems and immigrant populations. Your passions for these fields are evident in the way you teach, and as the next generation of nurses learn and grow, I hope they continue to be inspired by you both as much as I was.

My nursing journey would not have existed without the sacrifice, dedication, and hardships of my loving parents who left everything they knew in Hong Kong with the hopes of a better future for their five children.

To my late mother, Serena Ling, your late-stage cancer diagnosis and passing is one of the many untold stories that exemplify the health inequities experienced by immigrants. I hope that the findings of this study illuminate the role of nurses in rewriting stories of tragedy into hope for individuals like you.

To my father, Eric Ling, thank you for your constant support and encouragement in every goal, aspiration, and dream I have ever had and will have. Despite the adversities you were granted in this life, you sacrificed everything you wanted so that we could have everything we needed. I would not be where I am today without you, and I am forever grateful for you.

Lastly, I would like to thank God for His unending grace and goodness in my life. May this thesis be a testament to His work of restoration in this world.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION	1
Background	4
Registered Nurses' Primary Health Care Roles and Competencies	
Recent Immigrants and Inequities in Health	5
CHAPTER TWO: LITERATURE REVIEW	10
Search Strategy	10
Findings of Literature Review	11
Nursing Roles and Responsibilities in PHC	12
Optimization of the PHC Nursing Role	26
Literature Gaps	28
Study Purpose	29
Research Questions	30
Position Statement	30
CHAPTER THREE: METHODOLOGY	32
Study Design	32
Patient-Centered Access to Health Care Framework	32
Study Setting	33
Sampling & Recruitment	33
Inclusion & Exclusion Criteria	34
Sampling Methods	
Sample Size	37
Data Collection	38
Semi-Structured Interviews	
Demographic Questionnaire	42
Data Management	42
Data Analysis	44
Credibility	47
Ethical Considerations	50
CHAPTER FOUR: RESULTS	53
Participant Characteristics	53
Promoting Healthcare Access for Recent Immigrants & Optimizing the PHC RN Role	55
Appropriateness	
Availability and Accommodation	66

Ability to Perceive	71
Ability to Engage	72
Ability to Seek	81
Ability to Reach	85
Affordability	
Ability to Pay	
Acceptability	
Approachability	
Summary of Results	
CHAPTER FIVE: DISCUSSION	
Findings in the Context of Literature	
Promoting Healthcare Access for Recent Immigrants & Optimizing the PHC RN Role	102
Implications	127
Education	127
Clinical Practice	128
Policy	
Research	131
Strengths and Limitations	132
Conclusion	133
REFERENCES	135
APPENDICES	162
Appendix A: Search Strategy	162
Appendix B: Recruitment Flyer	169
Appendix C: Email Script to PHC RN Organizations	171
Appendix D: Recruitment Email Script	173
Appendix E: LETTER OF INFORMATION / CONSENT FORM	175
Appendix F: Recruitment & Informed Consent Script	180
Appendix G: Interview Guide	186
Appendix H: Demographic Questionnaire	188
Appendix I: Follow-Up Email	190
Appendix J: Study Key	191
Appendix K: Coding Frame	192
Appendix L: Verbal Consent Log	194
Appendix M: Privacy and Confidentiality Agreement	195

M.Sc. Thesis – Eugenia Ling Mcl	Master University – School of Nursing
---------------------------------	---------------------------------------

LIST OF TABLES

Table 1 Strategies to Enhance Credibility

Table 2 Participant Characteristics

Table 3 How PHC RNs Promote Healthcare Access for Recent

Immigrants and Optimization of their Role

LIST OF ABBREVIATIONS

AFHTO Association of Family Health Teams of Ontario

CCA Constant Comparative Analysis

CDGA Concurrent Data Generation and Analysis

CHC Community Health Centre

FHT Family Health Team

HCP Healthcare Provider

HiREB Hamilton Integrated Research Ethics Board

ID Interpretive Description

IFH Interim Federal Health

NP Nurse Practitioner

NPLC Nurse Practitioner-Led Clinic

NRIG Nursing Research Interest Group

PCNO Primary Care Nurses of Ontario

PHC Primary Health Care

RN Registered Nurse

RPN Registered Practical Nurse

CHAPTER ONE: INTRODUCTION

Canada's publicly funded healthcare system has been characterized by its fragmentation in the delivery of healthcare services and programs (Martin et al., 2018). Depending on the healthcare provider (HCP) and setting, these services and programs can be disconnected and work in isolation from one another, which creates systemic barriers to healthcare access (Romanow, 2002). Healthcare access is a multifaceted phenomenon that refers to the opportunity to recognize the need for health care and to pursue, obtain, and utilise services or programs to address health needs (Levesque et al., 2013). Healthcare access enables individuals to receive appropriate and timely health care for prevention, management, or treatment of disease or illness (Gulliford et al., 2002). Inequities in healthcare access delays the utilization of health care to meet health needs, which can lead to an increased risk of health complications, such as delayed diagnosis (Sanmartin & Ross, 2006). Healthcare access is a prerequisite to achieving the highest level of health and wellbeing for all individuals and populations, including immigrants.

Immigrants are defined as foreign-born individuals who are legally permitted to permanently reside within national borders (Government of Canada, 2016). Generally, a prerequisite to apply for Canadian citizenship is permanent residency status, which may be granted according to specific categories. The economic category is granted based on an individual's experience or skills to benefit the Canadian economy (Government of Canada, 2014). The family-sponsored category is granted based on kinship to a Canadian citizen or permanent resident who can financially support the kin (Minister of Justice, 2023). Lastly, refugee status is granted if an individual is displaced from their home country resulting from violence, maltreatment, or oppression (Minister of Justice, 2023; United Nations High Commissioner for Refugees, 2020).

Depending on legal status, immigrants are eligible for federal or provincial health insurance. Immigrants from non-refugee classes are eligible for provincial health insurance (e.g., Ontario Health Insurance Plan [OHIP]) which cover essential physician and hospital services (Immigration Refugees and Citizenship Canada, 2021). In Ontario, non-essential services such as optometry services, dental care, and prescription drugs are generally not covered under OHIP (Ontario Health, 2024a). In contrast, resettled refugees or refugee claimants are eligible for the Interim Federal Health (IFH) Program, a temporary health insurance plan offered by the federal government, until they are eligible for a provincial health insurance plan or their refugee claim is denied (Government of Canada, 2023). Having health insurance is a key enabler for immigrants to receive the health services to address their health needs.

Upon resettlement in Canada, new immigrants experience unique challenges related to healthcare access, including learning to navigate a new but fragmented healthcare system (Carter et al., 2022; Kalich et al., 2016) and experiencing various forms of discrimination at a health provider level, including refusal of care (Pollock & Newbold, 2015). Further, new immigrants are challenged by the complexity of publicly funded health insurance plans (Goel et al., 2013). For example, immigrants under the family-sponsorship and economic category are eligible for provincial or territorial health insurance but require waiting periods of up to 3-months before coverage starts (Government of Canada, 2021). It is important to note, however, that since the Coronavirus pandemic in 2020, several provinces have removed the 3-month waiting period for provincial health insurance, including Ontario, to promote immediate access to essential health services (Ontario Health, 2024b). On the other hand, the IFH program is also known to have unclear registration and reimbursement policies causing confusion among service providers (Antonipillai et al., 2017; Ruiz-Casares et al., 2016). Healthcare providers at all levels of health

care, including primary health care (PHC), must be responsive to these systemic challenges that exacerbate health inequities among immigrants.

PHC is a holistic approach to health care to address the health and wellbeing of individuals, families, and communities across all life stages (Canadian Nurses Association, 2015b). Health promotion, prevention and screening, and treatment of acute or chronic health illnesses or diseases are integral components in the delivery of this type of care (Primary Healthcare Planning Group, 2011). PHC acts as the entry point into the health system and supports the coordination and integration of health-related services and programs that are beyond the scope of PHC (e.g., community services and programs, home care, primary and secondary levels of care) (Government of Canada, 2012).

In Ontario, PHC is generally delivered through various practice models, such as Nurse-Practitioner-led Clinics (NPLC) (Ministry of Health and Long-Term Care, 2023), Community Health Centres (CHC), Family Health Teams (FHT), independent practices, and walk-in clinics (Health Force Ontario, 2019). Using an interdisciplinary approach, NPLCs deliver PHC through the leadership of Nurse Practitioners (NPs) (Ministry of Health and Long-Term Care, 2023). CHCs deliver primary and community-based care, through a multidisciplinary team approach, to address social determinants of health and serve populations that face barriers in healthcare access, such as new immigrants, uninsured migrants, and underinsured groups (Office of the Auditor General of Ontario, 2017). FHTs are comprised of a group of physicians that work with a multidisciplinary team to deliver PHC based the needs of the community (Office of the Auditor General of Ontario, 2017). In independent practices, a solo physician or group of physicians deliver PHC (Health Force Ontario, 2019). Lastly, walk-in clinics offer episodic health care to individuals (Health Force Ontario, 2019). Although physicians often lead the delivery of PHC in

these practice models (Health Force Ontario, 2019), PHC Registered Nurses (RNs) act as facilitators within the healthcare system for individuals facing inequities to healthcare access. This chapter explores the role of RNs in PHC settings, the unique challenges that recent immigrants, or those who have resided in Canada for less than 10 years, face in utilizing and receiving health care, and lastly, the potential of RNs as facilitators of healthcare access for this population.

Background

Registered Nurses' Primary Health Care Roles and Competencies

RNs that work in PHC settings (i.e., PHC RNs) play a vital role in the delivery of PHC because of their education, knowledge, skills, and expertise. For entry into practice in their registration class, RNs complete a bachelor's degree to develop in-depth knowledge for nursing practice, leadership, and research that enables them to practice autonomously to their full scope (College of Nurses of Ontario, 2018). RNs have the decision-making and critical-thinking skills required to comprehensively assess, treat, manage, and plan for the health and wellbeing of patients regardless of their level of complexity and predictability and likelihood of poor outcomes (College of Nurses of Ontario, 2018). Through a holistic approach, RNs also have the expertise to examine and identify interventions to address underlying contextual factors on an individual and systemic level that contribute to patients' health (Reutter & Kushner, 2010). Embedded at all levels of the healthcare system, RNs are crucial in promoting the health and well-being of individuals, patients, and communities across the health continuum. PHC nurses are referred to as 'generalists,' as they have an extensive knowledge-base of illness and diseases across the lifespan (Brunetto & Birk, 1972; Oelke et al., 2014). PHC RNs use evidence-based strategies to deliver patient-centered care to individuals and communities across the lifespan

(Grinspun et al., 2012). Working independently or collaboratively within an interdisciplinary team, PHC RNs are typically responsible for activities such as education on chronic disease management, physical assessments, provision of treatments, and administration of vaccinations and immunizations (Lukewich et al., 2014). With a comprehensive understanding of the healthcare system, PHC RNs are also well-positioned to promote healthcare access for patients (Canadian Nurses Association, 2015a). In 2019, the Canadian Family Practice Nurses Association developed a set of national competency standards for RNs practising in PHC in accordance with entry-to-practice competencies of regulatory authorities (e.g., College of Nurses of Ontario, 2019). These competencies include, but are not limited to, supporting patients in building health literacy skills, providing case management and care coordination to optimise the utilisation of health services and resources for patients, educating patients on tools and resources to effectively self-manage their health, supporting patients in navigating the healthcare system, and promoting organisational continuity of care (Canadian Family Practice Nurses Association, 2019; Lukewich et al., 2020). These standards demonstrate that PHC RNs are expected to have the competencies to facilitate healthcare access for individuals (Canadian Nurses Association, 2014; Grinspun et al., 2012). In Ontario, there are approximately 4,342 practicing PHC RNs (College of Nurses of Ontario, 2022). As PHC RNs are situated across the system, they are wellpositioned and have the expertise to act as facilitators within the healthcare system, especially for those experiencing inequities in healthcare access.

Recent Immigrants and Inequities in Health

Healthcare Access

Recent immigrants are of particular concern when examining inequities in healthcare access. While 84% of the overall immigrant population in Canada report having a designated

primary HCP, recent immigrants are less likely to have a designated primary HCP compared to their more established immigrant counterparts, or those who have resided in Canada for 10 or more years (Degelman & Herman, 2016; Ravichandiran et al., 2022). Similarly, a secondary analysis of the Canadian Community Health Survey to explore primary care access found that recent immigrants were more likely to report not having a regular source of health care to address minor health needs compared to their established and native-born counterparts (Ssendikaddiwa et al., 2023). Recent immigrants were also more likely to report using a walk-in clinic or emergency department as their regular source of care which may be explained by lack of access to a regular PHC provider or the convenient operating hours of these services (Ssendikaddiwa et al., 2023). Lofters and colleagues (2019) found that recent immigrants living in Ontario were less likely to have a history of breast, cervical, or colorectal cancer screening in the previous five years compared to established immigrants, despite being eligible based on provincial recommendations. Unsurprisingly, those without access to a designated provider were less likely to have a history of screening (Lofters et al., 2019), which highlights concerns about access to healthcare for recent immigrants. Further, recent immigrants living in Ontario were three times more likely to report difficulties accessing tertiary care (i.e., specialty care) compared to their established and native-born counterparts (Harrington et al., 2013). These inequities in access on various levels of care may be explained, in part, by the unique challenges experienced by new immigrants, as discussed previously.

Health Status

The healthy immigrant effect is characterized by reports of higher levels of health status among new immigrants, excluding refugees, but unfortunately, these levels typically decline during the years following migration (Zhao et al., 2010). Scholars suggest that poor healthcare

access may contribute to this decline (Newbold, 2009; Ng & Zhang, 2021; Vang et al., 2015). For example, Ng and Zhang (2021) found that recent immigrants are more likely to report higher levels of mental health status (i.e., very good or excellent) and are less likely to have received consultation from a mental HCPs (in the previous 12 months) than their native-born counterparts. In comparison, established immigrants are more likely to report lower levels of mental health status (i.e., poor and very poor) and are more likely to have received consultation from a mental HCP (Ng & Zhang, 2021). This highlights a decline in mental health status for immigrants in the years following migration. Considering the vulnerability of the health status of recent immigrants during the first few years of resettlement, promoting early healthcare access through PHC can help ensure the healthcare needs of this population are met sooner post-migration.

It is important to recognize that immigrants are not a homogenous group. Compared to their economic and family-class immigrant counterparts, refugees are twice as likely to report their health status as poor in the first year following migration and are more likely to report new emotional or mental health problems within the four years following migration (Newbold, 2009). Specifically, a meta-analysis of international studies by Blackmore and colleagues (2020) sought to examine the global prevalence of mental health disorders among refugee populations. Their analysis found that almost one-third of the refugee population suffers from post-traumatic stress disorder and depression. Studies have also found that compared to their counterparts in other immigrant classes, refugees are at highest risk for mood, anxiety (Edwards et al., 2022), psychotic disorders (Anderson et al., 2015), and mental health hospitalizations (Grundy et al., 2023). Additionally, suicide is twice as likely and self-harm is almost three times as likely among refugees compared to other immigrant groups (Saunders et al., 2019a). These findings are not surprising considering the hardships experienced by this population pre-migration, including

war, famine, poverty, gender-based violence, inadequate health care, or unsafe living conditions (United Nations High Commissioner for Refugees, 2020).

Refugees are a vulnerable group due to their pre-migration context and may experience further inequities to accessing health care following migration (Carter et al., 2022; Guruge et al., 2018). When facilitating healthcare access for refugees, HCPs should be responsive to the distinct health needs of this population and, in particular, their mental health.

Barriers to Healthcare Access

Disparities in healthcare access between recent immigrants and their established immigrants and/or native-born counterparts may be explained by the unique barriers in healthcare access experienced by this population. Previous reviews of quantitative and qualitative studies and more recent single qualitative studies have shown that key barriers include, but are not limited to, communication challenges between HCPs related to language, cultural differences, and/or inadequate knowledge of health services and programs required to navigate the healthcare system (Chowdhury et al., 2021; Kalich et al., 2016; Kamran et al., 2022; Pandey et al., 2021, 2022; Patel et al., 2021; Tsai & Ghahari, 2023; Turin, Rashid, Ferdous, Naeem, et al., 2020). These barriers are consistent with a cross-sectional study using secondary data, conducted by Etowa and colleagues (2021), which found that visible minority immigrants are more likely to report difficulty communicating with HCPs about health information and experience lengthier wait times between appointment bookings and visits, service wait times, language barriers, and transportation issues. Finances are also a commonly reported barrier among immigrants, including costs associated with attending appointments (e.g., transportation, child-care, work absences) and out-of-pocket expenses for health services (Carter et al., 2022;

Tsai & Ghahari, 2023). These out-of-pocket expenses refer to specific complementary or therapeutic services not covered by provincial or federal health insurance plans, such as prescription medications or laboratory tests (Government of Canada, 2023; Ontario Health, 2024a). When resettling in a new country, these multi-faceted barriers often make it challenging for recent immigrants to access health care within a complex system (Kalich et al., 2016). As these barriers contribute to inequities to healthcare access, PHC providers, including PHC RNs, have a responsibility to address these determinants of health when engaging with this vulnerable population (World Health Organization & United Nations Children's Fund, 2020).

CHAPTER TWO: LITERATURE REVIEW

Chapter Overview

This chapter discusses the search strategy and findings of the literature review that examines what is currently known on how PHC RNs promote healthcare access in practice, including the roles and responsibilities of PHC nurses, optimization of their role, and gaps in literature. The chapter concludes with the study aims and research questions.

Search Strategy

This literature review explores what is currently known in literature on how PHC-RNs promote healthcare access among recent immigrants. The literature search was conducted using five databases: CINAHL; OVID Medline Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINEI Daily and Ovid MEDLINEI 1946 to Present; OVID Emcare; Web of Science; and McMaster Library. A combination of key terms relevant to the research topic were used to search the listed databases: Nurs*, Immigrant*, Refugee*, Access to Health Care, Primary Health Care, and Ontario. The initial search strategy was reviewed by a Health Sciences Librarian at McMaster University. However, the initial literature search only yielded 3 relevant studies. The original search strategy was expanded to include additional terms and was reviewed by a secondary Health Sciences Librarian (see Appendix A for final search strategy).

Titles and abstracts were reviewed for relevance. Articles were included if they were (a) published between January 1, 2003 to September 24, 2023, (b) peer-reviewed studies, (c) available in English, (d) conducted within Canada, relevant to how PHC nurses (i.e., RNs or Registered Practical Nurses [RPNs]) promote healthcare access to recent immigrants and/or populations ≥18 years of age. Studies were excluded if they were (a) editorials, grey literature, or

10

unpublished, (b) not available in English (c) conducted outside of Canada (d) involved nurses who delivered PHC outside of the PHC setting, and (e) exclusively relevant to Nurse Practitioners (NP). The literature search yielded 209 articles across the five databases. Following, 113 articles remained after removal of duplicate articles. Titles and abstracts were then reviewed for inclusion screening. Lastly, the full text of articles were reviewed for relevance, resulting in 29 included studies which are reported below. Reference lists of included studies were reviewed for potentially relevant articles; however, no additional studies were found.

Findings of Literature Review

Of the 29 included studies, eighteen used a qualitative design, eight used a quantitative design, one used a mixed-methods design, and one study was a scoping review. Studies were conducted in Ontario (n=10), Quebec (n=9), Alberta (n=3), Nova Scotia (n=1), British Columbia (n=1), Atlantic Canada (n=1), and pan-Canada (n=4). Only eight exclusively reported results that pertained to PHC RNs. The remaining studies reported general results across the sampled population (e.g., PHC nurses, interdisciplinary team members, key informants) or did not explicitly report specific designation classes (e.g., RN, RPN) of the recruited PHC nurses. No studies discussed the roles and responsibilities of PHC RNs as facilitators of healthcare access for recent immigrants.

The literature review has been organized into two main categories: (1) nursing roles and responsibilities in PHC and the (2) optimization of the PHC role. For context, the review explores the general roles and responsibilities of PHC nurses among adult populations (≥ 18 years of age) and the potential opportunities to optimize the PHC role. Following the synthesis of

11

the findings is a discussion of the gaps identified in the existing literature with respect to how PHC RNs promote healthcare access for recent immigrants.

Nursing Roles and Responsibilities in PHC

Through the delivery of PHC, nurses have various roles and responsibilities to promote access to care across the health system. Several themes were identified related to the role of PHC nurses in practice: (1) assessment of needs, (2) nursing tasks, (3) care planning, (4) care coordination, (5) chronic disease management, (6) health promotion and illness prevention, (5) system navigation, (6) case management, and (7) serving marginalized populations.

Assessment of Needs

PHC nurses conduct holistic assessments to accurately identify health needs and ensure that patients receive the appropriate health care to adequately address their health need (Al Sayah et al., 2014a). Studies have described common types of nursing assessments, such as physical (Poitras, Chouinard, Fortin, et al., 2018) or mental health exams (Girard et al., 2017; Todd et al., 2007), vital sign measurements (Lukewich et al., 2014; Lukewich et al., 2018; Poitras, Chouinard, Fortin, et al., 2018), health and/or social histories (Akeroyd et al., 2009; Lukewich et al., 2014; Martin-Misener et al., 2020), social factors (e.g., social support) (Lukewich et al., 2015), prenatal assessments, and eye examinations (Todd et al., 2007). During these assessments, PHC nurses demonstrate skills in listening and gathering information, using a holistic approach, to contextualize patient needs based on an interplay of physical, psychological, and social factors (Oandasan et al., 2010).

PHC nurses may also be responsible for determining the level of urgency of a health need or concern through triaging (Allard et al., 2010; Borgès Da Silva et al., 2018; Todd et al., 2007).

Triaging of patients seeking care in PHC settings often requires a specific set of competencies and expertise that are unique to PHC nurses (Oandasan et al., 2010). This enables PHC nurses to assess and determine the appropriate intervention or type of care to rapidly address patient needs based on the level of urgency (Oandasan et al., 2010). The information or data gathered through nursing assessments supports PHC nurses to provide care that is responsive to the complex needs of patients.

Nursing Tasks

Nurses perform activities and tasks to prevent disease or promote health. Several of the studies described the clinical tasks that PHC nurses perform in their practice, such as administering and dispensing medications (e.g., injections) (Martin-Misener et al., 2020), glucose level testing (Allard et al., 2010), reviewing and following-up on lab results, venipuncture, ear syringing, foot care (Todd et al., 2007), wound care (Akeroyd et al., 2009; Allard et al., 2010; Todd et al., 2007), or removal of sutures or staples (Allard et al., 2010; Todd et al., 2007).

Depending on the practice setting and/or context, PHC nurses may also have the authority to perform advanced activities or tasks. For example, a cross-sectional study conducted by Martin-Misener and colleagues (2020) described the responsibilities of RNs in rural and remote areas of Canada who practice with an expanded scope. Nurse participants reported activities such as ordering, conducting, and interpreting laboratory tests and diagnostic imaging, prescribing specific therapies (e.g., medications) using medical directives, and making nursing diagnoses or initiating referrals based on organizational protocols or guidelines (Martin-Misener et al., 2020). Similarly, Fournier and colleagues (2021) sought to understand the expanded role of nurses practising in Nunavik, a rural region of Northern Quebec, using data collected from interviews

and observations. The study found that nurses, in the absence of a physician, performed delegated acts based on protocols and guidelines which enabled them to diagnose, perform specific controlled acts (e.g., clinical procedures), and manage emergent cases. However, it is important to understand that these responsibilities are generally beyond the typical scope of practice for nurses practising outside of rural or remote regions. Therefore, considering the context of these studies where there are limited resources and health care personnel, the findings are likely not transferable to PHC settings located in urban or population-dense cities.

The delivery of basic interventions by PHC nurses is essential to the health of patients. However, drawing from their expertise and knowledge, nurses also play a significant role in the planning, organizing, and delivering PHC in a manner that promotes access to health care. The following sections discuss how nurses fulfill these responsibilities in practice.

Care Planning

Using data collected from nursing assessments, PHC nurses utilize this data to develop care plans that address complex health needs of patients (Al Sayah, Szafran, et al., 2014; Girard et al., 2017; Poitras, Chouinard, Fortin, et al., 2018). For example, using a multiple case study design, Girard and colleagues (2017) interviewed 13 nurses practicing across seven multidisciplinary, PHC practices in Quebec to describe the activities of nurses delivering care to patients diagnosed with chronic and mental illnesses (Girard et al., 2017). PHC nurses reported participating in care planning which involved identifying and prioritizing key interventions, and establishing frequency of reminders, follow-ups (i.e., telephone or in-person), and length of appointment times (Girard et al., 2017).

In a similar study conducted in Quebec, Poitras, Chouinard, Fortin and colleagues (2018) also found that care planning by PHC nurses involved planning appointments in relation to achieving target health levels, testing and monitoring of health conditions, and coordinating appointments with other HCPs. Nurses in this practice setting were also able to adjust medications for certain clinical situations based on standing orders and organizational protocols (Fédération interprofessionnelle de la santé du Québe, 2010; Poitras, Chouinard, Fortin, et al., 2018). Through ongoing assessment and evaluation, PHC nurses were also responsible for regularly revising the care plan to ensure it is responsive to the patient's condition and needs (Girard et al., 2017; Poitras, Chouinard, Fortin, et al., 2018). By leading the care planning of patients with various physical or mental health conditions, PHC nurses ensure that patients receive the appropriate treatment and interventions throughout their care journey.

Care Coordination

Regarding care coordination, several studies discussed how PHC nurses organize various components of health care and services to promote access to various levels of care (Al Sayah, Szafran, et al., 2014; Beaudet et al., 2011; Borgès Da Silva et al., 2018; Lukewich et al., 2018; Todd et al., 2007; Yuille et al., 2016). These studies described the role of care coordination as facilitating (a) continuity of care, (b) referrals, and (c) care collaboration.

Continuity of Care. PHC nurses promote continuity of care between multiple providers, services, and organizations to support the seamless delivery of care for patients. In a mixed-methods study conducted by Todd and colleagues (2007), a survey completed by 30 PHC RNs practising in Nova Scotia found that more than 85% of participants reported playing a role in promoting continuity of care in their nursing practice. PHC nurses have an in-depth understanding of the health context of patients which enables them to function as a care leader

15

(Al Sayah, Szafran, et al., 2014; Poitras, Chouinard, Gallagher, et al., 2018) or key contact (Al Sayah, Szafran, et al., 2014; Todd et al., 2007) between the interdisciplinary team and patients.

PHC nurses promote continuity of care by liaising transitions between different levels of care. In a cross-sectional study conducted across 26 PHC settings in Ontario, it was found that over 60% of RNs practising in FHTs (n=11) and 100% of RNs practicing in CHCs (n=4) reported functioning as a liaison between different health organizations across the care continuum (e.g., hospital, long-term care) (Lukewich et al., 2018). Further, in a qualitative, descriptive study conducted in Ontario, Yuille and colleagues (2016) found that PHC RNs delivering cancer survivorship care supported patient transitions between different HCPs and levels of health care and, in addition, coordinated follow-up care and medical imaging for their patients. However, considering the design of these two studies (i.e., cross-sectional and qualitative descriptive), these studies sought to examine the role or activities of PHC nurses rather than provide a rich description in understanding of how their roles are enacted.

Considering the disconnect within the health system in Canada, PHC nurses are well-positioned to liaise between health services and providers across the system, but further research is needed to understand how PHC nurses do so.

Referrals. PHC nurses are involved in facilitating referrals to health and social services beyond the PHC setting. In the study by Todd and colleagues (2007), over half of the PHC nurses reported making referrals, independently or in consultation with the physician, to various health professionals or services, such as public health, social work, occupational therapy, diabetes educators, or home care. However, in a qualitative study conducted in Quebec by Beaudet and colleagues (2011), nurses and nurse managers reported that PHC nurses are often restricted by the practice setting to a referral role in relation to coordinating care between health

16

professionals and services beyond the PHC setting. Although PHC nurses may promote access to necessary health services through referrals, there is potential opportunity to expand this role to facilitate collaboration between health settings to optimize health resources and capacity for patients (Beaudet et al., 2011).

Beyond health services, PHC nurses also address social needs by connecting patients to community resources (Poitras, Chouinard, Gallagher, et al., 2018). Specifically, in cancer survivorship care, Yuille and colleagues (2016) report that familiarity and pre-existing relationships with community organizations among PHC RNs supports the referral process when directing patients to community services. PHC RNs reported adopting various strategies when connecting cancer survivors to the appropriate resources, including the use of professional relationships, formal referrals, pamphlets, or verbal communication (Yuille et al., 2016). Although there is opportunity for collaboration between health organizations, PHC nurses play a functional role in connecting patients to essential health and social resources on various levels of care.

Care Collaboration. As PHC nurses often coordinate care within and beyond PHC settings, studies have frequently reported their involvement in collaborating with interdisciplinary members (Al Sayah, Szafran, et al., 2014; Girard et al., 2017; Poitras, Chouinard, Fortin, et al., 2018; Poitras, Chouinard, Gallagher, et al., 2018; Todd et al., 2007). In the context of PHC nursing, care collaboration involves referring, consulting, or communicating to or with health professionals of other disciplines relating to patient care (Girard et al., 2017). In the study conducted by Todd and colleagues (2007), a majority of PHC nurses report collaborating with various HCPs and organizations including, but not limited to, physicians, pharmacists, home care, and public health nurses.

In nursing practice, care collaboration may include engaging with physicians to discuss relevant health information, such as patients' health status or care, treatment plans, and requesting interdisciplinary consultations (Poitras, Chouinard, Fortin, et al., 2018). PHC nurses may communicate health information through different methods, such as telephone, email, and in-person meetings (Al Sayah, Szafran, et al., 2014). Having an in-depth understanding of their patients, PHC nurses are well-positioned to advocate for patients when collaborating with the multidisciplinary team to ensure patient needs are appropriately met (Al Sayah, Szafran, et al., 2014). PHC nurses are important liaisons and advocates of the multidisciplinary team in coordinating health care services within and beyond the PHC setting in a manner that maximizes healthcare access for patients.

Chronic Disease Management

PHC nurses have a role in supporting patients to manage their chronic disease or illnesses (Al Sayah, Szafran, et al., 2014; Al Sayah, Williams, et al., 2014; Curnew & Lukewich, 2018; Lukewich et al., 2014; Lukewich et al., 2015, 2018; Poitras, Chouinard, Fortin, et al., 2018; Poitras, Chouinard, Gallagher, et al., 2018; Todd et al., 2007). Specifically, PHC nurses deliver education on a variety of chronic diseases but, most notably, in relation to diabetes and hypertension (Lukewich et al., 2014; Todd et al., 2007). This health education may include counseling patients on their diagnoses, relevant medications, and symptom management (Poitras, Chouinard, Fortin, et al., 2018). PHC nurses also conduct health teaching on identifying and managing normal and abnormal target values and signs and symptoms related to their condition (Poitras, Chouinard, Fortin, et al., 2018; Poitras, Chouinard, Gallagher, et al., 2018). To promote independence in self-managing their chronic disease, PHC nurses conduct health education on various aspects of chronic disease management including, but not limited to, utilizing medical

devices, connecting patients to supplemental resources (Poitras, Chouinard, Gallagher, et al., 2018), and adapting lifestyle habits (Lukewich et al., 2015).

PHC nurses also have a responsibility in evaluating the effectiveness of their health education, such as validating patients understanding of their health teaching (Al Sayah, Williams, et al., 2014; Girard et al., 2017; Poitras, Chouinard, Fortin, et al., 2018). In a qualitative study conducted in Alberta, Al Sayah, Williams and colleagues (2014) examined the communication strategies of nine PHC nurses across three PHC settings when delivering health education to patients diagnosed with type 2 diabetes. Using audio-recordings of nurse-patient interactions, findings showed that nurses frequently used clarification techniques or, in other words, explaining the meaning or purpose of the stated health teaching. Unfortunately, findings also found that nurses less frequently adopted any other validation strategies. They also often used medical jargon and inappropriate terms that were inconsistent with the intended medical meaning. However, considering the small sample size, these findings may not be generalizable to other PHC nurses and settings. Through education and counseling, PHC nurses play an essential role in supporting patients in independently managing their chronic diseases at home, but further research is needed to understand how PHC nurses evaluate the effectiveness of their health teaching.

Health Promotion & Illness Prevention

Although some PHC nurses may focus on a medical model of care (Oelke et al., 2014), a handful of studies discuss how PHC nurses support, in varying degrees, preventative care and health promotion in their practice (Allard et al., 2010; Beaudet et al., 2011; Borgès Da Silva et al., 2018; Curnew & Lukewich, 2018; Fournier et al., 2021; Girard et al., 2017; Johnson et al., 2003; Lukewich et al., 2018; Poitras, Chouinard, Fortin, et al., 2018; Yuille et al., 2016).

Regarding preventative care, some PHC nurses support patients in reducing the risk of illness or diseases by educating patients on blood-borne and/or sextually transmitted diseases (Lukewich et al., 2018), counseling on immunizations (Poitras, Chouinard, Fortin, et al., 2018; Todd et al., 2007), administering vaccinations (Akeroyd et al., 2009; Allard et al., 2010; Lukewich et al., 2014), and facilitating or performing cancer screenings (Yuille et al., 2016).

PHC nurses also promote optimal health in their practice through the delivery of health education on healthy lifestyle behaviors (Al Sayah, Szafran, et al., 2014; Borgès Da Silva et al., 2018; Curnew & Lukewich, 2018; Girard et al., 2017; Lukewich et al., 2018). Specifically, studies indicate that PHC nurses report educating patients on behaviors related to diet, weight management, smoking behaviors, and/or physical exercise (Al Sayah, Szafran, et al., 2014; Borgès Da Silva et al., 2018; Lukewich et al., 2018).

Although PHC nurses may have a responsibility in performing health promotion and prevention activities, several studies suggest that there is a gap in nursing practice. For example, in the multiple case study conducted by Poitras, Chouinard, Fortin, and colleagues (2018), it was found that PHC nurses reported rarely delivering preventative care, as their scope of practice was often limited by organizational policies. In the same study, rather than administering vaccinations in-house, nurses often referred patients to external vaccination clinics. Similarly, in a cross-sectional study examining RN roles within family practice, residency training programs across Canada, Allard and colleagues (2010) found that less than eight percent of RNs report conducting breast cancer screenings, cervical screenings, or gynecologic exams despite these activities being within the RN's scope of practice. Beaudet and colleagues (2011) found that, PHC nurses reported that medical care was often prioritized over health promotion and prevention in the practice of PHC nurses due to limited time and resources. Nurse participants

also reported that their nursing practice rarely focused on addressing population-health and social determinants of health which are essential aspects of PHC that support optimal health (Beaudet et al., 2011). It has also been reported that PHC nurses prefer to have more opportunities deliver health education to patients (Todd et al., 2007). Although PHC nurses engage in a variety of health promotion and prevention practices, organizational environments and resources may limit their capacities to enact this role.

System Navigation

As PHC nurses have knowledge of the health system, they are well-equipped to support patients in accessing health services within or beyond the PHC setting (Al Sayah, Szafran, et al., 2014). A handful of studies discuss the role of PHC nurses in supporting patients navigate the healthcare system (Al Sayah, Szafran, et al., 2014; Feather et al., 2017; Poitras, Chouinard, Fortin, et al., 2018; Ritvo et al., 2015; Yuille et al., 2016). Generally, in nursing practice, this may involve educating patients on acquiring (e.g., asking for services) or reaching health services (e.g., providing directions) (Poitras, Chouinard, Fortin, et al., 2018). Two studies also discussed the emerging roles of PHC nurses as system navigators. For example, Ritvo and colleagues (2015) examined the effectiveness of a nurse navigator intervention across 21 PHC practices in northern Ontario to support the uptake of colorectal cancer screening among individuals 50 to 74 years of age. In this randomized control trial, nurse navigators supported participants in selecting and completing their preferred screening method (i.e., colonoscopy or stool blood test). This study found a significant difference in the uptake of colorectal screening among those supported by the nurse navigator (35%) compared to those not followed by the navigator (20%).

In another study utilizing RNs, Feather and colleagues (2017) sought to understand the experiences of clients supported by a nurse navigator program at a community centre (attached to a PHC clinic and social services) in southern Ontario. The role of the nurse navigator was previously implemented to address unmet needs of community members residing in a priority neighborhood with high socioeconomic needs (Feather et al., 2017). Using a qualitative, narrative inquiry approach, participants discussed how the nurse navigator fostered opportunities to develop a therapeutic relationship and holistically assessed needs through informal conversation (Feather et al., 2017). Following, nurse navigators promoted health care access for community members by connecting and navigating health and social resources, accommodating barriers (e.g., financial, language, literacy), and advocating for physically accessible resources within the community (Feather et al., 2017).

These studies (i.e., Feather et al., 2017; Ritvo et al., 2015) show that PHC nurses have the potential to be effective navigators in supporting patients to access health care within an isolated and complex system. However, considering the limited number of studies discussing this topic, further research in this area is needed to examine how PHC nurses support system navigation within their day-to-day practices within PHC settings.

Case Management

Several studies report the designated role of PHC nurses in case management which is a systematic approach to the planning and delivery of coordinated care to manage complex illnesses or diseases (Borgès Da Silva et al., 2018; Girard et al., 2021; Hudon, Bisson, et al., 2023; Hudon, Chouinard, et al., 2023; Karam et al., 2023; Selfridge et al., 2020). As PHC nurses often have pre-existing relationships with patients and knowledge of health resources and complex conditions, they have the clinical expertise to act as case managers (Hudon, Chouinard,

et al., 2023). Although there are various approaches to case management, the studies included in this review typically described the nurses' role as (1) assessing the patient, (2) developing an individualized care plan, (3) coordinating care, and/or (4) delivering education and self-management support (Borgès Da Silva et al., 2018; Hudon, Bisson, et al., 2023; Hudon, Chouinard, et al., 2023; Karam et al., 2023; Selfridge et al., 2020). Case management programs have also been tailored to meet the needs of various populations, including frequent users of health care services (Hudon, Bisson, et al., 2023; Hudon, Chouinard, et al., 2023; Karam et al., 2023), patients diagnosed with physical or mental health conditions (Girard et al., 2021) or Alzheimer's disease (Karam et al., 2023), and males seeking pre-exposure prophylaxis (Selfridge et al., 2020).

Depending on the context and population served, PHC nurses engage in case management activities to varying degrees. In a qualitative, multiple case study, Girard and colleagues (2021) examined the factors that influenced case management practices among PHC nurses when delivering care to patients with chronic diseases and mental health disorders among three multidisciplinary PHC clinics in Quebec. PHC nurses reported, to varying degrees, conducting patient assessments, using validated screening tools to assess for mental health conditions, facilitating referrals (e.g., social work, rehabilitation, mental health), coordinating care to ensure access to tailored services, engaging with patients, conducting follow-ups, supporting self-management of the condition, and delivering or monitoring mental health interventions (Girard et al., 2021). Multiple factors influenced the degree to which nurses could perform these responsibilities, including a clear care plan and goals, clear role and responsibilities of each interdisciplinary team member, and access to mental health services within and beyond the clinic (Girard et al., 2021). In contrast, two studies discuss the limited

involvement of PHC nurses in case management. For example, using a web-based survey, Poitras, Chouinard, Gallagher and colleagues (2018) found that PHC nurses practicing in Quebec reported infrequently engaging in case management, such as individualized care planning and coordinating care beyond the PHC setting. Similarly, a qualitative description study by Ziegler and colleagues (2021) found that PHC nurses delivering transgender care in Ontario did not report participating in case management activities. However, it is important to consider the context to which PHC nurses practice, as it may enable or create barriers for nurses to perform specific roles and responsibilities based on their scope of practice, including case management.

The delivery of case management can also be tailored to meet the needs of specific populations served. In a qualitative case study conducted in Quebec, Karam and colleagues (2023) compared activities of two nurse case manager programs designed for frequent users of the healthcare system and patients diagnosed with Alzheimer's disease. Both programs were found to have similar core activities, such as patient assessment, developing individualized care plans, providing self-management support, and connecting patients to appropriate services. However, the specific activities undertaken by case managers were tailored according to the goals of the care plan. For example, the Alzheimer's program focused on early detection, diagnosis, and treatment of the disease, including accessing specialized resources, while supporting the mental and social needs of the individual and their caregivers. In comparison, the course of care for frequent users was tailored to the unique needs and goals of the individual.

In another study, Selfridge and colleagues (2020) examined a nurse-led pre-exposure prophylaxis case management program offered by a community health clinic in British Columbia. Nurses were involved in screening for prophylaxis eligibility, reviewing health history, facilitating and reviewing lab work, providing prophylaxis education, coordinating

24

prescriptions with physicians, conducting follow-up lab work and assessments, and following-up on patients regarding appointment absences. Study findings showed that, of the 124 patients enrolled in the program, 99 patients (~80%) remained on pre-exposure prophylaxis for six or more months. Further, almost 95% of patients who remained on pre-exposure prophylaxis continued to access prophylaxis treatment at the community health clinic. These study findings demonstrate the potential effectiveness of nurse case managers in not only promoting access to preventative health care but also in improving health outcomes for this population (Selfridge et al., 2020). Overall, these studies show that PHC nurses promote access to tailored and coordinated services through case management to address the complex health needs of various populations provided that contextual factors promote their role enactment.

Serving Marginalized Populations

Although PHC nurses deliver health care to marginalized populations, unfortunately no studies discussed the role of PHC nurses in delivering care or promoting access to immigrant populations. However, two studies examined the unique role of PHC nurses in delivering care to transgender patients within Ontario. The role of PHC nurses in transgender care involve participating in patient assessments, providing education and administering hormones and immunizations, and supporting illness prevention (Ziegler, 2021; Ziegler et al., 2020). PHC nurses also promote culturally appropriate care for their transgender patients by creating a safe and inclusive environment throughout the PHC organization, including the integration of genderneutral options (e.g., washrooms, health-related forms), respecting preferred gender, names and pronouns, and participating in transgender care training (Ziegler, 2021). Further research is needed to understand how PHC nurses deliver care in a manner that meets the unique needs of marginalized populations.

Optimization of the PHC Nursing Role

Across several studies included in this review, there is a general consensus that there are opportunities to optimize the role of PHC nurses in practice settings (Akeroyd et al., 2009; Allard et al., 2010; Lukewich et al., 2014; Lukewich et al., 2015; Oelke et al., 2014; Todd et al., 2007; Yuille et al., 2016; Ziegler et al., 2020; Ziegler, 2021). This may be, in part, due to the limited scope of practice of nurses as a result of lack of clarity regarding the roles, responsibilities, or scope of PHC nurses as understood by stakeholders and/or health professionals, including nurses (Akeroyd et al., 2009; Lukewich et al., 2014; Oelke et al., 2014; Todd et al., 2007). For example, the study conducted by Allard and colleagues (2010) found that just over 60% of RN participants reported having a clear description of their nursing role and, in addition, practicing to their complete legislated scope of practice. Similarly, a cross-sectional study conducted by Lukewich, Edge, and colleagues (2014) found that 40% of Ontario nurses report not having clearly defined work responsibilities and almost one quarter report performing tasks above their legislated scope of practice.

Regarding preventative care, Allard and colleague's (2010) study showed that only 47% of RNs reported that conducting gynecological screenings (e.g., pap smears) were within their scope of practice. This is consistent with Todd and colleagues' (2007) study which noted that several nurses who participated in the study were unaware of available provincial guidelines or that conducting pap smears was within their scope of practice. These findings show that the contributions of PHC nurses to the delivery of PHC may not always align with the broader potential scope of practice associated with RN competencies.

Several factors may contribute to the issue of poor role optimization of PHC nurses.

Members of the interdisciplinary team (e.g., clinical managers, physicians) may perceive that the

26

PHC nursing role is defined by and/or limited to clinical tasks (Akeroyd et al., 2009; Oelke et al., 2014). Further, in the case that the full role or scope of practice is recognized, the context of organisations may inhibit PHC nurses in practicing to their full scope (Lukewich et al., 2015). Nurses have previously reported organisational barriers as limited continuing education opportunities (Allard et al., 2010; Lukewich et al., 2015; Todd et al., 2007), insufficient resources or staffing (Lukewich et al., 2015; Todd et al., 2007; Oelke et al., 2014), or lack of medical directives (e.g., ordering diagnostic tests or medications) (Lukewich et al., 2015). In a case study by Oelke and colleagues (2014), participants reported system and organisational barriers that included fee-for-service funding models, limited job descriptions and practice guidelines, limited access to electronic patient charts, and lack of previous PHC education. Other studies have indicated that poor understanding of the PHC nurse role or lack of trust among physician or interdisciplinary members' act as a barrier in PHC nurses effectively fulfilling their role (Akeroyd et al., 2009; Al Sayah, Szafran, et al., 2014; Allard et al., 2010; Fournier et al., 2021; Johnson et al., 2003; Oelke et al., 2014; Todd et al., 2007; Yuille et al., 2016).

Only two studies explicitly described the perceptions of PHC nurses regarding how their role could be optimized. In the study by Lukewich and colleagues (2015), PHC nurses reported that collaborating with the multidisciplinary team (e.g., physicians, HCPs) and continuing education opportunities would contribute to role enactment. Yuille and colleagues (2016) discussed enhancing their PHC nurses' roles in cancer survivorship care by continuing education opportunities and access to appropriate resources (e.g., time, evidence-based tools or guidelines, workload). As 15% of individuals residing in Ontario do not have access to a regular PHC provider due to the shortage of PHC providers, individuals may have limited access and barriers to essential health care (Innovations Strengthening Primary Health Care Through Research,

2022; Ontario College of Family Physicians, 2023). For that reason, PHC nurses practicing to their full scope could support opportunities for individuals, including those who face significant barriers, to receive the health care they need to maximize their health. Efforts should be made to further understand the facilitators that should be implemented to effectively utilize the competencies of PHC nurses in practice.

Literature Gaps

In the reviewed literature, PHC nurses fulfill their responsibility of promoting healthcare access by assessing patient needs and addressing these needs through planning and coordinating care, managing complex health conditions, promoting and preventing health, and navigating the system. However, given the variability in health systems across provinces in Canada, the findings of these studies may not be transferable to PHC RNs practicing in Ontario due to the context and populations investigated. For example, regulatory nursing bodies and legislation vary between provinces, which impact the practice of PHC RNs and their delivery of care (e.g., scope of practice, best practice guidelines, PHC models of care). Further, many studies examined the practices of PHC nurses either generally (i.e., registration class of participants not reported) or across two or more registration classes (i.e., RN, RPN, or NP) which have varying scope of practices and competencies. Only eight studies explicitly reported findings on the practices of PHC RNs. It is also important to note that only two studies (i.e., Ziegler, 2020; Ziegler et al., 2021) sought to describe the role or activities of PHC nurses delivering PHC to a marginalized population (i.e., transgender population). Considering the unique challenges and barriers experienced by recent immigrants, the findings of the reviewed studies are also likely not transferable to PHC RNs as they support recent immigrants in accessing health care. No studies

identified through this review explicitly aimed to examine how PHC RNs promote healthcare access for the immigrant population.

To the best of the student investigator's knowledge, no Canadian studies have explored the perspective of PHC RNs to understand how they deliver care to promote healthcare access for their patients, including recent immigrants, despite the significant role they play in the delivery of PHC. Therefore, there is a gap in literature that explores how PHC RNs facilitate healthcare access and address barriers when engaging with recent immigrants. Considering the competencies outlined by the *Canadian Family Practice Nurses Association* (2019), there is opportunity to leverage the potential skills, knowledge, and expertise of PHC RNs to improve healthcare access for these immigrants within a fragmented healthcare system. Research on this topic can help to inform nursing practice by better understanding how PHC RNs are currently fulfilling this role and opportunities to enhance PHC RNs' roles to meet the needs of this population. As approximately 40% of recent immigrants in Canada settle in Ontario (Government of Canada, 2017), optimizing the role of PHC RNs working in Ontario has significant potential to support equitable access to appropriate and timely care for recent immigrants.

Study Purpose

The aim of this study was to explore how PHC RNs working in PHC settings facilitate healthcare access among recent immigrant adults (≤10 years since immigration; ≥18 years of age) in Ontario.

Research Questions

How do PHC RNs working in PHC settings facilitate healthcare access among recent immigrants (≤10 years since immigration; ≥18 years of age) in Ontario?

- a. How do PHC RNs working in Ontario address barriers to healthcare access experienced by recent immigrants?
- b. How does facilitation of healthcare access by PHC RNs working in Ontario differ for recent immigrants based on immigration status (i.e., refugee, economic-class, familysponsorship)?
- c. How can the PHC RNs role in Ontario be optimized to facilitate healthcare access, including PHC, for recent immigrants?

Position Statement

In qualitative research, as researchers act as the "instrument" (Thorne, 2016, p. 70), they must locate their disciplinary position to account for the influence of their worldview, experiences, and perspectives on the process of inquiry (Parson, 2019; Thorne, 2016). I, the student investigator, conducted this research as part of the fulfilment of a Master of Science at McMaster University within the School of Nursing. At a young age, I witnessed how my mother, a first-generation Chinese immigrant, faced adversities as she battled a late-stage diagnosis of breast cancer. Over a decade later, as I was in my undergraduate education to become an RN, I only later realized how the barriers to healthcare access contributed to her delayed diagnosis and treatment of breast cancer. From my perspective, these barriers included low health literacy levels, lack of information on provincial breast cancer screening guidelines, and differences in language with healthcare providers.

As an RN, I have over three years of nursing experience in different fields (e.g., long-term care, acute care, public health) and am currently practicing on a medicine-oncology unit. In my nursing experience, factors such as fragmented health services, scarce time with patients, and heavy workloads are organizational barriers that limit nurses' ability to promote healthcare access for patients across the health system. I recognize my position as a healthcare system insider as a RN and that my previous nursing and personal experiences may influence the process of collecting and interpreting study findings. The study was designed in a manner to generate findings that were authentic to the participants' perspectives, including strategies to promote credibility which will be discussed later.

CHAPTER THREE: METHODOLOGY

Chapter Overview

A qualitative interpretive descriptive (ID) study design (Thorne, 2016) was used in this study. This chapter will justify the research design and theoretical framework used in this study. Following, the chapter will describe the application of ID methods as they relate to the study setting, sampling and recruitment, and data collection, management, and analysis. The chapter will also discuss the criteria and strategies utilized to promote credibility and conclude with ethical considerations.

Study Design

A qualitative study design using ID methods was used to conduct this study. Through naturalistic inquiry and a constructivist paradigm, ID studies attend to the variations of subjective experiences of individuals while recognizing that multiple, complex realities exist (Thorne, 2016). ID study designs aim to characterize a clinical phenomenon through the interpretation of participant perspectives for real-life application in clinical contexts (Thorne et al., 2004). An ID design helped to achieve the study purpose by investigating the unique experiences of PHC RNs in facilitating access to healthcare among immigrants and producing findings that inform PHC practice as it relates to the nursing discipline.

Patient-Centered Access to Health Care Framework

The *Patient-Centered Access to Health Care* framework (Levesque et al., 2013) was applied to the research process to inform data collection, analysis, and reporting of findings. This framework was developed through a synthesis of previous literature that conceptualizes healthcare access (Levesque et al., 2013). In this framework, the phenomenon of access is

characterized by a sequence of phases which include health care needs, perception of needs and desire for care, health care seeking, health care reaching, health care utilization, and health care consequences (Levesque et al., 2013). On a systemic level, the framework outlines the dimensions that influence access which consist of approachability, acceptability, availability and accommodation, affordability, and appropriateness (Levesque et al., 2013). On an individual level, the framework also identifies the dimensions that enable an individual to access health care, including the ability to perceive, seek, reach, pay, and engage (Levesque et al., 2013). In this framework, access is conceptualized as a series of phases, and an individual may experience barriers and facilitators when progressing through the phases (Levesque et al., 2013). The application of this framework supported the exploration of how PHC RNs facilitate access for immigrants through each phase while considering the unique individual and systemic factors that influence the process of accessing health care.

Study Setting

In Ontario, a majority of the immigrant population (85%) reside in Toronto, Ottawa-Gatineau, Hamilton, Kitchener-Cambridge-Waterloo, and London (Statistics Canada, 2022). As these are the top five census metropolitan areas (CMA) in Ontario with the largest immigrant population, conducting the study in these CMAs supported the recruitment of diverse PHC RNs who frequently engage and have wide-ranging experiences with this population.

Sampling & Recruitment

The study sample was composed of PHC RNs working in PHC settings in the identified CMAs. This study sample helped to yield findings that may be valuable to clinical practice settings that serve large proportions of immigrant populations. The following section discusses

the inclusion and exclusion criteria, sampling methods, and recruitment strategies used to recruit PHC RNs who could provide information-rich data to answer the research questions.

Inclusion & Exclusion Criteria

Inclusion Criteria. The study recruited PHC RNs who practiced in a variety of PHC practice models (e.g., CHCs, FHTs, NP-led clinics) to explore how the PHC RN role can be optimized to facilitate healthcare access in various practice settings. RNs with current registration with the *College of Nurses of Ontario* were eligible to participate in the study if they were practising full-time or part-time hours and had at least one year of experience providing direct nursing care in a PHC setting within Toronto, Ottawa-Gatineau, Hamilton, Kitchener-Cambridge-Waterloo, or London. Further, RNs must also have had experience working with immigrant populations. These pre-determined criteria helped to ensure recruited RN participants had sufficient PHC practice experience within the clinical context and could offer a rich description of their role in healthcare access as it relates to recent immigrants.

Exclusion Criteria. RNs who delivered care outside of PHC settings (e.g., outpatient clinics, home care) were not eligible to participate, as these settings are not considered the first point of contact of the healthcare system. RNs who had previously worked in PHC settings but only outside of Ontario were ineligible to participate, as the entry-to-practice competencies, standards of practice, and delivery of PHC vary by province or territory depending on the body of authority. Further, the delivery of PHC changed during and following the onset of the coronavirus pandemic in 2020, such as the adoption of virtual care in practice (Tu et al., 2022). Therefore, to account for these changes and its impact on facilitating healthcare access in the context of PHC, RNs who previously worked in PHC but were currently working in a non-PHC role or setting were excluded.

Sampling Methods

Thorne (2020) suggests using purposeful sampling to recruit key informants with diverse experiences to understand the distinct variations of the phenomenon experienced by participants. As researchers deliberately select participants with relevant experiences, purposeful sampling methods were applied to help recruit participants who had an in-depth understanding of the phenomenon of interest (Bassil & Zabkiewicz, 2014). To support purposeful sampling, snowball strategies were used, whereby the recruited participants were asked to identify others in their social network who share similar features or characteristics (Bassil & Zabkiewicz, 2014). Snowball sampling was utilized by using the social networks of recruited participants and will be described in the following section. This strategy has been shown to be an effective and cost-efficient method to recruit nurses (Chambers et al., 2020). These sampling methods supported data collected through the recruitment of PHC RNs that were key informants who had rich knowledge and understanding of facilitating healthcare access for recent immigrants.

Recruitment Strategies

To recruit PHC RNs working in Ontario, a recruitment flyer consisting of the (a) sample population, (c) study procedure, and (d) contact information was used (Appendix B). The flyer advertised flexible scheduling of interviews (e.g., evenings and weekends), as fixed schedules have been reported to be a logistical barrier to the recruitment of nurses (Broyles et al., 2011; Webber-Ritchey et al., 2021), Disseminating recruitment flyers through email and social media (e.g., Facebook, Instagram, Twitter) have been shown to be an efficient and cost-effective strategy to recruit a nurses for qualitative studies (Webber-Ritchey et al., 2021). Further, professional associations and interest groups are trusted conduits among the nursing community (Ngune et al., 2012). Therefore, the recruitment flyer was disseminated via email and social

media through existing nursing networks, including professional associations, interest groups, and the professional network of research team members. To support snowball sampling, the student investigator also shared the recruitment flyer with recruited participants to disseminate within their social network. Lastly, participants received a \$20 Presidents Choice gift card following completion of the interview to promote recruitment of nurses and for recognition of their time (Broyles et al., 2011). This participation incentive was shared on the recruitment flyer. Although an honorarium may implicitly coerce participants into taking part in the study (Resnik, 2015), the amount is an appropriate incentive to facilitate recruitment without promoting coercion.

Prior to conducting the study, the *Primary Care Nurses of Ontario* (PCNO), *Association of Family Health Teams of Ontario* (AFHTO), and *Nursing Research Interest Group* (NRIG) were professional associations or interest groups that were identified as nursing networks who could potentially support with the recruitment process. Prior to receiving ethics approval from the *Hamilton Integrated Research Ethics Board* (HiREB), HiREB requested for the student investigator to receive feedback on the proposed recruitment strategy from these nursing networks. Between January to February 2023, the PCNO, AFHTO, and NRIG provided feedback on the recruitment strategies and provided written agreement to support with recruitment through the dissemination of the flyer to members within their network. In March 2023, ethics approval from HiREB was received prior to commencing recruitment. During the initial period of recruitment, the PCNO, AFHTO, and NRIG disseminated the recruitment flyer to their members. The student investigator emailed a copy of the recruitment flyer and captions to these nursing networks (Appendix C) and the networks disseminated the flyer through the following platforms: AFHTO via their e-newsletter, PCNO via email and Facebook page, and NRIG via Twitter and

Facebook. During this time, the research team members also disseminated the recruitment flyer via email and social media within their professional networks.

In June 2023, following the initial recruitment period, 6 PHC RNs were enrolled in the study which did not meet the target sample size of 8-12 PHC RNs. As originally planned, the student investigator contacted the PCNO, AFHTO, and NRIG to request that the organizations re-distribute the recruitment flyer to their members. The PCNO re-distributed the flyer to their members via Facebook and AFHTO via their e-newsletter. The student investigator also contacted relevant professional associations and interest groups to request their support with recruitment. In July 2023, 2 additional PHC RNs were enrolled in the study. To meet a sufficient sample size, the student investigator contacted individual CHCs and NP-led clinics in the identified CMAs to request their support with recruitment. These recruitment strategies were carried out until a sufficient sample size was achieved which will be discussed later.

Sample Size

Thorne (2016) indicates that ID designs are generally conducted using small sample sizes (e.g., 5-30 participants); however, nearly any sample size can be used with sufficient reasoning. The sample size target range was selected to promote financial and logistic feasibility of the study based on the scope of a Masters-level dissertation. Therefore, based on the smaller end of the range mentioned by Thorne (2016), the study aimed to recruit 8-12 participants across the identified CMAs.

During data collection and analysis, sampling and recruitment was concluded in August 2023 when sufficient information power was achieved following recruitment of 10 PHC RNs.

Information power indicates that additional recruitment of participants is not required when the

sampled participants provide valuable and relevant information that can answer the study question (Malterud et al., 2016). Information power is dependent on various factors, including the study purpose, specificity of sample participants who belong to the population of interest, amount of existing theoretical knowledge, quality of data generated from interviews, and/or data analysis strategies (Malterud et al., 2016). Information power was generated through the recruitment of information-rich participants across a wide-range of PHC settings (i.e., CHC, FHT, NPLC) with in-depth interview dialogue to support cross-participant analysis with variation of results. Further, the preliminary analysis of the data and existing theoretical knowledge provided sufficient information to answer the research questions. Considering clinical phenomena are complex and involve constant discovery of new variations (Thorne, 2016), sufficient information power was generated through the 10 recruited PHC RNs and provided justification for the final sample size. A meeting was conducted with the student investigator and supervisory committee members (R.G., O.W., M.N.) to justify the final sample size; all committee members were in agreement to conclude recruitment.

Data Collection

Data collection was conducted between mid-April to mid-August of 2023. Data was collected from 10 eligible and consenting PHC RN participants through semi-structured interviews and demographic questionnaires. No participants withdrew from the study following completion of the semi-structured interview and demographic questionnaire.

Interested PHC RNs contacted the student investigator via email. The student investigator responded with a follow-up invitation email (Appendix D) to arrange a date and time to (a) complete eligibility screening, (b) receive consent, and (c) conduct the semi-structured interview. The scheduled meeting was expected to last approximately 75 minutes. In this email, the student

investigator also provided a copy of the Letter of Information/Consent Form (Appendix E), recruitment flyer, and the Zoom meeting invite URL (if applicable). The student investigator encouraged the interested participant to review the Letter of Information/Consent form prior to the scheduled meeting. The student investigator also encouraged the PHC RN to share the recruitment flyer with any individuals within their social network who may have been eligible and interested in participating in the study. The time and date of interviews were based on the availability of the PHC RN and were generally scheduled during the daytime when the participants had downtime during their work shift or when they were not scheduled to work. Some interviews were scheduled during the evening following their work shift. Participants received a reminder email and copy of the interview guide (without the probes) 48 hours before the meeting.

During the scheduled meeting, the student investigator discussed the eligibility criteria, study purpose, and outlined details of the Letter of Information/Consent form using a script (Appendix F). The student investigator informed the potential participants that the study was being conducted as a partial fulfilment of a Master of Science at McMaster University with the School of Nursing. Potential participants also had the opportunity to ask questions regarding the study and/or participation. If the potential participant was eligible and interested, the student investigator received verbal consent for participation in the study and for the interview to be audio-recorded. The student investigator then conducted the interview with the participant which will be discussed in the following section.

Semi-Structured Interviews

Semi-structured interviews were used to elicit the subjective experiences of PHC RNs in facilitating healthcare access among recent immigrants. Semi-structured interviews involve an

interview guide (Appendix G) with open-ended questions to inform and promote the interviewer-participant dialogue (Kallio et al., 2016). Semi-structured interviews were an ideal data generation tool for interviewers, as they explored the complexities and variations of a phenomenon through in-depth dialogue with the PHC RNs (Thorne, 2020). This type of interview also offered flexibility for the interviewer to elaborate or clarify codes and patterns following the initial stages of data analysis and interpretation of findings (Thorne, 2016).

The interview guide was developed based on the literature review, theoretical framework (i.e., Levesque et al., 2013), and feedback from the supervisory committee members. Prior to conducting the study, the interview guide was pilot tested by the student investigator with one PHC RN, a non-participant, to verify question clarity and generation of data that is relevant to the study purpose (DeJonckheere & Vaughn, 2019). The interview guide was revised by the student investigator and the final interview guide was reviewed by the lead principal investigator (R.G.). Further, as the student investigator was a new researcher with no experience in conducting interviews and data analysis, the lead principal investigator observed the pilot interview and provided feedback on the student investigator's interviewing skills. Following initial data analysis, the student investigator and lead principal investigator included additional probes to the interview guide based on specific codes or patterns that required further inquiry or clarification.

The semi-structured interviews were conducted by the student investigator with each participant (1:1) via Zoom, through a McMaster University subscription, or phone as requested by the participant. Zoom is an externally hosted cloud-based, video conferencing platform and has features such as password-protected meetings, user- and session-specific authentication, encrypted meetings, and secure recording and storage of sessions (Zoom Video Communications

Inc. [Zoom], 2016). The use of video conferencing was to accommodate for unforeseeable changes to institutional or public health policies regarding the coronavirus pandemic. Although in-person interviews could have enabled interviewers to observe non-verbal cues such as body language (Archibald et al., 2019), video conferencing was a cost-effective, convenient, and user-friendly platform to conduct interviews with participants who were geographically dispersed (Gray et al., 2020). Video conferencing also allowed participants to select a familiar and comfortable environment when participating in the interview which fostered trust and openness when sharing their experiences (Gray et al., 2020). Lastly, video conferencing has been found to establish better rapport between the researcher and participant compared to non-visual platforms such as telephone (Archibald et al., 2019).

Six interviews were conducted by Zoom and three interviews by phone. One interview was originally planned to be conducted by phone; however, due to cell phone connection issues shortly following the start of the interview, the participant agreed for the remainder of the interview to be completed by Zoom. Only one interview had a small unplanned interruption due to network issues. All interview sessions lasted between 50-75 minutes and were audio-recorded using Audacity and a physical voice recorder. During the interview, the student investigator wrote key notes in a field journal as reference points for discussion during the interview and data analysis (Thorne, 2016). As advised by Thorne (2016), the student investigator also used openended questions for participants to elaborate on experiences, such as "Can you tell me more about..." or "Can you share with me..." The student investigator also avoided using value-laden prompts that may suggest to participants that specific responses are favoured while others may not be to the same degree (Thorne, 2016).

Demographic Questionnaire

The demographic questionnaire (Appendix H) was electronically administered using Microsoft Forms, which is a free, web-based platform to create and share electronic surveys (Microsoft, n.d.). The purpose of the questionnaire was to gather sufficient details of the sampled population to determine if findings are transferable to other populations, settings, or contexts (Krefting, 1991; Shenton, 2004). Following the semi-structured interview, the student investigator sent a follow-up email (Appendix I) to thank the PHC RN for their participation in the study and share the demographic questionnaire URL. In the email, the student investigator requested that the questionnaire be completed within 48 hours of receiving it. All 10 participants completed the electronic demographic questionnaire following the interview. These data collection strategies supported the generation of rich and meaningful data to support the exploration of the perspectives of PHC RNs. Honorariums were emailed to participants following completion of the demographic questionnaire.

Data Management

All study data and files were in an electronic format. Data collected from the semi-structured interviews were imported and stored on NVivo (version 12), a data management software. NVivo is a software program that stores and organizes text data to support qualitative data analysis (Jackson & Bazeley, 2019). The software included several features, including data encryption to securely store data in a centralized storage space and organization of codes and cases for analysis (Qualitative Solutions and Research, 2014). The NVivo project files were password-protected to promote data security.

All additional study files, including demographic data, were electronically stored on SharePoint, operated by Microsoft 365, through a McMaster University subscription. SharePoint

is an external, cloud-based platform that allows users to securely access, store, and share documents with others (T. Smith, 2016). Only the student investigator, lead principal investigator, and supervisory committee members had access to the study's SharePoint site through multi-factor authentication. All project data was regularly backed-up using two methods to reduce the risk of data loss: (1) an encrypted folder using MacDrive, a private cloud-based server hosted by McMaster University (n.d.-a), and (2) a password-protected laptop.

Audio-recordings of interview sessions were stored on SharePoint. Audio-recordings were transcribed using a third-party transcription service, Transcription Plus Inc., to capture and analyze the interview dialogue. A denaturalized approach to transcription was used which refers to the removal of "idiosyncratic elements of speech (e.g., stutters, pauses, nonverbals, involuntary vocalizations)" (Oliver et al., 2005, pp. 1273–1274). Although these elements may have provided insight on the tone or meaning of the interview dialogue (Oliver et al., 2005), a denaturalized approach helped to ensure the amount of data provided in the transcripts were manageable for data analysis and the scope of the research study. Further, although financially expensive, the use of a transcriptionist was an efficient and timesaving method (M. Smith & Bowers-Brown, 2010). The audio-recordings and transcripts were securely transferred between the research team and the third-party transcription service using SecureDocs, an online delivery service. SecureDocs (n.d.) offered security measures, such as full encryption and audit tracking of user access, to safeguard the data. Following transcription, the student investigator reviewed the transcripts against the audio-recordings to verify accuracy of the transcriptions, remove any identifying information, and engage in the interview data. Audio-recordings were deleted following verification of the transcriptions, as they may contain identifiable information of the participants.

To protect participant identity, participants were given a unique identification number, and all respective data or files were coded or labelled with this unique number. A study key (Appendix J) was used to link the participants' identity to their unique identification number and included the participants' contact information. The study key was stored in an encrypted (i.e., password-protected file) document on SharePoint. Further, to mitigate the risk of breaches in privacy and confidentiality related to personally identifiable information, immediately following transcription, the student investigator cleaned the transcriptions, removed any personally identifiable information, and replaced this information with generic identifiers (Thorne, 2016). Following completion of the study, study files with identifiable information (i.e., study key) were deleted immediately. An archive of the data will be maintained for three years on a password-protected laptop. Following, the archived data will be deleted from the laptop and the operating system of the laptop will be updated. Protecting the privacy and confidentiality of participants was a main priority in the management of data.

Data Analysis

Descriptive statistics of demographic data was analyzed using Microsoft Excel. Excel is a spreadsheet software that simplifies the data analysis process for datasets (Divisi et al., 2017). The frequency and frequency percentage were calculated for ordinal and nominal data. The mean and range (i.e., maximum and minimum values) were calculated for continuous data.

A deductive approach was guided using a coding frame based on the study's theoretical framework (i.e., Levesque et al., 2013) to develop dimensions. It should be noted that 'patterns,' rather than themes, is consistent with Thorne's (2016) terminology. The coding frame (i.e., coding label, definition, and how to apply) was developed prior to data analysis (Boyatzis, 1998; Braun & Clarke, 2021) (Appendix K). The coding frame was developed based on the theoretical

framework and was reviewed by the lead principal investigator for feedback prior to conducting data analysis. Simultaneously, an inductive analytic approach was also applied during data analysis to investigate the dataset beyond the coding frame to produce a meaningful interpretative description (Thorne et al., 2004).

As data analysis is an iterative process, approaches included *concurrent data generation* and analysis (CDGA) and constant comparative analysis (CCA) (Thorne, 2016; Thorne et al., 2004). CDGA refers to the researcher moving between the two stages simultaneously; whereby, evolving patterns during data analysis can be confirmed, clarified, or elaborated in subsequent interviews (Thorne, 2016). Data collection, or semi-structured interviews, were conducted simultaneously during data analysis. The CCA approach refers to the comparison of a data section with the rest of the dataset to investigate similarities and differences (Glaser & Strauss, 1967; Thorne, 2016). Although CCA is typically used for theory development, a CCA approach helped to establish properties of a phenomenon (B. Glaser, 1965) or, in other words, the variations of a phenomenon as it related to the ID methodology. As outlined by Braun and Clarke's (2021) framework, the data analysis process that was employed by the student investigator is explained in the following section.

Phase 1: Engaging and Familiarizing with the Data

During phase one, the student investigator familiarized themselves with the whole dataset by repeatedly reviewing the textual data (Braun & Clarke, 2021; Thorne, 2016). When verifying the accuracy of the transcript following transcription, the student investigator listened to the audio-recording once to immerse in the data. Following, the student investigator engaged in the dataset by reading the transcript at least three times prior to coding

the data. The student investigator recorded electronic memos of initial reactions, observations, and questions for review or reference during the research process (Braun & Clarke, 2021; Thorne, 2016).

Phase 2: Coding

During phase two, an open coding strategy was employed where the student investigator independently divided lines of data into segments and labelled the segments with broad-based, preliminary codes using a deductive (i.e., coding frame) and inductive approach (Thorne, 2016). The preliminary codes were not labelled with excessive detail, as Thorne (2016) suggests this can limit the potential meaning of the findings. In accordance with CCA, when developing these codes, the data segments were compared with previously coded data to reveal emerging relations between codes (Glaser & Strauss, 1967; Thorne, 2016). Lastly, relevant segments were sorted and grouped together based on the coding frame (i.e., dimensions) (Braun & Clarke, 2021; Thorne, 2016). Following preliminary analysis of interviews, the student investigator and lead principal investigator met to review and revise the preliminary naming and groupings of codes (Krefting, 1991).

Phase 3: Generating Initial Patterns

Once all the data segments were broadly coded and grouped, connections between codes were identified and categorized, also known as axial coding, to begin constructing preliminary patterns (Thorne, 2016). In accordance with CCA, the data segments were constantly compared to preliminary patterns to identify similarities and differences and begin making sense of the conceptual phenomenon (Glaser & Strauss, 1967; Thorne, 2016).

Phase 4: Developing and Reviewing Patterns

Phase four involved the lead principal investigator and student investigator collaboratively developing and refining the codes and patterns to ensure clarity and coherence (Braun & Clarke, 2021). Following, a similar step was conducted across the whole dataset to ensure patterns are coherent within the analytic structure (Braun & Clarke, 2021; Thorne, 2016). A conceptual structure (i.e., Table 3) outlining the dimensions and patterns were developed to support this process (Thorne, 2016).

Phase 5: Refining, Naming, and Defining Patterns within the Dimensions

In this phase, the core concepts (i.e., dimensions) were defined based on the coding frame (i.e., theoretical framework) (Braun & Clarke, 2021; Thorne, 2016). The minor groupings (i.e., patterns) were assigned conceptual names, to begin articulating and give meaning to the conceptualized phenomenon (Thorne, 2016). The final naming of the patterns were reviewed by the supervisory committee members (R.G., O.W., M.N.) and agreed upon by all members.

Phase 6: Writing the Report

In the final phase, the conceptual description of the phenomenon was produced in the form of a written report supported by evidence of extracted data segments (Thorne, 2016; Thorne et al., 2004). In the written report, the study findings, including dimensions and patterns were aligned with the theoretical framework (Levesque et al., 2013); however, new insights that could not be defined within the framework were also reported.

Credibility

Credibility of an ID study is of upmost importance should findings be applied within the clinical context (Thorne, 2020). Credibility refers to the integrity of the research findings

and is based on the principles of *epistemological integrity*, *representative credibility*, *analytic logic*, *and interpretive authority* (Thorne, 2016). Epistemological integrity is the reasonable justification of the research process as it relates to the study design and the epistemological position of the researcher (Thorne, 2016). Representative credibility is the extent to which the study findings are true representations of the perspectives and experiences of the sampled participants (Thorne, 2016). Analytic logic is the explicit reasoning of the decisions made during the research process (Thorne, 2016). Interpretive authority refers to the trustworthiness of the interpretations and claims of the study findings (Thorne, 2016).

Several strategies were applied to fulfill these criteria and promote credibility. Specifically, reflexivity is the engagement in self-assessment to build awareness of the assumptions, thoughts, and biases that can influence the research process, including data generation and analysis (Finlay, 2002). To promote epistemological integrity and analytic logic, reflexivity was employed during all phases of the research study by the student investigator through the use of a field journal to record study schedules, analytic memos, logistics (i.e., decisions and justifications), and personal reflections (Thorne, 2016). Credibility was also promoted through the strategies described in *Table 1*.

Table 1
Strategies to Enhance Credibility

Strategy	Research	Application of the Strategy
	Phase	
Epistemological Integrity		
Positionality	Start of	The student investigator provided a positionality statement
Statement	Research	to situate themselves with the research (e.g., participants and
	Process	study context), such as disciplinary orientation, insider-

		outsider position, and theoretical fore structure (Thorne, 2016).
Representative	Credibility	
Data source triangulation	Data collection and analysis	To gather a complete understanding of the phenomenon, data from the literature review, theoretical framework (i.e., Levesque et al., 2016), field journal, and memos were additional data sources to support the credibility of the analysis and study findings (Farmer et al., 2006).
Interview technique	Data collection	During the interview, the student investigator repeated or reframed participant responses with them to confirm that the meaning of the participant's experiences were accurately captured (May, 1991).
Analytic Logic	2	
Audit Trail	Entire Research Process	An audit trail was recorded in the field journals and consisted of detailed documentation of the researchers' decision-making process throughout all phases of the research process (Thorne, 2016).
Logical description of research process	Written report	The final written report of the study includes a logical and sufficient description of the research process (Burns, 1989; Thorne, 2016), as outlined by the COREQ guidelines (i.e., Tong et al., 2007) so that researchers can determine the credibility of the research methods and study findings (Thorne, 2016).
Interpretive A	uthority	
Peer debriefing	Entire research process	The student investigator and supervisory committee members held frequent debriefs to consider their expertise and perspectives, discuss data analysis decisions, examine logistical or methodological issues or decisions, and test interpretations (Guba, 1981; Shenton, 2004; Thorne, 2016).
Peer Examination	Data analysis	The student investigator independently analysed the interview data. The student investigator and lead principal investigator held frequent meetings to discuss interviewing strategies of the student investigator and to review and refine the preliminary coding of the data (Krefting, 1991).
Inquiry Audit	End of research process	Methodological experts (i.e., supervisory committee and an external reviewer) will review the final written report to assess the credibility of the research process, including the collected data and interpretations (Lincoln & Guba, 1985).

Ethical Considerations

As the research study involved humans, the research team sought to respect the personhood of individuals and safeguard their livelihood (Canadian Institutes of Health Research et al., 2018). Therefore, ethics approval from HiREB (#15592) was received prior to conducting the study to ensure these principles were upheld. The following section discusses additional ethical considerations during the research process.

Informed Consent

Informed consent refers to the voluntary, uncoerced agreement to participate in a research study based on all relevant information that pertains to the study (Canadian Institutes of Health Research et al., 2018). At any point in the research process, participants were able to withdraw consent and, if requested, their data may have also been withdrawn (Canadian Institutes of Health Research et al., 2018). All participants were required to provide informed consent prior to participating in the study. The consent form (Appendix E) described the following components: study purpose, study procedures, potential risks and harms, study benefits, privacy, ongoing consent, and study results. During the scheduled meeting with participants, the student investigator reviewed the consent process and form with participants, responded to any questions, and received verbal consent from participants. Verbal consent was recorded in the electronic verbal consent log (Appendix L). This informed consent procedure respected the autonomy of all individuals and participants.

Privacy and Confidentiality

Researchers have a duty to protect the confidentiality of participants, and participants have the right to privacy (Canadian Institutes of Health Research et al., 2018). Only research

team members had access to the stored data through a password-protected laptop or computer. The third-party transcriptionist was required to sign a privacy and confidentiality agreement prior to the transcription process (Appendix M). Secure web-based platforms and software used during the research process, including SharePoint, Microsoft Forms, MacDrive, and SecureDocs were password-protected. Zoom, Sharepoint, and Microsoft Forms were also used through a McMaster University subscription that provides specific security protections (McMaster University, n.d.-b). MacDrive was hosted on a private, secure server hosted by the university (McMaster University, n.d.-a). To promote privacy of the participants on Zoom, a password was required to access the Zoom session and the waiting room feature was enabled to ensure only the participant joined the session. As there were risks of unintended data breaches when using these platforms, the consent form described the potential risks of breaches in privacy and confidentiality and the steps that were applied to minimize these risks.

During the research process, generated data contained pieces of personal information of the PHC RNs (e.g., employment details, work setting and location, or stories of previous experiences with patients). These pieces of information could be collated and suggest the identity of the participant (Richards & Schwartz, 2002). Several strategies were applied to protect the identity of the participants. Firstly, the student investigator avoided using personal identifiers when conducting the interview with participants. Further, as discussed previously, immediately following transcription, the student investigator reviewed the transcripts and replaced the potentially identifiable information with generic names or terms (e.g., CHC, FHT) (Thorne, 2016) and all study files were labelled or coded with the participant's unique identification number. In the final report, demographic data is published as collated data (Morse, 2007). To

protect the identity of participants and safeguard their personal information, every precaution was taken to minimize the risk of privacy and confidentiality breaches.

Researcher and Participant Safety

Generally, the nature of qualitative research involves investigating participants' stories and experiences which may induce feelings of discomfort or distress among participants and research team members (Richards & Schwartz, 2002). The consent form outlined the limited risk or harms in participating in the study and that participants had the right to decline answering any questions, stop or take a break during the interview, or to withdraw at any point during the interview without consequences. Protecting the safety of participants remained a priority throughout the research process.

CHAPTER FOUR: RESULTS

Chapter Overview

This chapter presents the main findings to understand how PHC RNs facilitate healthcare access for recent immigrants living in Ontario. The chapter begins with a brief description of participant characteristics followed by two sections to present the findings related to (1) promoting healthcare access for recent immigrants and (2) optimizing the PHC RN role to address the needs of recent immigrants. The major patterns within these two sections are organized based on Levesque and colleague's (2013) framework. Direct quotes have been embedded as evidence to support the findings. For each quote, the nomenclature "RN#, [Type of PHC setting]" is used to refer to the participant and PHC setting they practice in, respectively. The chapter will conclude with a summary of the main findings.

Participant Characteristics

Ten PHC RNs participated in the study across the identified cities in Ontario. Their age range was 23-59 years (median = 28 years). Table 2 provides a detailed description of the participant characteristics.

Table 2Participant Characteristics

Participant Characteristics	n	%
Socio-demographics		
Age		
21-30	6	60%
31-40	2	20%
41-50	1	10%
51-60+	1	10%
Gender		
Female	10	100%
Male	0	-

Other	0	-
Nursing Education & Practice		
Highest Level of Education		
College Diploma	1	10%
University Degree	7	70%
Masters	2	20%
PhD	0	-
Other	0	-
Years of Nursing Experience		
1-5 years	5	50%
6-10 years	3	30%
11-15 years	0	-
16-20 years	1	10%
More than 20 years	1	10%
Years of Primary Health Care Experience		
1-5 years	5	50%
6-10 years	3	30%
11-15 years	1	10%
16-20 years	0	-
More than 20 years	1	10%
Primary Health Care Practice Setting		
Primary Employment Setting		
Family Health Team	5	50%
Community Health Centre	4	40%
Nurse Practitioner Led Clinic	1	10%
City of Employment*	_	
Toronto	4	40%
Ottawa-Gatineau	2	20%
Kitchener-Cambridge-Waterloo	2	20%
Hamilton	1	10%
London	1	10%
Employment Status	•	1070
Full-Time	6	60%
Part-Time		40%
Job Title	4	.0,0
Staff Registered Nurse	9	90%
Advanced Practice Nurse	0	-
Manager	0	-
Other ("Community Health Nurse")	1	10%
Primary Health Care & Immigrant Health		
How often do you provide direct nursing care to recent immigrants?		
Daily	4	40%
Weekly	4	40%
Monthly	0	-
Uncertain	1	10%
Other ("3-4x per year")	1	10%
oner (5 in per year)	1	10/0

Which class of immigrants do you most frequently provide direct nursing care to?

Economic Class	1	10%
Family-sponsorship Class	1	10%
Refugees	4	40%
All immigration classes	2	20%
Uncertain	1	10%
Other ("Refugee Claimants")	1	10%
Have you received formal training on how to facilitate healthcare access		
for your patients?		
Yes	1	10%
No	7	70%
Maybe	1	10%
I don't know	1	10%

^{*}Census Metropolitan Area

Promoting Healthcare Access for Recent Immigrants & Optimizing the PHC RN Role

Overall, 10 major dimensions were noted in the findings based on Levesque and colleagues' (2013) framework (i.e., Table 3). Specifically, PHC RNs discussed promoting healthcare access for recent immigrants across nine dimensions: (1) appropriateness, (2) availability and accommodation, (3) ability to perceive, (4) ability to engage, (5) ability to seek, (6) ability to reach, (7) affordability, (8) ability to pay, and (9) acceptability. In addition to describing how PHC RNs promote access to healthcare for recent immigrants, PHC RNs also described several opportunities in which PHC RN roles could be better utilized in practice to promote access across four of the dimensions: (1) appropriateness, (2) availability and accommodation, (3) acceptability, and (4) approachability. As previously discussed, Appendix K defines the major dimensions. Based on the findings, Table 3 outlines the dimensions and major patterns. These findings will be described in detail in the following sections.

Table 3

How PHC RNs Promote Healthcare Access for Recent Immigrants and Optimization of their Role

Dimensions		tterns
1. Appropriateness		Acting as a health and social resource hub
11 1		"wehave to start them from scratch on their catch-up
		immunizations, or we have to figure out how to get them their
		medications, how to refer them to specialists if they haven't had
		any care or any follow-up on a certain medical issue for
		years"
	h)	Promoting continuity of health care
	D)	"we give them everything, their chart, like what we've done
		for them, and what they need to follow-up with, especially when
		· · · · · · · · · · · · · · · · · · ·
		we're discharging to no family doctor to make sure to get
	-)	everything ready"
	c)	Enhancing the PHC RN role
		"as our scope increases and we have more directives hopefully
		from physicians, we're able to do more"
2. Availability and		Promoting flexibility to increase availability of health services
Accommodation		"I'll have to accommodate their schedule, and so, I'll have to
		work later in order for them to be home to do translating."
	b)	Addressing timely care
		"I try to not send people to other places I try to have them
		seen where we are."
	c)	Strengthening the PHC RN workforce
		"if we had more capacity, we could be seeing more
		newcomers"
3. Ability to	a)	Providing education on the importance of receiving PHC
Perceive		"So you have to touch base ontheir exposure to certain
		[chronic diseases] andselling them on what you're trying to
		do in terms of maximizing their health"
4. Ability to	a)	Promoting active patient participation in care and care
Engage		decisions
		"it's giving them the skills that they need to independently
		take care of themselves"
	b)	Tailoring strategies to address language barriers
		"I have to keep it a bit more simple, speak slower, show
		pictures if I need toGoogle an image of something that I'm
		trying to explain anatomy-wise"
	c)	Promoting health literacy
	-,	"Let me explain that to you in not language in terms of English
		or another language but in language that you understand"
5. Ability to Seek	<u>a)</u>	Educating on utilizing health services
3. Homey to been	a)	"When we get someone and we have a new medicationI'm
		like, 'This is your medication' 'This is a refill,this is where
	k)	you go, this is how a pharmacy works'" Novigating the healthcare system
	D)	Navigating the healthcare system "I've had to reach out to a specialist and communicate the
		"I've had to reach out to a specialist and communicate the
		details in terms of the availability of the client."

6. Ability to Reach a) Mapping health services "We write down appointments or I'll print maps." b) Connecting to transportation resources "We're able to provide them with a taxi chit to get to an appointment." 7. Affordability a) Coordinating low-cost health services "...we can also directly approach a specialist to say, 'Is there any ability at this time to consider compassionate care whether it's at a reduced price or if it is able to given for free...?'" b) Navigating affordability of health services for those with IFH or without OHIP coverage "...if the patient has no insurance...then our centre will cover it and the nurses are pretty key in advocating for that..." 8. Ability to Pay a) Navigating health coverage "...we need to get you set up with some sort of coverage going forward so we can keep running all these tests or keep maintaining your health..." 9. Acceptability a) Respecting cultural differences and preferences "...it's important to know where someone is coming from, their history and understanding of health and human body, their beliefs and worldview ... " b) Promoting cultural competency "...it's just helpful to have the knowledge of, 'Okay...we are getting a group of recent immigrants that are coming from this country. How are we going to care for this population?" a) Supporting Opportunities for Nursing Outreach 10. Approachability "...we could be doing outreach, and we could be meeting some of the need by doing outreach at the [immigration] hotels...and letting [newly arrived refugees] know that services are available."

Appropriateness

Within the dimension of *appropriateness*, two patterns were identified: (1) *acting as a health* and social resource hub and (2) promoting continuity of health services. A third pattern that was identified to optimize their role was: (3) *Enhancing the PHC RN role*. This dimension of healthcare access was the most frequently discussed by participants.

Acting as a Health and Social Resource Hub

As PHC RNs are well-equipped to address the health and social needs of recent immigrants, they are a key contact for these individuals within the PHC setting. One nurse perceived this as acting as a "hub" of resources to address these needs:

So, as the hub,...[PHC RNs] are the first person that sees [recent immigrants] usually for things like, again vaccinations or...some particular health care concern. So, from those conversations, a lot of times we will figure out specific needs, so whether that is things like housing support, food insecurity, things like that... (RN8, NPLC)

As a resource hub, PHC RNs discussed assessing their needs and tailoring nursing interventions to provide the appropriate nursing intervention. Specifically, for newly arrived immigrants, participants shared their experiences providing initial health care services during their first encounters with these individuals. They highlighted their responsibilities of assessing and addressing new immigrants' health and social needs. For example, nurses discussed conducting initial health assessments using a holistic approach: "In my role with new immigrants is collecting medical history in terms...surgical history, immunization history, social history, like who they've come with, their employment status, any major illnesses, diagnosis, what their treatments are up until then..." (RN7, FHT). Based on this initial health assessment, RNs followed-up by providing resources or supports to ensure immediate health needs were met. One nurse shared her experiences educating a patient following a new diagnosis of diabetes: "...for one of [the follow-ups] it was doing routine labs and it came back with a diagnosis of diabetes, so we called [the patient] back, talked through what that looks like...and then counselling on the medication that we're starting them on and then what monitoring looks like" (RN5, FHT).

For newly arrived refugees, some PHC RNs also emphasized the vulnerability of their health considering their pre- and post-migration experiences. With an unclear picture of their

health history, these nurses supported refugees in establishing their care journey within the context of the Ontario health system:

Because they've lost their documents, they've lost their immunization documents, they've lost all their medical documents. They've lost everything. They don't have anything with them except for the clothes on their backs, so we unfortunately have to start them from scratch on their catch-up immunizations, or we have to figure out how to get them their medications, how to refer them to specialists if they haven't had any care or any follow-up on a certain medical issue for years since they were in the refugee camp... (RN4, CHC)

For newly arrived immigrants, participants also discussed ensuring that preventative, PHC needs were addressed (e.g., cancer screening, vaccinations). Specifically, some participants highlighted their responsibility of verifying that the immunization status of newly arrived immigrants is upto-date based on the Canadian immunization guidelines:

So, people coming from different countries, a lot of times the immunization schedule is very different; so, as an RN we need to make sure that we can convert that in some way and see that their vaccines are compatible or similar to what the Ontario publicly-funded immunization schedule is, and if they're missing certain vaccines, we need to make sure they're up-to-date. (RN6, FHT)

For recent immigrants, PHC RNs reported identifying and addressing physical and social needs. Regarding physical needs, some participants perceived their role as leading the treatment plan among interdisciplinary team members for disease management, such as diabetes: "I'll kind of say [to the patient], 'Okay, so I think first we need you to see the dietician. Then, I think in three months what we'll do is if your numbers aren't...where we want them, then...we'll arrange to get the pharmacist on board'" (RN2, FHT). When addressing the physical health of immigrants, participants also reported referring immigrants to other interdisciplinary team members within their organization. To encourage this population in accessing other health

services, one nurse discussed referring patients to in-house HCPs, as patients are generally comfortable with receiving services within their regular PHC clinic:

In terms of services beyond primary care, the other departments that I would think about is inter-referrals within the [CHC], but it's pretty straightforward because we're all using the same electronic medical record and everybody's located in the same building so it's pretty easy...to collaborate with other allied health providers... [Patients] are familiar with this place, so they're often more accepting or willing to, for example, go to a physiotherapist in the same building as opposed to going somewhere else." (RN3, CHC)

Participants specifically mentioned referring to in-house pharmacists, social workers, mental health professionals, dieticians, and/or physiotherapists.

In terms of social needs, PHC RNs described using a holistic approach to care and recognized the significance of the social determinants of health for recent immigrants. They conducted assessments to understand their immigrants' social situations and to identify particular social needs:

I will ask a lot of things like, "Where are you living now, what's your income? Do you like your housing? How is the shelter? Are you eating enough? What's your [government financial assistance]? Do you need a special diet form?" We look at all of the things here. We don't just look at one thing. So, I think looking at all aspects of their life and how it could be impacting them. (RN9, CHC)

Participants reported utilizing various strategies to connect immigrants to the appropriate resource to address their social needs. Similar to addressing physical needs, they discussed interreferring to interdisciplinary team members within their clinic including a dietician, social worker, or health system navigator. One example of this was when the need was beyond the knowledge of the RN: "In terms of nutrition, sometimes it is just kind of beyond my understanding, so I also offer an inter-referral to our dietician who is also at the clinic" (RN3, CHC). PHC RNs also commonly reported referring immigrants to internal or external

community services based on specific needs, such as food insecurity. One nurse shared, "If people need formula for their baby, we refer them to the baby cupboard downstairs in our social services sector or the food bank" (RN4, CHC). PHC RNs supported immigrants in accessing community services for a variety of other social needs, including socialization, housing, nutrition, laundry or clothing, or transportation. As the social hub for immigrants, one nurse discussed the strategies they adopt to develop their knowledge on resources within the community: "...you just build that mental mind map of resources that are in the communities...also building other networks and connections with colleagues, asking around..." (RN5, FHT) Through their established network, PHC RNs efficiently supported immigrants in accessing essential community resources.

Although several PHC RNs discussed providing direct care to refugees, only a few highlighted their responsibility of addressing the mental health of this vulnerable population. They reported often acting as a first point-of-contact to start these mental health discussions, reporting their perceptions that refugees often have difficulty describing their mental health concerns: "So, sometimes I find the most common word that's used is: 'I have a lot of worries'...even though that sensation might diagnostically come across as anxiety or [post-traumatic stress disorder] or even depression..." (RN8, NPLC). In response, these nurses discussed taking the opportunity to explore these issues in greater depth and refer immigrants to mental health resources:

...[The patient] say[s] to me, "Hey ... you know, I'm really, really stressed. You know, I'm sorry, I'm just kind of all over the place"... I take that opportunity, and so do my colleagues, to just explore a little bit more, can we take this as an opportunity, especially within our team, to internally refer them to some additional supports whether that be social work or not? (RN8, NPLC)

One nurse discussed enacting a trauma-informed approach to their nursing care: "...We definitely always use a trauma-informed approach here...these people have been through traumas that we can never even imagine, like being a refugee claimant, taking off with your backpack and coming to a new country" (RN9, CHC). The participants were sensitive to how pre-migration experiences may influence the mental health and well-being of, not only refugees, but recent immigrants more broadly. They explored these mental health concerns and offered these individuals the necessary mental health resources to address these concerns.

Using a holistic approach, PHC RNs assess and identify specific needs, utilizing their nursing expertise to directly provide or connect immigrants to the appropriate resources to ensure their needs are addressed. Considering the vulnerability of newly arrived immigrants and refugees, these findings also highlight the adaptability and responsiveness of PHC RNs in tailoring care to their unique needs.

Promoting Continuity of Health Care

When immigrants required health services beyond what was offered in their PHC setting, PHC RNs promoted continuity of care between health organizations, including other PHC clinics, specialty care, diagnostic labs, and pharmacies. Participants reported facilitating these in various ways including providing paper or email requisitions to immigrants or directly faxing requisitions on behalf of immigrants: "...it's easy for us to either email it to them or have it ready at the office and they can pick it up or we can fax it directly to the department" (RN3, CHC). One nurse also reported communicating the referral status to immigrants or updating referral statuses when the urgency level changes. As PHC RNs have a contextual understanding of the immigrants with whom they provide care to, some also felt they had a responsibility in advocating for immigrants by verbalizing patient needs on various levels of health care:

It's really just working, especially with our patients who don't speak English, it's adding that extra voice to be like, "Hey, I know that this seems straightforward. It seems like a very stupid thing to be asking for and maybe the patient's too afraid to speak up because they don't know that they can or they don't know how to say what they're trying to say, but this was my interaction with the patient and that's why we're asking for certain things. (RN1, CHC)

As PHC RNs hold a position of power within the health system, they exercised their power to advocate for the needs of immigrants among other health care providers.

Some participants also shared their experiences supporting transitions between health organizations or systems when immigrants leave the care of the PHC clinic. For example, one nurse discussed their responsibility when newly arrived immigrants are discharged from the CHC walk-in clinic: "...we give them everything, their chart, like what we've done for them, and what they need to follow-up with, especially when we're discharging to no family doctor to make sure to get everything ready..." (RN9, CHC). For migrants with precarious immigration status facing deportation, another nurse shared their experiences of helping to enable continuity of care in another country or province. This includes providing comprehensive health care within the clinic and preparing immigrants to speak for themselves in a new country regarding chronic disease management:

And my biggest focus...is towards chronic disease...if we have them on such a great established lifestyle modifications and medication regimens and things like that, the thought of it not being accessible potentially down the line, we need to understand what that looks like and make sure that they are at least equipped to speak for themselves to say, 'This is what was ... provided to me in Canada, this is what was recommended to me. Is this something that I can still hopefully access if I'm able to stay?' (RN8, NPLC)

PHC RNs equip immigrants with the necessary knowledge and resources to support the continuation of their health care journey of receiving PHC. Although PHC RNs deliver care in a fragmented health system, they promote continuity of care by providing immigrants, or HCPs,

with essential information to ensure their health needs are appropriately addressed beyond the PHC clinic.

Enhancing the PHC RN Role

When discussing opportunities to optimize the PHC nursing role, many of the RNs reported various ways to enhance the delivery of care provided to recent immigrants. Some participants highlighted the need to integrate the delivery of PHC among immigrant populations in nursing education programs. For example, one participant reflected on her undergraduate education and recommended that there should be greater emphasis in undergraduate curriculums on community and PHC and promoting immigrant health:

I think in school or even at my first job, if I had more experience working with an interpreter, I think that would have been really helpful...In school, they never really talked about working with people who can't speak English. It was kind of...the assumption that, "oh, everybody speaks English, so they'll be able to know what you're saying." I think having a greater acknowledgement that there's a lot of different cultures and diversity in the communities...in school or at my first job. (RN3, CHC)

Another participant also expressed a need for continuing education opportunities (e.g., online resources or webinars) to promote the quality of care delivered to recent immigrants. When asked what topics would be helpful in promoting her practice, the nurse shared:

I can always improve in communication as a whole and dialoging with clients...I think just being better mentally prepared of, "Okay, this is what this person might have experienced, and this is their knowledge, their health knowledge and understanding of like the human body." (RN5, FHT)

In addition to education and mentorship, one PHC RN expressed their vision for specialty roles or clinics focused on refugee health:

...Ideally, we'd want every provider to be versed in knowing how to care for refugee claimants...having specialty clinics, it could be like a good model. I mean having every

provider, every nurse being well-versed in this kind of specialty would be ideal, but I think that's like too far or too big of an expectation... (RN9, CHC)

In their day-to-day practice, participants also recommended expanding the nursing scope or implementation of medical directives to optimize the workload in PHC settings:

...if we have the knowledge to address certain or specific concerns then I think overall...as our scope increases and we have more directives hopefully from physicians, we're able to do more... (RN5, FHT)

For example, some nurses discussed limitations in their ability to administer medications or vaccinations, despite having the knowledge and expertise to do so:

...as a Registered Nurse, let's say if I know that this patient is due for a certain vaccine or they're ...requesting a simple medication...I would still have to consult with the physician or the nurse practitioner first in order to then, let's say, provide them with that appropriate medication or vaccine. So, the nurse I find is so restricted on being able to act on the issue. (RN6, FHT)

Rather than immediately administering the medication or vaccination when required, this nurse discussed taking the time to follow up with physicians or NPs to receive a medical order which may delay the delivery of treatment for patients. She discussed the need for medical directives with clear guidelines to promote quicker access to basic interventions or treatment for patients. Some nurses also indicated that medical directives would be particularly important to efficiently provide access to recent immigrants who require up-to-date vaccinations.

PHC RNs also expressed their desire to have access to various resources to support their practice when working with recent immigrants. Specifically, some participants recommended having access to professional translation services while others discussed having access to a community resource database to easily connect patients to the appropriate resources: "Definitely something like a spreadsheet, a flow chart…Like where do I direct these people? Where should this referral go? Where should I send someone? Like that master list of resources…" (RN5,

FHT). These findings show the desire of PHC RNs for additional nursing education, organizational policies, and tailored resources, as it would enhance the quality and delivery of appropriate nursing care to recent immigrants.

Availability and Accommodation

Two patterns were identified within the dimension of availability and accommodation: (1) promoting availability of health services and (2) committing to and addressing expectations of timely care. A third pattern that was identified to optimize the PHC role and improve the availability and accommodation of health services for recent immigrants included (3) strengthening the PHC RN workforce.

Promoting Flexibility to Increase Availability of Health Services

PHC RNs were often responsible for triaging the urgency of their health needs and prioritizing appointments based on their assessment. One stated, "I'm usually the one triaging it further and saying whether...it's something that needs to be seen today at our family practice or...can wait two days or...until next week" (RN7, FHT). Another nurse shared her experiences when immigrant families approached the PHC clinic seeking care. The nurse described how she assesses and treats each family member based on the urgency of the health need:

...Because a lot of times, [family members] just want a check-up, or they need vaccines to get them up-to-date, so we try to triage who is the most unwell, or if someone is more elderly, or obviously babies like under two years needs to be assessed even if they're not sick just to make sure vaccines are up-to-date and everything is good. (RN9, CHC)

When there was a lack of availability of clinic appointment times, participants discussed providing patients with information on alternative appointment options to receive health care that could support addressing their health concerns. Some PHC RNs shared how they use virtual visits as an accessible or convenient mode of appointment for immigrants with precarious jobs or

when transportation barriers existed. One PHC RN reported offering alternative appointments with medical residents when appointment times with assigned physicians are unavailable. When there was a lack of available appointments with assigned physicians, another nurse explained to immigrant patients the availability of after-hour services and weekend walk-in clinics offered by the PHC clinic to support patients in receiving health care that meets their expectations of timely care:

...it's looking at what their expectation is in terms of timing for medical appointments and explaining that to them, making them aware what's available in terms of after-hours, the family physician does walk-ins... (RN7, FHT)

Some PHC RNs also recognized that the regular, daytime clinic hours may act as a systemic barrier for some individuals. For example, recognizing that recent immigrants may work precarious jobs, one nurse shared how she adjusts the typical opening hours of the clinic and accommodates appointment times for these individuals:

...We set some of those clinic hours to be at a specific time that makes it a little bit easier because we recognize that there are people who do night shifts, who do day shifts...we try to make it flexible so that they're encouraged to come. (RN1, CHC)

When family members assist with language translation during appointments, another nurse shared how she flexes her personal work schedule to accommodate for the availability of these family members: "...the daughter or the son has to work, right? So, then I'll have to accommodate their schedule, and so, I'll have to work later in order for them to be home to do translating" (RN2, FHT). For health services outside the PHC clinic (e.g., specialty services), one participant was involved in addressing these wait-times by re-directing immigrants to another institution with shorter wait-times or the internal referral department to assist with wait-times. These findings suggest that PHC RNs recognized the current system limitations regarding the availability of HCPs which inhibits the clinic's capacity to provide timely care. However,

recognizing these limitations, these nurses provided alternative solutions to promote availability of services for immigrants, especially for individuals who require special considerations due to unique barriers to access.

Addressing Timely Care

Considering the long-wait times in Ontario to access certain health services, PHC RNs vocalized their commitment to supporting patients in receiving timely care. For example, one nurse acknowledged the barriers that immigrants may face to physically reach the clinic. When immigrant patients arrive at the clinic with health concerns, she resolved to having these individuals be assessed the same day by an HCP:

If a patient walks in, to be honest, I don't like to turn them away. If they made the effort to come to the office, if they can't talk on the phone because of the language barrier and they come to the office and they put in the effort, I seldom will turn somebody away. I'll just be like, "If you're okay to wait or have the doctor see you, or if there's something I can do for you today and then maybe you can come back in two days." (RN7, FHT)

Participants also shared how they advocate for timely access to health services within their clinic for immigrants with IFH and/or without OHIP, as they may experience barriers to receiving health care elsewhere. For example, one nurse shared their role in acting as a gatekeeper of appointments and advocating for immigrants with IFH to receive timely medical care in-house:

...we will often be kind of the gatekeeper as to whether or not an [Interim Federal Health] client gets seen in the clinic...I personally advocate for that a lot. Like I try to not send people to other places... I try to have them seen where we are, and if they have an urgent issue, I will book them right into the walk-clinic... (RN4, CHC)

On an organizational level, another participant shared how she and her nursing colleagues advocated for their PHC clinic to develop a dedicated walk-in flu clinic program for individuals, including children, many of whom did not have OHIP:

...there were many patients who would call in to see their provider but weren't able to see their provider and...many of them were children, many of them didn't have OHIP, so they weren't able to go to walk-in clinics, so we noticed that they were being booked two or three days after, but by then their symptoms maybe have gotten worse or they had to go to hospital...or they ended up going to a walk-in clinic and having to pay for services...So, what we ended up doing was collaboratively when there were a few more nurses on the team, we created this triage-like flu clinic program... (RN10, CHC)

PHC RNs recognized that long wait-times may be exacerbated for recent immigrants, especially for those with IFH or without OHIP. By advocating for these individuals on a provider- and organizational-level, they demonstrate a commitment to the availability of timely health care for this population.

Although PHC RNs are committed to timely care, they also discussed how the expectations of immigrants regarding timely care may not align with existing system capacity and resultant wait times. Participants reported having to re-adjust the expectations for these individuals, which are often based on experiences with their previous healthcare systems:

I know in some of these home countries it's like half-private, half-government funded or you can pay to see specialists, so then you're seeing a specialist sooner. So... also talking about what their expectations are in terms of accessing the healthcare and in what type of time manner they would get it. (RN7, FHT)

One participant also shared how they are honest with immigrants regarding realistic expectations of timely care:

So, if I have a patient that does have an injury that's a little bit more acute or symptoms that involve the need for ultrasounds and things like that, having the conversation with them that this is probably going to take several weeks because it's non-urgent... (RN8, NPLC)

As frontline HCPs, PHC RNs are often required to inform immigrants of long-wait times and tempering expectations related to accessing health services within Ontario's current health system.

Strengthening the PHC RN Workforce

PHC RNs highlighted that organizational barriers that limit the opportunity to optimize their role in practice. For example, one nurse shared: "...one of the limitations that I find is that because there aren't many RNs within primary care, it's hard to kind of divide up the tasks. Like I am one of the only RNs here at this site, and we have four providers, so again, trying to support the team but also see my own clients..." (RN10, CHC). Participants discussed the need for resources, such as organizational funding and additional nursing staff, to increase the capacity of the PHC clinics: "...if we had more capacity, we could be seeing more newcomers. Right now, we're adequately staffed but...there's been a lot of [staffing] shortages during the pandemic" (RN4, CHC). Some nurses reported heavy workloads in their practice within the PHC clinic. Specifically, one nurse highlighted that she often feels rushed when assessing patients due to the limited, allocated time; however, increasing funding would enable the nursing staff to spend more time with patients: "What would be good is if we had more clinic time, set time to schedule, to see people rather than like rush in a walk-in, so more funding for that" (RN9, CHC). Other nurses indicated that a facilitator to optimizing their practice would be increased funding to support hiring additional healthcare providers, such as RNs. One of these nurses discussed how she is often strained by the increasing responsibilities within the clinic due to the limited number of RNs which limits her capacity to conduct PHC-related outreach programs, as discussed previously:

...because there aren't many RNs within primary care, it's hard to kind of divide the tasks...it can be difficult to kind of spread myself thin enough to say, "Okay, I do have certain goals or things that I would like to do for this community," but there are limitations because again there's not many RNs within this practice. (RN10, CHC)

Increasing the capacity of the PHC clinics through additional resources, such as organizational funding, would provide opportunities for PHC RNs to optimize their role in practice.

Ability to Perceive

Although the *ability to perceive* dimension was not extensively discussed by PHC RNs, some reported providing education to recent immigrants on the importance of receiving PHC, such as immunizations, preventative screening, and chronic disease management. They delivered education using various techniques to iterate the need to receive PHC to achieve an optimal health status. For example, some nurses discussed explaining familial risk of diseases or illness:

If they say, like "Oh, yes my sister had breast cancer or my mom had breast cancer," then I explain, "Okay, because there's that familial component…it makes screening all the more beneficial so that we can detect early changes." (RN3, CHC)

One nurse shared her approach when educating immigrants on their increased risk of diseases, such as cardiovascular diseases or diabetes, considering previous diagnoses among family members:

...So, you have to touch base on that in terms of their exposure to certain [chronic diseases] and...selling them on what you're trying to do in terms of maximizing their health. We can't cure everything...death will eventually happen, but I want to maximize the health that you can have while you're aging. (RN7, FHT)

Some participants also emphasized the importance of PHC by explaining the rationale, risks, or benefits of receiving versus not receiving PHC: "I'll usually just reiterate the purpose of the test and...why did they need that done and...consequences or risks if they don't get the test done" (RN6, FHT). As some immigrants may not always recognize the need for disease prevention and screening, PHC RNs utilized their knowledge on PHC to educate these individuals on the significance and potential impacts of PHC on their health and well-being.

Ability to Engage

The *ability to engage* dimension was commonly discussed by all participants when describing their roles with recent immigrants. Three patterns were identified in this dimension:

(1) promoting active participation in care and care decisions, (2) tailoring strategies to address language barriers, and (3) promoting health literacy.

Promoting Active Participation in Care and Care Decisions

PHC RNs supported recent immigrants in their ability to engage by promoting their active participation in their own health care and supporting them in decision-making. When interacting with immigrants, some PHC RNs shared how they provide opportunities for individuals to express their desired goals of care based on personal values, beliefs, and worldviews by asking open-ended questions, such as "'What does healthy look like for you?' and 'How can I help you achieve that goal?'" (RN5, FHT) This enabled immigrants to have control of the trajectory of their care journey.

As recent immigrants experience unique challenges related to socioeconomic factors (e.g., ethnicity, language, income), they are often considered a vulnerable population. Due to the clinical expertise of PHC RNs and the inherent position of vulnerability of recent immigrants, participants recognized the existence of a power imbalance between themselves and these individuals. In response, participants emphasized the importance of empowering immigrants to make informed decisions about their medical care. To do so, the nurses emphasized the importance of informed consent to immigrants and understanding their rights as individuals. Some nurses reported that they explain the risks, benefits, or rationale for medical interventions or treatments. After educating their patients, the PHC RNs recognized that patients hold the

decision-making power. For example, one PHC RN shared her experience when a parent declined mental health treatment on behalf of their teenage child, a minor:

But I guess the only way I felt a little more comfortable was just outlining the risks and benefits, the rationale...and saying "Okay, well this is what this one can potentially do, this can potentially do." I just felt like I did my part in that sense to say, "I know that I've done my role by educating the patient the best I could to say that this is outlining both sides of certain things and ultimately it's your decision." (RN10, CHC)

In this instance, the parent's decision was based on their cultural values and beliefs, and the participant shared how she personally disagreed with the decision of the parent. However, by providing all the necessary information to the parent and child, acknowledging cultural differences, and recognizing that the decision-making power was ultimately in the hands of the parent, the nurse felt ease in the parent's decision to decline treatment. Another participant discussed how some immigrants may not have experienced preventative screening exams in their previous country. She shared her experiences in conducting pre-appointments prior to completing these exams to ensure patients have all the relevant information they need to make an informed decision:

I think it has saved everyone more time overall to take that 15 to 20 minute appointment ahead of time, leave them with the opportunity to gain information [on pap smear testing] ...then we usually set the recall or reminder within let's say two to three weeks, let's just check in. If you're wanting to proceed, they will make that appointment and then we go forward with it. (RN8, NPLC)

In addition to providing consent, some nurses reported educating patients on their right to refuse medical treatment. As recent immigrants are experiencing a new healthcare system, one participant shared how they explain to their patients the appropriate standards of care regarding female-based preventative care and refusing care if those standards are not met: "In terms of the physical exam of a female being done by a male, I always tell them that there should be a

chaperone in the room, and if that's not present, then it's not something that you should consent to" (RN7, FHT). As standards of care may differ in health systems outside of Canada, PHC RNs promoted the autonomy of patients by educating them on their rights as individuals. To promote autonomy at home, some PHC RNs also reported supporting immigrants in self-managing their health:

...it's giving them the skills that they need to independently take care of themselves...so getting to teach them things that they can do, medications that they can take, how to monitor things, how to take care of things on their own, we do a lot of teaching... (RN9, CHC)

These findings highlight the significant power of position of PHC RNs that exist in their relationship with recent immigrants. However, by giving them the knowledge, skills, and opportunity to be informed decision-makers, the RNs are empowering immigrants to actively participate in their own care.

Tailoring Strategies to Address Language Barriers

When engaging with recent immigrants who do not speak English, PHC RNs highlighted the challenges in communication due to the presence of a language barrier. Participants reported adopting several strategies to address these language barriers in practice. For example, the nurses practising in CHCs and an NPLC reported utilizing professional language services to assist with translation when communicating with non-English speaking patients. However, the nurses practising in FHTs either did not report having access to translation services or reported not having access to them. Several participants reported engaging with family members or friends to support with language translation. However, they also shared the challenges associated with this strategy, including lack of availability of family members or difficulties translating complex medical terms: "You have to be mindful of like your medical terminology because if English is

also a second language for that caregiver, they might not be able to translate the full medical terminology of what you're saying" (RN7, FHT). She discussed adopting other techniques to enhance the quality of communication to family members:

I wouldn't use as many medical terms... so I have to keep it a bit more simple, speak slower, show pictures if I need to...Google an image of something that I'm trying to explain anatomy-wise. (RN7, FHT)

Participants also discussed partnering with other members who are part of the circle of care to assist with translation, including nursing colleagues, community support workers, social workers, or case workers. Further, one participant emphasized the benefit of having in-person translation support, as it "help[s] create more of a connection rather than using the phone translation" (RN9, CHC). This nurse indicated the limits of creating a therapeutic relationship when using professional language services over the phone. Some nurses also reported seeking and providing language-specific resources to patients: "I would see if there are resource materials that I can provide in their own language and I will do that" (RN2, FHT). Other strategies reported by participants were using Google translate, simplifying medical terminology or explanations, and promoting in-person appointments rather than phone appointments. PHC RNs acknowledged the advantages and disadvantages of certain strategies, and in response, they utilized a combination of strategies to communicate more effectively with their patients when language barriers existed.

Promoting Health Literacy

PHC RNs emphasized the influence of literacy and education levels on health literacy levels of recent immigrants. Therefore, identifying literacy levels was a focus for participants when conducting initial health assessments with their patients:

We go through the extended demographics... "Are you able to read? Are you comfortable with reading in your language? Do you have an understanding of that? No? Okay, great.

Now we know where we're starting from. How can we best support you then?" (RN8, NPLC)

By understanding individuals' ability to understand and apply health information, PHC RNs anticipated the need to tailor the ways they provide and deliver their nursing care that cater to the literacy levels of immigrants.

When engaging with recent immigrants, the participants reported tailoring communication strategies in various ways to promote the health literacy levels of these individuals. They reported providing verbal explanations of processes related to a procedure or test, and some used repetition to reinforce their health teaching. To address language and literacy barriers, many nurses also reported using visual aids to supplement their health education. One participant also highlighted the benefit of visual communication, as it is a shared language among nurses and patients despite differences in verbal language: "...visuals is something that are pretty helpful because it's universal, right?" (RN10, CHC) PHC RNs utilized a variety of visual aids or tools, such as physical models to explain the human anatomy. One nurse discussed using physical models when educating expectant mothers with low health literacy levels:

So, a lot of times...[immigrant females] get pregnant, they deliver a baby, but sometimes they don't necessarily really know their pelvic anatomy per se or the pelvic organs or what cervical cancer might look like or why are we screening for that, so I usually have a model in terms of like a teaching model of the uterus and the cervix. (RN7, FHT)

Participants also reported using other types of visual aids, such as diagrams, email or paper handouts, images, videos, or instrument demonstrations. Regarding other strategies to promote health literacy, some nurses reported checking-in with individuals during appointments to promote understanding, as recent immigrants may hesitate to verbalize questions or concerns if not given the opportunity which may be attributed to language barriers or low health literacy levels:

...Once the translator perhaps has said it, I will say, "Do you understand? Do you have any questions?" But again, like sometimes I just do feel that they do just agree to agree. Do they fully understand? I don't know. But sometimes just having that simple in the end question...that's usually that little open window or that door that ends up being the opportunity for them to ask questions. (RN10, CHC)

Some participants also shared increasing time spent or the frequency of follow-up with recent immigrants. When conducting education on chronic disease management related to diabetes, one nurse stated: "The follow-up will maybe be a phone appointment. I'll call them a little more often than I would somebody whose English wasn't a second language" (RN2, FHT). For immigrants who are part of the family-sponsorship class, one nurse shared her experiences in conducting joint appointments with family members to ensure shared understanding of health education:

...We'll have the whole family come in ... to kind of provide some of that education in a family space, so I find a lot more joint appointments just because ... I find that that support then translates into home because when they go home, several members of that family [have] that knowledge... (RN8, NPLC)

By drawing on the strength of social support, this nurse recognized that shared knowledge of family members often reinforces the support received at home to manage one another's health. As low health literacy levels can act as a barrier to engaging with HCPs, PHC RNs communicated in various accessible ways based on immigrants' health literacy levels.

As recent immigrants have interacted with health systems outside of Canada, they may have expectations of health services based on these previous experiences. As a result, PHC RNs discussed tailoring health education based on these expectations. Specifically, for refugees, some participants highlighted the need to promote the health literacy of this population, as their ability to apply health information is influenced by past experiences with health systems in other countries. For example, one nurse discussed refugees' expectations that all health concerns require seeking physician services:

...refugees sometimes have this expectation that in their country: you go to their doctor, you get what you need, you get an antibiotic, and you go, but it's just understanding that that's not how our healthcare system works. There's times you go see a doctor. There's times you take care of it at home. You can't always see a doctor. (RN9, CHC)

This nurse shared how she explains to refugees the reality of wait-times of PHC clinics especially in the context of the physician shortage in PHC settings. Further, she discussed educating refugees on how to independently manage common ailments at home, such as a yeast infection, rather than immediately seeking health care at the emergency department:

...in their head, they think, "Oh, I have to go see a doctor right away." So, getting to teach them things that they can do, medications that they can take, how to monitor things, how to take care of things on their own... (RN9, CHC)

Similarly, another participant shared her experiences in addressing preconceived beliefs on the use of certain medications, such as antibiotics:

If I'm...saying, "Okay, it sounds like you might have a bit of a cold or a flu right now, the main treatment is lots of fluids, rest, Tylenol as needed"...They're like, "Oh, but back home I got antibiotics. Why is that not being done?" There is a large piece of health education around that ...antibiotics are not necessarily helpful if it's not for a bacterial infection and it can actually cause more harm, can have side effects...can cause antibiotic resistance. (RN3, CHC)

As the health literacy levels of recent immigrants, particularly refugees, may be influenced by health care experiences in previous countries. By educating their patients, PHC RNs sought to address these health-related beliefs or misconceptions and promote their health literacy levels.

PHC RNs shared that health information is often complex in nature which can be complicated by barriers unique to recent immigrants, such as language discordance with HCPs. In response, some nurses discussed translating health information into accessible language to promote the health literacy of these individuals or, in other words, explained information in a

manner that can be easily understood and applied. For example, one participant identified her role as a "health translator" and defined it as follows:

...we are effectively health translators, right? So we look at health lingo as nurses and say, "Okay, I understand that they're asking you to do this. Let me explain that to you in not language in terms of English or another language but in language that you understand." (RN1, CHC)

As an example, this nurse shared how she translates information for patients who require laxatives to prepare for colonoscopies:

Most of the time patients take the medication and then they stop because they're like, "Well, it made my stomach really, really upset, and I had diarrhea,"...they understood, like, "It's helping clear my system," but they don't necessarily recognize that what clearing your system means is that it's going to translate to you having diarrhea. It's because then it makes it easier to visualize when they're doing the colonoscopy. (RN1, CHC)

Another shared how she translates information for immigrant patients after receiving health care outside of the PHC clinic (e.g., emergency department, specialist office) to support them in understanding the rationale for certain procedures, tests, or prescriptions:

I'm not in the mind of the healthcare practitioner, so I can't 100% say why they're doing it, but based on my experience, based on what I've seen and based on the reports that we get, I can explain to them a little bit better what the rationale might be and what the expected outcome could be... (RN7, FHT)

As health information may be shared in ways that are inaccessible for recent immigrants, PHC RNs addressed this barrier by translating information, thereby providing the opportunity for these individuals to better understand and apply the knowledge to promote their health.

As recent immigrants may not speak or read English fluently, PHC RNs highlighted the importance of assessing the understanding of health information for these individuals when delivering health education. To address these barriers, participants discussed adopting various

strategies to evaluate the effectiveness of their health teaching. Many participants reported using the teach-back method with patients by having the patient repeat or explain their understanding of the health teaching, such as "so what do you think I'm about to do?" (RN10, CHC) or "repeat what I just said" (RN9, CHC). Some nurses discussed using this method when communicating with patients using professional language services, as health information may be misinterpreted when received and interpreted by the translator:

Translation services are great, but it does get lost in translation and although they are medical translators, you can tell they don't understand the medical terms you're trying to relate, and we don't know exactly what they're saying, so it's not the best way. (RN9, CHC)

Further, one nurse also highlighted the importance of incorporating the teach-back method in her practice, as she states, "...unfortunately, the interpretation service that we use, I think there's two hundred languages, so it's pretty comprehensive but unfortunately, there isn't an option for like a Roma dialect. We have the more, I would say, common languages available" (RN3, CHC). However, participants also expressed their concerns regarding this method of evaluation, as it may place their patient in a vulnerable position if there is a language barrier or if they are unable to answer the question. One nurse shared that she integrates the following statement prior to asking the patient to repeat or explain their understanding: "...to make sure I've explained it properly..." (RN2, FHT). This statement indicates that the purpose of the question is to assess the quality of the PHC RN's teaching rather than patients' ability to answer the question. Some participants also reported receiving verbal confirmation from patients to confirm their understanding the health teaching, such as "do you understand what's happening?" (RN10, CHC).

Although less frequently reported, some nurses discussed assessing facial expressions or body language as an evaluation method when language barriers existed and professional language services were unavailable: "So for me, body language is pretty important. I can usually tell if a patient is understanding me based on...how they're interacting with me: if their facial expression looks confused, then I will have to reiterate what I'm saying" (RN6, FHT). One participant also reported assessing if patients or their caregivers follow up with medical plan to evaluate the effectiveness of their health teaching:

But in terms of proof, I would say if they follow-up with visits or they follow-up with tests or if we prescribe a medication and then they bring it to us and we can see that they've taken it, then that's also a way that we can verify that they've understood what's being asked. (RN7, FHT)

Following the evaluation of the effectiveness of their teaching, the participants discussed reiterating their teaching to ensure that their patients demonstrated understanding of the health knowledge. As recent immigrants may have low health literacy levels which are exacerbated by unique barriers, specifically language barriers, these findings show that PHC RNs recognize the importance of delivering health information in a manner that is accessible for this population. As health translators for recent immigrants, PHC RNs assess health literacy levels and tailor strategies to equip these individuals in utilizing health information that optimizes their health and well-being.

Ability to Seek

Two patterns were identified in how PHC RNs support recent immigrants in their *ability to seek*:

(1) *educating on utilizing health services* and (2) *navigating the health system*.

Educating on Utilizing Health Services

PHC RNs highlighted the experiences of recent immigrants in encountering a new and unfamiliar health system during the first few years of resettlement. One nurse empathized with the challenges that recent immigrants face in navigating the system:

So, things like trying to figure out like, "...How do I follow-up and go to a blood test? Where do I go to do my ECG? Where do I do my diagnostic imaging test? My ultrasound? When do I follow-up? Do I have to call back? Will the doctor call me back? How will I communicate?" So, there's so many things of just navigating the healthcare system. (RN10, CHC)

The PHC RNs discussed educating immigrant patients on how to use complementary and therapeutic health services, such as pharmacy, bloodwork, and/or imaging. For example, one participant discussed educating patients on the process of having a new prescription filled at the pharmacy: "When we get someone and we have a new medication...I'm like, 'This is your medication.' I show them like, 'This is a refill, like this is where you go, this is how a pharmacy works " (RN4, CHC). Some PHC RNs also reported educating immigrants on expectations when using health services on various levels of care, such as referrals to specialty care or using the emergency department. One stated, "I tell them about the wait times and I say, ... 'they might be doing tests,' 'you might have to be admitted,' or... 'depending on what happens, they can send you home'" (RN7, FHT). She also discussed anticipating the language barriers that may exist between the HCPs and immigrants and, in response, encouraged her patients to bring a family member to support with communicating important health information: "I usually say that they will be able to have somebody there that can translate, just because I know [emergency department] physicians want collateral information a lot of times especially if the patient doesn't speak English" (RN7, FHT).

In addition to utilizing health services, some participants also reported educating patients on how to select appropriate level of care to seek based on health needs or concerns. Specifically, they described teaching immigrants on when to seek PHC versus emergency care services depending on the urgency of their concern. One nurse shared the explanation she routinely provides to newly arrived immigrants:

"We are your main providers here [at the PHC clinic]. If you need anything nonemergent you would come to us first. We would take care of all of your routine care as well...however, if there is something urgent, so for example, you're having a heart attack, you can't breathe, things along those lines, you call 911 or you go straight to the emergency department." (RN6, FHT)

When the participants were asked how strategies or needs differ in promoting access among immigrants of different immigration categories, some nurses highlighted the vulnerability of refugees when navigating a complex healthcare system: "They have the information but now they don't know where to go, and they're unsure, and there's questions, but they didn't ask those questions because they were afraid..." (RN10, CHC). These nurses emphasized the extensive support and effort required to orient refugees to the context of the Ontario healthcare system, including the utilization of services:

So, a lot of health literacy and health teaching for really basic things that [native-born individuals] living in Canada really understand...So, getting them up to speed with that can kind of take up a lot of time. They are very motivated to take care of their healthcare needs, so if you send them for appointments...they're very much like wanting to follow-up... but it takes a lot of teaching to navigate the healthcare system... (RN9, CHC)

Although some aspects of accessing and utilizing health services may seem straightforward for native-born individuals, recent immigrants are required to integrate into a foreign and complex healthcare system. These findings show how PHC RNs are responsive to these unique

experiences of immigrants, particularly refugees, by providing basic but foundational education in utilizing health services across the system.

Navigating the Healthcare System

PHC RNs support recent immigrants to navigate the different levels and types of healthcare services available through the health system. The participants reported triaging and directing patients to the appropriate level or type of health care: "I'm usually the one triaging [the health concern] further and saying whether it's something that needs to be seen urgently, so at urgent care or a hospital, or if it's something that needs to be seen today at our family practice..." (RN7, FHT). Some nurses also highlighted the hesitancy of patients when directing them to receive care in the emergency department due to social barriers, such as transportation:

[Patients say] "If you're telling me to go to the emergency room, I need go take two buses or I need to take a taxi" versus "Okay, like either way I need to go see a doctor, so why can't I come see the doctor here at the health centre...?" (RN3, CHC)

In response, these nurses discussed explaining the rationale of accessing specific types of care considering the urgency of the patient's health concern. This nurse also shared the education she provides to patients with emergent health concerns: "I'm concerned that you need to be seen urgently in a larger facility that has access to, for example, immediate diagnostic imaging and... a place that's equipped to deal with medical emergencies" (RN3, CHC).

As patients may require health services beyond the PHC clinic, some participants also reported supporting immigrants to follow-up with referrals or attend appointments outside of the clinic. Specifically, some discussed clarifying appointment logistics for these individuals. For example, one nurse shared her experiences in facilitating communication between patient and specialty offices to schedule appointments:

I have had some cases where I've had to reach out to a specialist and communicate the details in terms of the availability of the client: so, having to first connect with the client using [phone interpretation] services, speaking to them, then calling the specialist back, sharing that information, seeing what appointments are available, and also just having that loop around. (RN10, CHC)

Another participant shared her experiences with contacting patients who are "lost to follow-up," with the support of professional language services, as the date and time for their ultrasound appointment were unclear:

...I give the patient a call, and I say, "Hi, we've received your appointment details to see this doctor at the hospital. Here is the time and the date. Do you have someone that you can bring with you as an interpreter? Are you able to get to the hospital on that day?" (RN3, CHC)

Language discordance of immigrant patients and service providers on an organizational level may influence the ability for patients to seek health services outside the PHC setting. PHC RNs addressed these challenges by ensuring these appointment details were appropriately communicated to these individuals. These findings show that PHC RNs support recent immigrants in navigating a complex health system by educating and directing patients to seek the appropriate type and level of health care.

Ability to Reach

Two patterns were identified in the dimension of *ability to reach*: (1) *mapping health services* and (2) *connecting to transportation resources*.

Mapping Health Services

Although less frequently discussed by PHC RNs, some shared about how they support recent immigrants in physically accessing health services due to social barriers. For example, one

participant discussed how recent immigrants may not have sufficient knowledge of available health services, which may be attributed to language barriers:

So, in [city of practice] we have really one major hospital and then we have an urgent care but there's no inpatients there and we do have a lot of walk-in clinics. I do find that because they don't know that you can enroll with a family doctor, a lot of times they're just seeing different walk-in clinics just for the ease of it...So, a lot of times mainly it's a geographical knowledge of what the services are available to them and the language barrier... (RN7, FHT)

To address geographical and language barriers, she reported providing information on available health services with a geographical area:

So, a lot of times it's providing them information in like a written form, so that I can show them maybe streetwise where they are or giving them like what's beside the hospital or what's beside like urgent care and giving more of like a visual thing. Letting them know the hours that they can access care. (RN7, FHT)

Another participant shared how recent immigrants may not follow up with attending appointments due to lack of knowledge of where the health service is located. In response, she discussed clarifying appointment details and referring individuals to health services or programs that are geographically convenient for them to promote attendance: "We do always try to refer them to places that are within walking distance of the Community Health Centre..." (RN3, CHC). When patients do not speak English, some nurses also shared how they provide written or visual directions of health services when individuals are accessing care beyond the PHC clinic to address language barriers: "...we write down appointments or I'll print maps...it's sometimes just more clear to have it on a map of where we send them" (RN9, CHC). Considering geographical location of health services and language may be a barrier for recent immigrants to attend appointments, PHC RNs address these barriers by promoting knowledge of available

health services through various strategies when assisting these individuals in utilizing services outside the PHC clinic.

Connecting to Transportation Resources

PHC RNs highlighted transportation barriers experienced by recent immigrants when attending appointments within or beyond the PHC setting. PHC RNs shared various ways that they connect these individuals to transportation resources in response to these barriers. For example, some PHC RNs connected individuals to community or social resources. This includes providing individuals with local transit fare, such as a "taxi chit" (RN4, CHC), or referring to a "community support service program that does offer lifts to patients" (RN2, FHT). In another instance, one participant discussed referring patients to interdisciplinary team members to assist with accessing transportation: "...we can refer [the patient] to our healthcare systems navigator and she can accompany them or figure out a way for them to get there" (RN4, CHC). Another PHC RN also shared utilizing case workers to help individuals physically attend appointments:

It's just such a big hospital. Any person could get lost. So, if we really needed [the case worker's] support to say, "You know, this is a somewhat urgent appointment. We really want to make sure that patient does not miss this follow-up. Is that something you could support us in?" (RN8, NPLC)

As health services may be physically inaccessible for recent immigrants, these findings demonstrate the various strategies that PHC RNs implement in their practice to support these individuals in reaching essential health services.

Affordability

Two patterns were identified in how PHC RNs promote the *affordability* of health services: (1) coordinating low-cost health services and (2) navigating affordability of health services for those

with IFH or without provincial or federal health insurance (i.e., migrants ineligible for OHIP or IFH).

Coordinating Low-Cost Health Services

PHC RNs highlighted the financial barriers associated with accessing specific health services or treatments for recent immigrants, particularly health care not covered under OHIP. They shared their experiences in coordinating low-cost health services within and beyond the PHC clinic for individuals to access health care, including extended services not covered under OHIP. Regarding services not covered under OHIP, one participant discussed offering bundle sessions for services, such as physiotherapy, to patients at no cost:

[Physiotherapy is] extremely expensive, but we have so many families and individuals that have immigrated that they need [this service]. This is clinically required. So, what we did is we actually... as a clinic kind of put together some of that funding and what we use it for is packages. So, we can get...you know six to twelve sessions for these individuals. (RN8, NPLC)

This nurse also discussed collaborating with health services (i.e., specialty care) beyond the PHC clinic to explore compassionate care options for specialty tests not covered under OHIP:

So, if we have someone that has any kind of elevations, liver enzymes for example, FibroScans are \$90.00...if we can clinically apply to have that covered...if not...we can also directly approach a specialist to say, "Is there any ability at this time to consider compassionate care whether it's at a reduced price or if it is able to given for free as well." (RN8, NPLC)

Another nurse reported connecting individuals to limited in-house, uninsured interdisciplinary services: "...there are services where if you don't have [private] insurance coverage, they qualify for things like, for example, physiotherapy or mental health counselling. We're able to set them up with that..." (RN5, FHT).

For medications not covered by health insurance plans, participants highlighted the various strategies they implement in their practice to support patients in accessing medications

they need. For example, one nurse reported making referrals to pharmacists to assist with accessing medications. Other participants discussed providing individuals with sample stock medications: "We have a lot of pharmaceutical companies that give us samples of medications, so we have a lot of those that we can give offhand that we have stocked" (RN9, CHC). When stock samples weren't already available in the PHC clinic, one nurse shared her experiences in: "...contacting [pharmaceutical companies] to see if [the PHC clinic can] get samples for clients" (RN10, CHC). Some nurses also described coordinating with services or programs (e.g., pharmaceutical companies) beyond PHC to provide patients with free or affordable medications. For example, one participant shared about how "some of the drug companies offer like programs where they will help kind of pay for part of the medication, if not all of it" (RN2, FHT) and connecting patients to these programs. Similarly, another nurse described the various options she explores to ensure patients are able to access birth control treatments:

...they've got to wait six months to perhaps get the funding for a certain thing or we're applying for a free sample for like an [intrauterine device] for example with a company... so there's a lot of things that go into it, but using different services, working collaboratively with outreach of different programs, we can try and find other options for clients that maybe sustainable in the long run. (RN10, CHC)

One participant also described applying and re-applying for funding through social assistance programs to facilitate accessing necessary medications for resettling immigrants:

[When applying for funding through social assistance programs] you really have to be specific in your request...for example, you have to prove that you've done all these different types of methods of treatment before ... going to get to that first line [treatment]. So, we might have to introduce medications that are maybe a little bit less effective first time around, then we reapply, right to say, "Hey ... you know, clinically-speaking are we meeting our goal? Is it optimal? No. Please consider providing this medication or again a procedure." (RN8, NPLC)

As lack of health coverage acts as a significant financial barrier for immigrants to accessing extended health services and medications, these findings demonstrate the expertise of PHC RNs

in facilitating creative solutions to acquire a wide range of affordable health services for their patients.

Navigating Affordability of Health Services for those with IFH or without OHIP

PHC RNs practicing in CHCs and NPLCs highlighted that refugees covered by the IFH program and immigrants not covered by OHIP may face significant financial barriers when accessing health care. In response, these nurses discussed navigating the affordability of health services for these immigrants. Within the PHC clinic, participants reported providing comprehensive in-house care to avoid out-of-pocket costs for immigrants. For example, one nurse shared her experiences with coordinating health services for an uninsured immigrant with a suspected bone fracture:

"Okay, we can order an outpatient x-ray, but the treatment in terms of what we would do... we can't cast, we can't splint...we don't have a surgeon to be able to do those types of things. But...if it's a non-displaced fracture where the treatment is ... rest, ice, and then keeping it immobilized, those are things that we can actually do in the office. It's just that we basically have to send them away, have them do their x-ray, have them come back for us to go through the results, then do the immobilization...but it will cost them a lot less. (RN1, CHC)

Despite the limited extent of illnesses or diseases that the HCPs could manage or treat within the PHC clinic, PHC RNs acted as facilitators of delivering certain in-house services that could be offered to individuals, and in some circumstances, with no out-of-pocket costs for patients. When promoting the delivery of affordable services to individuals within the clinic, one participant emphasized her responsibility in navigating the complex billing system of health services. She provided the following example when assisting a patient in accessing specialty bloodwork:

"If we're sending them to a specialist, sometimes the specialist has to order something because it is covered under certain government funding for immigrants of certain

statuses, but if we at a primary care level had someone order it, it's actually not covered... (RN8, NPLC)

Overall, these findings suggest that PHC RNs have in-depth knowledge of the billing system of health services and direct patients to the appropriate services to avoid unnecessary out-of-pocket costs to patients.

Participants also shared their experiences in coordinating low-cost health services beyond the PHC clinic. For services not covered under OHIP or IFH, participants discussed advocating for direct billing of services or medications to the PHC clinic:

...we can't cover someone's medication forever, but on a short-term basis we can get the doctor to send the prescription to this pharmacy...and then the pharmacy bills us. Same with bloodwork or diagnostic services. If it's something that's not covered under OHIP or IFH or if the patient has no insurance...then our centre will cover it and the nurses are pretty key in advocating for that... (RN4, CHC)

Another nurse discussed collaborating with health services outside the PHC clinic to explore compassionate care or affordable options for various therapeutic or specialty services: "So, if we have a situation where say dermatologist, usually its \$120.00 for an appointment...we will certainly ask for consideration for compassionate care" (RN8, NPLC). For refugees with IFH, one participant recognized the limitations associated with health service access, as not all health organizations accept this form of health coverage. Based on previous experience and knowledge, this nurse discussed connecting refugees to specific health services that accept IFH coverage:

It's just good to know where you can send people...there's two other walk-in clinics that will take clients who are IFH... We have a list for clinics that take IFH for physio...we had sent someone for an ultrasound that didn't accept IFH, and now I know don't send people there. We just have lists and lists of things offhand to make sure that this is where we can send them, this is where we can't send them. (RN9, CHC)

PHC RNs address financial barriers for immigrants with IFH or without OHIP by applying their knowledge of the billing system and coordinating low-cost PHC services to promote the affordability of comprehensive health services.

When uninsured immigrants required emergency care services, one nurse reported providing a letter to individuals for direct billing to the clinic: "...there is a specific letter that we provide them that...says, 'Hello, this client is uninsured, and they're a client of our Community Health Centre. These are the services that we can cover and you can bill it to the health centre'" (RN4, CHC). Some nurses also emphasized the hesitancy of uninsured individuals in seeking these services due to the associated costs:

I couldn't even count the amount of times that a new immigrant has contacted a primary care office saying that they are concerned about something that could potentially be emergent...something that we would direct them to an emergency department for, but they don't know if they're going to be able to afford it. (RN8, NPLC)

These nurses reported educating individuals on using the emergency room for emergent health concerns regardless of ability to pay: "We do…tell them, we say, 'If you go to the emergency room…based on our assessment, you are having a medical emergency that needs to be assessed urgently" (RN3, CHC). To encourage patients to seek emergency care, one participant also discussed informing individuals of collaborating with members of the healthcare system to develop long-term payment plans:

... we have to send you [to the emergency department], but we will work with the hospital, social worker, we will work with the finance team to see what we can do to make payments a little bit more reasonable for you...as opposed to needing to pay like two thousand dollars upfront. (RN1, CHC)

These findings show that PHC RNs have extensive understanding of the healthcare system which enables them to navigate the complexity of affordable health service options for those most vulnerable to financial challenges, particularly uninsured immigrants.

Ability to Pay

One pattern was identified in how PHC RNs support recent immigrants in their *ability to pay* for health services: *navigating health coverage*.

Navigating Health Coverage

Although less frequently reported, some PHC RNs shared their responsibility in supporting recent immigrants' ability to pay for health services by navigating health coverage. Specifically, one nurse discussed supporting uninsured immigrants to develop a plan to receive health coverage by referring to the clinic's community support worker:

There needs to be a plan going forward. So yeah, we definitely support them with that because if you're someone we're seeing in the clinic, we tell them, 'You know, we're only limited in what we can do. So, we need to get you set up with some sort of coverage going forward so we can keep running all these tests or keep maintaining your health.' (RN9, CHC)

Some participants also shared their experiences in supporting immigrants in accessing government-assisted programs. For example, one nurse indicated that they assist individuals with completing paperwork for government assistance programs to receive health services, such as IFH. Some participants also discussed supporting the application process for social assistance programs to cover the costs associated with specific treatments or interventions. One nurse shared an example of a patient who needed incontinence products:

... he didn't have very much income to kind of support that and of course those can be very expensive. Working collaboratively with the case co-ordinator here at the centre,

we're able to look and see if we can kind of help him with this process of his disability application. (RN10, CHC)

Another participant shared her experiences of applying and re-applying on behalf of individuals for social assistance coverage until the application for a specific treatment is approved:

...for example, you have to prove that you've done all these different types of methods of treatment before...going to get to that first line. So, we might have to introduce medications that are maybe a little bit less effective first time around, then we reapply...to say, "Hey ... you know, clinically-speaking are we meeting our goal? Is it optimal? No. Please consider providing this medication or again a procedure." (RN8, NPLC)

These findings suggest that PHC RNs acknowledge that health coverage is a key facilitator in accessing health care and are involved, to some extent, in supporting this population to navigate health coverage to obtain necessary services.

Acceptability

A pattern that was identified where PHC RNs promote the *acceptability* of health services was *respecting cultural differences and preferences*. To optimize the RN role when delivering PHC to recent immigrants, a second pattern was identified as *promoting cultural competency*.

Respecting Cultural Differences and Preferences

To promote acceptability of services, PHC RNs assessed and acknowledged differences that existed between the RN and recent immigrants regarding social and cultural belief systems. To understand an immigrant's worldview, participants reported assessing the patients' individual belief systems. These nurses expressed curiosity when assessing these systems: "...it's important to know where someone is coming from, their history and understanding of health and human body, their beliefs and worldview of 'What does healthy look like for you?"" (RN5, FHT). PHC RNs also shared about having discussions with individuals regarding the health and/or cultural

practices they use. One nurse discussed how she approaches conversations with her immigrant patients who practice Ramadan and how it might affect their health:

It's...talking to those patients about medication taking and ... if you're diabetic and certain things like that in terms of cultural practices or religious practices, and also, what their belief system is in terms of disease itself, and how does the body heal itself, and how do we help the body in healing. (RN7, FHT)

As there may be a contrast in worldviews between the PHC RNs and immigrant patients, participants discussed being self-aware of differences and respecting their values and beliefs. Practically, some nurses reported accommodating individuals' gender preferences for those in the circle of care, such as HCPs or professional language translators: "So, I actually ask before the appointment starts if there is a preference because usually it is possible, we use a phone service, so it's usually possible to request a male or a female" (RN8, NPLC). As PHC RNs have their personal worldview, including values and beliefs, some participants recognized the importance of not imposing their worldview onto their patient. These nurses recognized the importance of respecting individuals' cultural worldviews and decisions associated with their values and beliefs:

...you know they have very strong cultural beliefs when it comes to their own bodies, when it comes to their own health, then you have to try and again explore that with them to better understand it and then respect it at the same time, as much as you can. (RN7, FHT)

Promoting Cultural Competency

PHC RNs highlighted providing nursing care to specific cultural or ethnic groups that the PHC clinic serves. They also discussed the need to promote cultural competency in their nursing practice. For example, one participant reported being unaware that she would be delivering nursing care to a large proportion of immigrant patients at the PHC clinic she previously

practiced at. She discussed the lack of orientation and communication from the healthcare team as a reason for this:

I feel like I kind of just got thrown into it and even when I was interviewing for the job, it was a bit strange that they didn't give me a heads up or they didn't say, "Okay. this is the population that we work with, a lot of them don't speak English." They didn't tell me that at all. That was something that I found out. (RN3, CHC)

Specifically, this nurse highlighted the challenge of not knowing the specific cultural or ethnic groups that the PHC clinic served, as it would have enabled her to provide appropriate and tailored nurse care:

So...at that specific clinic, one of the doctors spoke Spanish, so a lot of his patients came specifically to see him because he speaks Spanish, but nobody ever mentioned that to me and looking back now, oh it could have been much more helpful... (RN3, CHC)

She also stated that cultural training on this specific population could have supported her nursing practice when delivering care to this cultural group. Other participants also recommended that it would be helpful to receive updates from *Immigration, Refugees and Citizenship Canada*. Some participants indicated this would support tailoring health services for specific populations:

...I think it's just helpful to have the knowledge of, "Okay, like these are things that are coming. Like we are getting a group of recent immigrants that are coming from this country. How are we going to care for this population? What other measures are we going to put in place for this community?" (RN5, FHT)

These findings show that there is opportunity to adequately equip PHC RNs in the delivery of nursing care to specific cultural and ethnic groups, including incoming refugee groups. Through early notification from the Federal government and education from PHC organizations, PHC RNs can improve the quality of culturally safe care delivered to sub-populations of recent immigrants considering they are not a homogenous group.

Approachability

Although there were no main findings regarding how PHC RNs promote the approachability of health services, one pattern was identified in how the PHC RN role can be optimized which is by *supporting opportunities for nursing outreach*.

Supporting Opportunities for Nursing Outreach

Participants emphasized the desire for opportunities to utilize their knowledge and expertise to deliver nursing care outside the PHC setting. For example, nurses proposed delivering preventative care (e.g., pap testing, flu, and vaccination clinics) through outreach activities or programs in the local community. Participants described this type of opportunity as improving access by addressing community needs: "So, going into a population or a community and seeing: What are the needs of this community? What are the strengths here? And what are some things that we could work on?" (RN10, CHC). One nurse who specializes in diabetes education discussed delivering group diabetes education sessions in the community with the support of a professional translator: "...we offer these courses in multiple languages? So, if there isn't anybody who's technically qualified in teaching them, I could teach them with an appropriate translator and do it in a group..." (RN2, FHT). However, some participants discussed barriers to engage in these types of programs due to organizational factors, such as heavy workloads, inadequate funding, insufficient staffing, or lack of medical directives.

As newly arrived refugees have immediate health needs upon arrival in Canada, some PHC RNs recommended PHC RNs completing assessments and triaging care for these individuals outside of the PHC clinic (e.g., prior to accessing healthcare). For example, one PHC RN discussed triaging refugees immediately upon arrival and directing them to PHC settings with specific models of care that can appropriately meet their needs:

"...why are we not using nurses to be able to assess where they may be medically to be able to then direct them to areas where they may be more specialized? So, I work at a centre that does specifically follow refugees, but there's a lot of people who come to us who are very healthy, who speak English very well who can actually probably go to a [primary] health care centre that doesn't require the level of resources that a CHC provides. (RN1, CHC)

These nurses also emphasized their expertise in supporting newly arrived refugees by addressing immediate health needs, such as vaccination campaigns: "I feel like we could be doing outreach and we could be meeting some of the need by doing outreach at the [immigration] hotels...and letting people know that services are available" (RN4, CHC). These findings demonstrate the potential opportunity to draw upon the skills and expertise of PHC RNs to meet the needs of specific communities and populations, specifically newly arrived immigrants, by extending their delivery of PHC beyond the clinic setting.

Summary of Results

The findings of this study explain how PHC RNs promote healthcare access among recent immigrants living in Ontario and how their role can be optimized to better support recent immigrants.

Based on Levesque et al.'s (2013) framework, PHC RNs promoted access among this population through a variety of ways. Firstly, to promote *appropriateness* of health services, nurses acted as a health and social resource hub to address health and social needs and promoted continuity of care within a fragmented health system. Secondly, they supported the *availability* and accommodation by promoting the availability of health services. Despite limited availability of HCPs and appointment times, the nurses also committed to ensuring recent immigrants received timely care by advocating for access to various levels of health care. PHC RNs also promoted recent immigrants' *ability to perceive* the need to care by adopting various strategies to

educate these individuals on the importance of receiving PHC. Further, they supported their ability to engage by promoting active participation of immigrants in their health care. As recent immigrants may also experience low health literacy levels and language barriers, the nurses also tailored strategies to promote their health literacy levels and address language barriers. Additionally, PHC RNs also supported recent immigrants, particularly newly arrived immigrants and refugees, in their ability to seek by delivering education on utilizing health services and navigating the health system which is often complex in nature. As immigrants may also face transportation barriers, the nurses supported their ability to reach health services by connecting them to transportation resources and mapping health services for these individuals. Drawing from their knowledge on the billing of the health system, the nurses promoted affordability through coordinated low-cost health services for services not covered by OHIP. For immigrants with IFH or without OHIP coverage, PHC RNs also navigated the affordability of health services and, to some extent, health coverage for these individuals to support their ability to pay. Lastly, despite differences in worldviews, PHC RNs supported the acceptability of health services by demonstrating respect the cultural differences and preferences of recent immigrants.

Several opportunities were identified to optimize the PHC RN role to support the delivery of care among recent immigrants. Specifically, additional nursing education and resources, such as continuing education, medical directives, and professional language services, would support RNs in delivering appropriate PHC care to this population. Secondly, the nursing workforce can be strengthened through additional organizational resources (i.e., funding and more nursing staff) which would enable RNs to spend more time providing PHC-related care to recent immigrants. Further, there is opportunity for RNs to utilize their expertise outside the PHC setting through preventative care outreach programs to support the health of immigrant communities. This also

includes the delivery of PHC to immigrants immediately upon arrival in Canada. Lastly, to promote the delivery of culturally tailored nursing care for recent immigrants, PHC RNs would benefit from being informed, on an organizational and government level, on the specific cultural or ethnic groups they will provide care to.

CHAPTER FIVE: DISCUSSION

Chapter Overview

This chapter discusses the study findings related to how PHC RNs promote healthcare access for recent immigrants living in Ontario and how their role can be optimized in practice. Based on Levesque's et al.'s (2013) framework, 10 dimensions of healthcare access were identified in the study findings: (1) appropriateness, (2) availability and accommodation, (3) ability to perceive, (4) ability to engage, (5) ability to seek, (6) ability to reach, (7) affordability, (8) ability to pay, (9) acceptability, and (10) approachability. The chapter will contextualize these findings within the current body of Canadian literature and discuss new contributions to literature.

Findings in the Context of Literature

The primary aim of this study was to explore how RNs practising in PHC settings promote healthcare access for recent immigrants living in Ontario. The study also sought to examine how PHC RNs address the unique barriers to care experienced by recent immigrants, support immigrants of different immigration classes in accessing health services, and opportunities for role optimization to enhance healthcare access for immigrants. The *Patient-Centered Access to Health Care* framework by Levesque and colleagues (2013) was useful in conceptualizing how PHC RNs promote the various dimensions of healthcare access for recent immigrants. The following sections will examine the study findings within the context of existing literature.

Promoting Healthcare Access for Recent Immigrants & Optimizing the PHC RN Role

Appropriateness

Acting as a health and social resource hub. In this study, PHC RNs assessed and identified physical and social needs of recent immigrants. This is consistent with previous studies that discuss PHC nurses' responsibility for conducting health assessments among the general population to identify specific needs, including physical (Poitras, Chouinard, Fortin, et al., 2018), mental (Girard et al., 2017; Todd et al., 2007), and social needs (Todd et al., 2007). To address physical and social needs, nurses in the current study reported referring immigrants to internal and external interdisciplinary HCPs and resources to support addressing the specific needs of these individuals, which is congruent with previous single studies using qualitative or quantitative approaches (e.g., survey data) (Beaudet et al., 2011; Poitras, Chouinard, Gallagher, et al., 2018; Todd et al., 2007; Yuille et al., 2016). One participant discussed utilizing her established network to efficiently support immigrants to access essential community resources. Similarly, when delivering cancer survivorship care, Yuille and colleagues (2016) reported that PHC RNs utilize existing knowledge and collegial relationships with community organizations to support referral processes when directing patients to community resources.

In previous literature, a review of quantitative studies and more recent single quantitative studies using health administrative data have reported the vulnerability of the mental health of refugees (e.g., Anderson et al., 2015; Blackmore et al., 2020; Edwards et al., 2022; Grundy et al., 2023; Saunders et al., 2019), which was also highlighted by some nurses in this study.

Specifically, for post-traumatic stress disorder, clinical guidelines for immigrants and refugee health recommend that HCPs conduct a systematic, clinical assessment rather than directly

screening for or assessing this mental health illness alone (Pottie et al., 2011), which is consistent with what PHC RNs reported in this study.

Although not all participants discussed the responsibility of addressing the mental health for recent immigrants, some nurses described assessing mental health concerns and connecting willing individuals to mental health resources. The varying degrees to which nurses promote the mental health of patients in the PHC setting is consistent with previous studies. For example, a multiple case study conducted by Girard and colleagues (2021) indicates that PHC nurses in various PHC settings report varying responsibilities in assessing and screening mental health levels as well as connect and deliver mental health resources or interventions. Similarly, Poitras, Chouinard, Fortin, and colleagues (2018) reported that mental health assessments were rarely conducted by PHC nurses in their multiple case study. The degree to which the nurses in the current study addressed mental health concerns for this population may be influenced by organizational factors, such as defined goals of care, responsibilities of interdisciplinary team members, and access to mental health resources within and beyond the PHC clinic, as previously reported by Girard and colleagues (2021).

Findings from this study showed that PHC RNs were responsible for addressing the health and social needs of newly arrived immigrants. Specifically, this study has offered new insights with respect to how RNs support these individuals in establishing their care journey within the context of the Ontario health system considering their pre- and post-migration experiences, immigration class, and insurance coverage (i.e., provincial, federal, or uninsured). To establish their care journey, these nurses ensured that the preventative, PHC needs of these individuals were addressed, including cancer screenings and vaccinations. The responsibility of PHC nurses for promoting and delivering these types of preventative health interventions is

consistent with what has been reported in previous single studies using qualitative or quantitative approaches (e.g., survey data) (Akeroyd et al., 2009; Allard et al., 2010; Lukewich, Edge, Van DenKerkhof, et al., 2014; Poitras, Chouinard, Fortin, et al., 2018; Todd et al., 2007; Yuille et al., 2016).

Promoting continuity of health care. Our study findings showed that PHC RNs promote the continuity of care between health organizations, which is congruent with previous quantitative (i.e., cross-sectional survey) and mixed-methods studies (Lukewich et al., 2018; Todd et al., 2007). To support continuity of care, previous qualitative and mixed-methods studies have reported the responsibility of PHC nurses making referrals to other health services or professionals among the general population (Beaudet et al., 2011; Todd et al., 2007). The current study provides new insights in how PHC RNs facilitate referrals by providing paper or email requisitions to recent immigrants or directly faxing requisitions on behalf of immigrants.

Some PHC RNs discussed their responsibility of advocating immigrants' needs among other health care providers, based on their contextual understanding of their patients. Similarly, in a focused ethnography study, Al Sayah, Szafran, and colleagues (2014) found that PHC nurses report having a role in patient advocacy when collaborating with other members of the healthcare team. In the current study, PHC RNs exercised their inherent power within the health system to advocate for immigrants who, otherwise, may not be able to advocate for themselves.

As a core competency, the *Canadian Family Practice Nurses Association* (2019) outlines that PHC RNs are expected to support patients in transitioning between health organizations or levels of care. Considering previous literature, Yuille and colleagues' qualitative descriptive study (2016) found that PHC RNs delivering cancer survivorship care supported patient

transitions between HCPs or levels of health care (e.g., specialty cancer care to community-based care). This aligns with our current study which found that some nurses are responsible for supporting transitions between health organizations or systems when immigrants leave the care of the PHC clinic. Our study also offers new insights in how RNs promote continuity of care for immigrants who are discharged from new-immigrant clinics or who face deportation, including equipping these individuals with the necessary knowledge and resources to support the continuation of their health care journey elsewhere.

Enhancing the PHC RN role. To promote the quality of care delivered to the immigrants, PHC RNs suggested integrating the delivery of PHC to this specific population into undergraduate curricula and continuing education nursing programs. Specifically, nurses discussed how receiving education on communicating with individuals with limited English proficiency would support their practice. In a qualitative study by Carter and colleagues (2022), HCPs and/or stakeholders also suggested the need for specialized education for training health professionals in delivering care to newly arrived immigrants, specifically refugees. In general, a lack of continuing education opportunities for PHC nurses has also been reported in quantitative (i.e., cross-sectional surveys) and mixed-methods studies to be an organizational barrier for their role optimization in nursing practice (Allard et al., 2010; Lukewich et al., 2015; Todd et al., 2007). There are opportunities for organizations to develop and enhance the skills and knowledge of PHC RNs when delivering health care to immigrant populations through specialized PHC training and education, specifically immigrant health.

In this study, participants recommended expanding the nursing scope of practice or implementation of medical directives to optimize the general workload in their PHC practice. Although PHC nurses have the expertise and knowledge to administer the appropriate

medications or vaccinations, they discussed how seeking out medical orders from physicians or NPs can act as a barrier to care and, in some instances, delay treatment for individuals. Some nurses highlighted that this was particularly relevant when administering vaccinations to ensure the immunization status of recent immigrants is up to date. This is consistent with a cross-sectional study by Lukewich and colleagues (2015) which found that approximately 20% of PHC nurses practicing in Ontario reported that their inability to prescribe or adjust medications is an organizational barrier to RN role optimization. When appropriately implemented and applied, medical directives can support the full scope of practice for RNs and promote the delivery of timely health care for individuals (College of Nurses of Ontario, 2023a), including recent immigrants who may have immediate health needs.

Availability and Accommodation

Promoting flexibility to increase availability of health services. To promote the availability of health services, PHC RNs in this study triaged the urgency of the health needs of patients and scheduled appointments based on their assessment which is consistent with previous single studies using qualitative or quantitative approaches (e.g., survey data) (Allard et al., 2010; Borgès Da Silva et al., 2018; Oandasan et al., 2010; Todd et al., 2007). However, PHC RNs also discussed promoting the availability of health services for recent immigrants working precarious jobs or when transportation barriers existed. Similarly, in a scoping review, Tsai and Ghahari (2023) found that transportation and inconvenient hours of opening influence the availability of services for recent immigrants. The current study provides new insights into how PHC RNs address these barriers by providing information on alternative appointment options to receive health services (e.g., virtual appointments, after-hour services or weekend walk-in clinics) or flexing their personal job schedule to accommodate individuals unable to attend regular, daytime

clinic hours. The ways in which PHC RNs promote availability of health services is particularly important given the capacity crisis that is challenging the current PHC system in Ontario (Mangin et al., 2022).

Addressing timely care. This study found that PHC RNs recognized the long wait times associated with accessing some health services in Canada. This is consistent with previous reviews of quantitative and qualitative studies which have reported long-wait times to be a key systemic barrier to accessing health care for immigrants (Chowdhury et al., 2021; Tsai & Ghahari, 2023). Although wait times create barriers to access among the general Canadian population, nurses in the current study discussed that newcomers' perception of timely care may be influenced by their experiences with previous healthcare systems. For example, as one participant mentioned, immigrants may have received immediate medical attention when seeking out care from a general HCP or specialty office in their home country, whereas in Ontario, it may take weeks or months to access service providers. This is consistent with Carter and colleagues' (2022) findings which showed that newly arrived Syrian refugees interacting with the Ontario health system experienced dissatisfaction with long-wait times between referrals and receiving specialty care for similar reasons.

The current study provides two unique contributions to existing literature surrounding availability and accommodation. Firstly, as frontline providers, PHC RNs are often required to inform immigrants of long wait times and temper expectations related to accessing health services within Ontario's current health system. Secondly, despite these long wait times, nurses also recognize the inequities in healthcare access for recent immigrants, especially for those with IFH and/or OHIP, and demonstrate a commitment to providing timely care for this population. This is exemplified through the study's PHC RNs who reported advocating on a provider- and

organizational-level for immigrants to receive timely health care, especially for immigrants with IFH or without OHIP who face additional barriers to care.

Strengthening the PHC RN workforce. PHC RNs discussed practice challenges related to heavy workloads and increasing responsibilities due to the limited number of nursing staff at their clinics. They identified the need for additional organizational resources to expand clinic capacity, such as funding to hire additional HCPs. These resources would act as facilitators for nurses to increase their time and capacity and re-distribute their workload to ensure the appropriate nursing care is provided to patients. Some nurses indicated that this would enable them to spend more time engaging with recent immigrants to promote the quality of care or to expand their roles and responsibilities as an RN (e.g., engaging in community-based outreach programs). In a previous integrative review and more recent single studies using qualitative or quantitative approaches (e.g., survey data), limited organizational resources, such as time and staffing, has been identified as a barrier to PHC nurses practising to their full potential (Busca et al., 2021; Lukewich et al., 2015; Todd et al., 2007). Specifically, Lukewich and colleagues (2015) found that just over one quarter of PHC nurses (i.e., RN, RPN, and NP) in Ontario report insufficient time as a barrier to their role optimization in practice. Further, Todd and colleagues (2007) found the PHC RNs in Nova Scotia reported the need for additional nursing staff in order to deliver care that is to their full scope of practice.

To support the delivery of care to recent immigrants, some participants practicing in FHTs also suggested having access to professional interpretation services. Having access to these services in PHC settings during patient-provider interactions has also been previously recommended by HCPs and immigrant populations as a primary strategy to address language barriers (Lane & Vatanparast, 2022; Pottie et al., 2014; Turin et al., 2021). To maximize their

expertise, stakeholders and governments must ensure that organizations have adequate resources and tools that support advancement of the PHC RN role and responsibilities to better the health of patients who face health inequities, including recent immigrants.

Ability to Perceive

Providing education on the importance of receiving PHC. For recent immigrants, their knowledge regarding the need for PHC is heavily influenced by their experiences with previous health systems in other countries (Kamran et al., 2022). As a result, the need for PHC to optimize health and well-being may not always be realized by immigrants. To respond to this, PHC RNs in the current study discussed delivering education to this population to iterate the importance of receiving PHC. A previous scoping review and more recent single studies using qualitative or quantitative approaches (e.g., survey data) have highlighted a range of responsibilities of PHC nurses associated with delivering education, including educating patients on blood-borne and/or sextually transmitted diseases (Lukewich et al., 2018), immunizations (Poitras, Chouinard, Fortin, et al., 2018; Todd et al., 2007), and healthy lifestyle behaviors (Al Sayah, Szafran, et al., 2014; Borgès Da Silva et al., 2018; Curnew & Lukewich, 2018; Girard et al., 2017; Lukewich et al., 2018). This study offers new contributions to explicate how nurses deliver PHC education for immigrants related to immunizations, preventative screening, and chronic disease management, including promoting the ability for recent immigrants to perceive the need for this type of care. To do so, the nurses educated immigrants on the necessity of PHC to prevent, treat, and diagnose illnesses or diseases. This also involves nurses educating immigrants on their increased risk of non-communicable diseases based on family history and explaining the rationale, risks, or benefits of receiving and not receiving PHC.

Ability to Engage

Tailoring strategies to address language barriers. PHC RNs frequently emphasized language barriers as a major factor that influences the opportunity to access health services for recent immigrants who do not speak English. This has also been previously reported in reviews of quantitative and qualitative studies and more recent single qualitative studies as a key access barrier for immigrants (Chowdhury et al., 2021; Kalich et al., 2016; Kamran et al., 2022; Pandey et al., 2021, 2022; Patel et al., 2021; Tsai & Ghahari, 2023; Turin, Rashid, Ferdous, Naeem, et al., 2020). To address this barrier, nurses in the current study adopted several strategies, including the use of professional interpretation services and collaborating with non-trained interpreters (e.g., family members or circle of care members) to assist with translation. The use of interpreters, trained or non-trained, among nurses to address language discordance between patients has been frequently reported as a primary strategy to address communication challenges in previous reviews of quantitative and qualitative studies and more recent single studies using qualitative or quantitative approaches (e.g., cross-sectional surveys) (Brisset et al., 2014; de Moissac & Bowen, 2019; Gerchow et al., 2021; Joo & Liu, 2020; Pandey et al., 2021; Patel et al., 2021).

Notably, in the current study, access to professional interpretation services were only reported by nurses practising in CHCs and NPLCs, which is not a surprising finding considering their services are designed to serve populations who experiences inequities in healthcare access, including immigrants (Office of the Auditor General of Ontario, 2017). Yet, those who practiced in FHTs either did not report or reported not having access to these services, which highlights potential inequities across PHC delivery models. These findings are consistent with previous studies reporting varying availability of professional interpretation services among practice

settings. For example, in a mixed-methods study, de Moissac and Bowen (2019) found that less than 20% of Francophone participants with poor English fluency reported using professional interpretation services when using health services in their community and almost 60% of these participants reported using non-trained interpreters (e.g., family members) to assist with translation. Similarly, in a cross-sectional study examining the practices and resources of PHC HCPs delivering mental health care to non-English speaking immigrants, Brisset and colleagues (2014) found that only 44% of participants had access to professional language interpreters and 57% had friends or families of patients assist with translation. Although professional interpretation services are a key tool in addressing language barriers between HCPs and patients, the current study found inconsistencies in availability of these services across PHC settings, which prevents effective communication between nurses and patients of this population.

When using non-trained interpreters, nurses in the current study highlighted challenges that these interpreters may experience when translating complex medical terms. Previous scoping reviews of quantitative and qualitative studies and a more recent single qualitative study have also indicated disadvantages of using these types of interpreters, such as possible inaccuracy of translated health information (e.g., medical terms or patient-stated information) (Gerchow et al., 2021; Pandey et al., 2021; Patel et al., 2021). As another strategy to address language barriers, nurses in the current study sought out language-specific PHC resources to provide to patients. Similarly, the study by Brisset and colleagues (2014) found that PHC HCPs use this as a practice strategy when providing mental health care to immigrants. As discussed, nurses in the current study indicated adopting a combination of strategies to effectively communicate with their patients when language barriers existed.

Promoting health literacy. Low health literacy levels among recent immigrants, particularly refugees, were highlighted by PHC RNs as a disadvantage to accessing health care services in Ontario. Previous literature has similarly found that immigrants, in general, have lower health literacy levels compared to their native-born counterparts (Ng & Omariba, 2014, 2010; Wang et al., 2019). Based on the competencies outlined by the *Canadian Family Practice Nurses Association* (2019) and *College of Nurses of Ontario* (2019), PHC RNs are expected to promote the health literacy levels of individuals. This study offers new contributions to portray how PHC RNs demonstrate this competency when delivering nursing care to recent immigrants. Recognizing that language barriers may exacerbate low health literacy levels, PHC RNs assessed the health literacy and literacy levels and, in response, tailored communication strategies when delivering education to recent immigrants. For example, PHC RNs provided verbal explanations of processes, used repetition to reinforce their health teaching, utilized visual aids or tools, and increased the time spent or frequency of follow-ups.

Previous reviews of quantitative and qualitative studies and a more recent single, qualitative study have reported that preconceived beliefs or misconceptions are factors that influence the ability and decision for immigrants to access care, such as such as sexual and reproductive health (Chowdhury et al., 2021; Tsai & Ghahari, 2023) and mental health (Pandey et al., 2022; Tsai & Ghahari, 2023) related to cultural and religious beliefs. However, PHC RNs in the current study highlighted that the influence of preconceived beliefs relating to health service use, based on their experiences with previous health systems, may influence the health literacy levels of recent immigrants. Nurses provided education to immigrants that address these preconceived beliefs and misconceptions. For example, some nurses discussed addressing the belief that every health ailment requires medical attention from HCPs. Nurses promote their

health literacy levels by educating them on managing their health independently at home and when medical attention from the PHC HCP is required. Future research should explore the effectiveness of these nursing strategies implemented in practice to promote the literacy levels of recent immigrants.

Considering the communication barriers between HCPs and immigrants with limited English proficiency, PHC nurses emphasized the importance of evaluating the effectiveness of their health education approaches. Nurses primarily reported utilizing the teach-back method. However, they also discussed adopting a combination of evaluation methods including, but not limited to, verbal confirmation and assessing facial expressions or body language. Interestingly, in their qualitative study, Al Sayah, Williams and colleagues (2014) observed that the teach-back method was infrequently utilized by PHC nurses when delivering diabetes education to patients. However, considering the data collection tools used to gather data in the mentioned study (i.e., observation) and the current study (i.e., interviews), the differences in these study findings may be explained by perceived versus actual validation techniques adopted by PHC nurses in practice.

This study provides new insights into how PHC RNs promote the health literacy of recent immigrants. Specifically, nurses discussed translating health information into accessible language for this population, as immigrants can experience challenges understanding and applying complex health information, which may be further complicated for those who do not speak English. However, this was less frequently reported by nurses in the study, and further research is needed to understand the ways in which PHC nurses promote the accessibility of complex health information to patients, specifically immigrants.

Promoting active participation in care and care decisions. To promote active participation in care, nurses in the current study supported recent immigrants in self-managing their health conditions. This is consistent with a previous scoping review and more recent single studies using qualitative or quantitative approaches (i.e., survey data) which have discussed how PHC nurses support patients in managing their chronic disease or illnesses (Al Sayah, Szafran, et al., 2014; Al Sayah, Williams, et al., 2014; Curnew & Lukewich, 2018; Lukewich et al., 2015, 2018; Poitras, Chouinard, Fortin, et al., 2018; Poitras, Chouinard, Gallagher, et al., 2018). As discussed previously, low health literacy levels and limited English proficiency may contribute to an immigrants' capacity to make informed health decisions. In the current study, PHC nurses discussed the importance of informed consent when working with immigrants and helping them to understand their rights as patients. This is consistent with the College of Nurses of Ontario (2019) entry-to-practice competencies; RNs are expected to assess and promote patients' capacity to provide informed consent based on practice standards and legislation. This study provides new contributions to literature regarding how PHC RNs equip recent immigrants with relevant health information to empower them to make informed decisions and actively engage in their health care.

Ability to Seek

Educating on utilizing health services. Study findings show that PHC RNs recognize that recent immigrants, following resettlement, are often challenged by a lack of familiarity with utilizing health services within a new health system. In their qualitative study of immigrants and health service providers, Pandey and colleagues (2021) highlighted that the ability for recent immigrants to access health services is heavily influenced by their ability to speak English, as service information is often only available in official languages (e.g., English and French).

Pandey et al. (2021) also found that HCPs from a variety of disciplines practicing in community clinics recognize their professional responsibilities in educating newly arrived immigrants, particularly those with limited English proficiency, on utilizing health services. Ghahari and colleagues (2020) pilot-tested an educational program led by various HCPs (e.g., family physicians and nurses) targeting immigrants to support their ability to access healthcare. The program included six components: an introduction to the Canadian healthcare system, finding a family physician, communicating with HCPs, addressing unique barriers, and mental and sexual health. They found that the program resulted in improved knowledge regarding these topics, which suggests that educational programs led by HCPs, specifically nurses, is a promising solution to promote healthcare access for this population (Ghahari et al., 2020).

The current study expands the existing literature by describing how PHC RNs fulfill this responsibility. Specifically, nurses educate this population on foundational knowledge to access the healthcare system, including (1) how to use complementary and therapeutic health services, such as pharmacy, bloodwork, and/or imaging and (2) selecting and seeking appropriate level of care based on health needs or concerns (e.g., PHC versus emergency care). As PHC RNs have an extensive knowledge of the health system, future research should explore the potential of utilizing this expertise to deliver educational programs for newly arrived immigrants on the Canadian health system within the PHC clinic and in the community.

Notably, RNs practising in CHC and NPLCs highlighted that newly arrived refugees as a particularly vulnerable group, compared to their immigrant counterparts. This vulnerability has also been highlighted in previous literature as a result of their pre-migration experiences related to violence, trauma, and loss (e.g., Al-Hamad et al., 2023; Oudshoorn et al., 2020; United Nations High Commissioner for Refugees, 2020) and initial resettlement challenges, such as

housing instability (Murdie, 2008; Oudshoorn et al., 2020), low income (Picot et al., 2019), and lack of employment (Agrawal, 2019; Xue, 2008). These pre- and post-migration experiences have significant impacts on the health of this population, including healthcare access. In the current study, findings indicate that extensive support is required to orient this population to the context of the Ontario healthcare system. This may be attributed to the fact that refugees may not have received health care for an extended period of time prior to immigration due to the conflict or hardships experienced in their previous country (United Nations High Commissioner for Refugees, 2020). These findings suggest that the experiences of accessing health care post-migration is unique for recent refugees compared to immigrants of other immigration categories (e.g., economic and family-sponsorship). Therefore, future research should examine how PHC nurses can be responsive to the educational needs of newly arrived refugees when orienting them to the Ontario health system.

When participants practising in FHTs were asked how they address specific needs or how their strategies differ in promoting access for individuals of different immigration categories, few nurses were able to address this topic. In contrast, CHC and NPLC nurses demonstrated greater expertise regarding this population compared to FHT nurses which may be explained by their frequent engagement with refugees considering the vulnerable populations their clinic serves. Interestingly, a scoping review by Kalich and colleagues (2016) found that the included studies exploring immigrant barriers to healthcare access rarely distinguished between immigration categories. As immigrants are often classified as a homogenous group, the current study suggests that a knowledge gap exists among PHC RNs regarding individuals' membership to specific immigration categories. However, considering healthcare access is heavily influenced by an individual's immigration status, further research is needed to examine this knowledge gap among

PHC RNs and potential solutions so that they can be adequately equipped to address the unique needs of refugees and immigrants based on immigration classes.

Navigating the healthcare system. Previous reviews of quantitative and qualitative studies and more recent single qualitative studies have reported that inadequate knowledge of health services and programs acts as a main barrier to navigating the health system for immigrants when settling in Canada (Chowdhury et al., 2021; Kalich et al., 2016; Kamran et al., 2022; Pandey et al., 2021, 2022; Patel et al., 2021; Tsai & Ghahari, 2023; Turin, Rashid, Ferdous, Naeem, et al., 2020). In this study, PHC RNs addressed this barrier by supporting navigation of the health system for recent immigrants in various ways. For example, they triaged and directed patients to the appropriate level or type of health care. This responsibility is a core competency of RNs (Canadian Family Practice Nurses Association, 2019; College of Nurses of Ontario, 2019) and has also been previous reported in single studies using qualitative or quantitative approaches (e.g., survey data) (Allard et al., 2010; Borgès Da Silva et al., 2018; Oandasan et al., 2010; Todd et al., 2007). Although triaging is a responsibility of nurses across the general patient population they serve, current study findings suggest that recent immigrants may face additional socioeconomic barriers, such as transportation, when directed by PHC nurses to access the appropriate level of care (e.g., emergency care). When triaging urgent health concerns of immigrants, PHC RNs tailor their nursing care to address these socioeconomic barriers and support immigrants in receiving the appropriate health care, including emergency care.

PHC nurses highlighted that language discordance between service providers and immigrants may exacerbate challenges in seeking and utilizing health services across the health system, which is a common barrier reported by previous reviews of quantitative and qualitative

studies and a more recent single qualitative study (Chowdhury et al., 2021; Pandey et al., 2021, 2022; Tsai & Ghahari, 2023). In a cross-sectional study, Lukewich and colleagues (2018) found that many RNs practicing in CHCs and FHTs act as liaisons between different levels of care. However, the current study expands this understanding through new insights into how PHC RNs act as liaisons to support recent immigrants in navigating health services outside the PHC clinic. Specifically, PHC RNs addressed communication challenges by coordinating care across the health system, including following-up with referrals on behalf of patients and facilitating appointment details between patients and specialty care.

Ability to Reach

Mapping health services. As discussed previously, inadequate knowledge of the health system is a barrier to accessing health care for the immigrant population. Specifically, in a scoping review, Tsai and Ghahari (2023) reported that these challenges can be attributed, in part, to the limited knowledge of immigrants on the existence of and geographical locations of health services. In the current study, PHC RNs indicated that recent immigrants settling within a geographical area may be familiarising themselves with the general services in the area, including availability of health services. However, they also highlighted that immigrants with limited English proficiency may experience challenges accessing information about services. To address geographical barriers, nurses provided visual or written information on health services (e.g., directions, map, appointment details) for recent immigrants.

Connecting to transportation resources. Previous reviews of qualitative and quantitative studies and more recent single quantitative (i.e., secondary-data analysis) and qualitative studies have highlighted that transportation challenges are a barrier to physically accessing health services (Carter et al., 2022; Etowa et al., 2021; Tsai & Ghahari, 2023). These

challenges may be influenced by factors such as lack of local service availability (Tsai & Ghahari, 2023) and associated financial or opportunity costs (Carter et al., 2022; Turin, Rashid, Ferdous, Chowdhury, et al., 2020). As previously discussed, PHC nurses in our study identified patients' social needs and connected them to relevant resources. Moreover, they connected immigrants with clinic or local resources to address transportation barriers and physically reach health services.

Affordability

Coordinating low-cost health services. The PHC RNs in this study highlighted financial challenges for health services not covered under OHIP as a barrier to accessing health care for immigrants, which is consistent with previous reviews and more recent single quantitative (i.e., secondary-data analysis) and qualitative studies (Chowdhury et al., 2021; Etowa et al., 2021; Goldenberg et al., 2023; Tsai & Ghahari, 2023). For example, a qualitative study by Turin, Rashid, Ferdous and colleagues (2020) found that Bangladeshi women often report difficulties in utilizing services not covered under provincial health coverage (e.g., physiotherapy, dental and eye care, ambulance services) due to the financial burden it places on the individual. Although access to health services not covered under OHIP is a challenge experienced by the general Canadian population, these challenges as they relate to immigrants were commonly highlighted by participants in the current study. Further, in a secondary-data analysis study, Antonipillai and colleagues (2021) found that immigrants across all three immigration categories are more likely to report not having prescription drug coverage compared to their native-born counterparts. This suggests that immigrants are more likely to bear financial burdens when accessing prescription drugs.

In this study, participants discussed implementing a variety of strategies to coordinate low-cost health services within the PHC clinic to promote healthcare access for this population, such as mental health services, physiotherapy, specialty care, and medications. For example, for extended services (e.g., physiotherapy, specialty bloodwork), nurses collaborated with health organizations to support access to compassionate or bundled care. To access specific medications, nurses provided sample stock medication, coordinated with pharmaceutical companies to access free medications or medications at reduced costs. This study offers new contributions to literature in how PHC nurses implement creative solutions to address access issues for services that require out-of-pocket expenses.

Navigating affordability of health services for those with IFH or without OHIP coverage. As health insurance is a prerequisite to accessing health services, refugees with IFH and immigrants not eligible for OHIP (e.g., migrants with precarious legal status) often face financial barriers when accessing health services. Although beyond the scope of this study, migrants with precarious legal status are defined as individuals living in Canada who do not have a recognized legal immigration status (Goldring et al., 2009). These individuals often include those with expired temporary visas or withdrawn or denied refugee or family-sponsorship claims (Goldring et al., 2009; Goldring & Landolt, 2013). Unfortunately, these migrants are often not eligible for provincial or federal health insurance plans (i.e., are typically uninsured) and often face significant challenges accessing essential health services (Gagnon et al., 2022). These barriers include high medical costs and fear of deportation (Hacker et al., 2015), which often lead to avoiding or delaying seeking medical care when health concerns arise (Brabant & Raynault, 2012; Gagnon et al., 2022). As discussed previously, prior to the 2020 coronavirus pandemic, legal immigrants (excluding refugees) required waiting up to 3-months before they were eligible

to utilize their provincial or territorial health insurance (Government of Canada, 2021). Although many provincial and territorial governments removed these waiting periods, immigrants who uninsured under public health insurance plans, such as OHIP, experience the burden of out-of-pocket expenses, delayed healthcare access, and unaddressed health concerns (Goldenberg et al., 2023).

Some PHC RNs highlighted their responsibility in navigating the affordability of health services in various ways for refugees with IFH or migrants not eligible for OHIP. When discussing financial barriers for these groups, only participants practicing in CHCs and the NPLC acknowledged differences in health coverage based on immigration status, including those covered by OHIP, refugees covered by the IFH program, or those who are uninsured. These RNs may have expertise providing care to immigrants with varying immigration statuses considering the models of care they practice in aim to serve vulnerable populations regardless of health coverage (Ministry of Health, 2023, 2024). These findings highlight the need for additional education regarding the impact of immigration status on healthcare access in undergraduate nursing education and continuing education programs for PHC RNs.

In this study, PHC nurses highlighted the unique strategies they implement in their practice to address financial barriers for the uninsured and refugees with IFH. For immigrants without OHIP, some nurses discussed responding to concerns associated with high medical costs, including education on the need for emergent care and collaborating with other service providers to develop long-term payment plans for these individuals. For refugees, the complexity of the insurance plan offered through the IFH program often deters health service providers from providing care to them, resulting in either refusing to provide care for refugees or having refugees pay out-of-pocket for medical expenses (Antonipillai et al., 2017; Ruiz-Casares et al.,

2016). Only one nurse in this study described policy challenges or barriers for those with IFH. To address these systemic barriers, she utilized her previous experiences and knowledge to connect refugees to specific health services that accept IFH coverage.

Our findings provide new contributions to literature regarding how PHC RNs promote healthcare access for immigrants who face significant financial challenges considering the affordability of services. Specifically, drawing from their knowledge of the Ontario billing system, nurses coordinated care within and beyond the PHC clinic to avoid out-of-pocket costs for immigrants. Within the PHC clinic, nurses ensured immigrant patients received comprehensive in-house care, at no cost to the individual. When individuals require services beyond the clinic, nurses advocated for direct billing of services (e.g., medications, bloodwork, imaging, emergency care services) to the PHC clinic rather than out-of-pocket costs for the individual or explored compassionate care options for specialty services. Future research should further investigate how PHC nurses navigate the complexities of accessing health services across the health system for immigrants with IFH or the uninsured.

Ability to Pay

Navigating health coverage. Broadly speaking, entry-to-practice competencies outlined by the *College of Nurses of Ontario* (2019) indicate the RNs are to utilize knowledge of health inequities to promote the health of individuals. Moreover, as a core competency, the *Canadian Family Practice Nurses Association* (2019) indicate that PHC RNs are expected to address factors that influence an individual's health, including health inequities. In the current study, nurses supported immigrants' ability to pay for health care by navigating health coverage. For uninsured immigrants, some nurses demonstrated this through their contributions in planning for these individuals to access government health insurance plans. For immigrants accessing specific

health services or treatments not covered by government insurance plans, nurses supported these individuals to access government or social assistance programs. The lack of discussion regarding navigating health coverage can likely be attributed to the fact that this responsibility is beyond the typical scope of practice or clinical role of RNs or possibly the role of other disciplines within their team (e.g., social workers).

Acceptability

Respecting cultural differences and preferences. In this study, participants recognized the existence of individual social and cultural belief systems of immigrants and their influence on health. Specifically, to understand their worldview, the nurses sought to assess and respect these systems, including differences in values and beliefs that may exist between themselves and patients. This is consistent with *College of Nurses of Ontario's* (2019) entry-to-practice competencies where RNs are expected to conduct assessments of patients using a holistic approach.

Previous reviews of qualitative and quantitative studies and more recent single qualitative studies have indicated that cultural barriers as a key factor influencing healthcare access for immigrants (Chowdhury et al., 2021; Kalich et al., 2016; Kamran et al., 2022; Pandey et al., 2021, 2022; Patel et al., 2021; Tsai & Ghahari, 2023; Turin, Rashid, Ferdous, Naeem, et al., 2020). These barriers involve mistrust between individuals and HCPs, cultural insensitivity of HCPs, and differences in cultural values and beliefs related to health (Kamran et al., 2022). A scoping review by Tsai and Ghahari (2023) found that the lack of accommodation for immigrants' preferred gender or ethnicity of an HCP can act as a systemic barrier to healthcare access. Similarly, having the same-gendered professional language interpreters, particularly females, is important for immigrant patients as it promotes a safe space for individuals to share

sensitive health information (Pandey et al., 2021; Patel et al., 2021). When specific cultural needs were identified by participants, participants in the current study reported being responsive to the preferred gender of HCPs or professional language translators. However, it should be noted that participants scarcely reported other cultural factors influencing healthcare access.

According to the *College of Nurses of Ontario* (2019), RNs are expected to deliver care that is responsive to the cultural values and beliefs of patients and, further, to foster culturally safe environments that promote the respect these values and beliefs (College of Nurses of Ontario, 2019). Although nurses in this study demonstrated respect for cultural preferences and differences of immigrants, further research is needed to examine how PHC RNs demonstrate these competencies and, in addition, their knowledge regarding specific cultural needs or barriers affecting immigrants.

Promoting cultural competency. In this study, PHC nurses suggested that early notification and training on specific cultural or ethnic populations could enable them to deliver culturally appropriate care. This is consistent with a previous literature review of quantitative and qualitative studies and a more recent single qualitative study which emphasize that HCPs should have an in-depth understanding of unique cultural groups and populations that they serve (Bajgain et al., 2020; Lane & Vatanparast, 2022). For PHC RNs to be adequately trained and equipped in this area would enable them to tailor their nursing care in response to the unique culture of immigrant patients. Although the unique practices and traditions (e.g., diet, medicine, physical activity, non-Western healing methods) of immigrants influence healthcare access, immigrant service providers generally lack awareness of these cultural factors (Lane & Vatanparast, 2022). For PHC nurses, having cultural competency regarding specific groups is

particularly important considering health-seeking behaviors for preventative health care is influenced by the specific group that an individual belongs to (Kalich et al., 2016).

On an organizational level, PHC nurses suggest that leaders of PHC settings can promote the cultural competency of nurses by offering training on specific cultural or ethnic populations that the clinic frequently serves. Further, as one participant emphasized, there are opportunities on a government-level (e.g., *Immigration, Refugees and Citizenship Canada*) to provide early notification to PHC organizations regarding incoming refugee groups. Specifically, as refugee reception centres receive pre-arrival notices for these groups, including demographics, (O. Wahoush, personal communication, March 19, 2024), there are opportunities to partner with these centres and adequately equip their staff, including nurses, to provide culturally competent and appropriate health care to incoming groups. These are promising strategies to optimize the role of PHC RNs are pro-active approaches that are responsive to the unique needs of specific immigrant communities and populations.

Approachability

Supporting opportunities for nursing outreach. In this study, no major findings were found regarding how PHC RNs promote the approachability of health services. However, the nurses emphasized their desire to deliver health promotion and prevention activities or programs in the local community of the PHC clinic. In a qualitative study, community-based health outreach programs were identified as a possible solution by the Bangladeshi community to address access barriers (Turin et al., 2021). However, in the current study, many participants discussed organizational barriers which prevented their opportunity to implement these activities or programs, such as heavy workloads, inadequate funding, insufficient staffing, or lack of medical directives. Similarly, in a qualitative study, Beaudet and colleagues (2011) found that

PHC nurses often focus on the delivery of medical care rather than health promotion and prevention, using a population-based approach, to meet the organizational demands in the context of limited staffing and resources. As PHC RNs have the competencies to deliver health promotion and prevention programs within their local community (Canadian Family Practice Nurses Association, 2019), there is opportunity for nurses to utilize their specialized knowledge in PHC to promote the health of recent immigrants. Specifically, outreach programs can be utilized to address inequities with PHC access among this population, such as low rates of preventative cancer screenings (e.g., breast, cervical, or colorectal cancer screening) (Lofters et al., 2019). However, local governments and stakeholders must address the organizational barriers that prevent PHC RNs from engaging in these activities.

PHC nurses highlighted the unique challenges of refugees in accessing health services, particularly upon arrival to Canada. To provide early access and integration into PHC, they discussed utilizing their knowledge and expertise outside of the clinic to assess and triage care for refugees immediately following their arrival. Specifically, one nurse suggested that they could deliver clinical care in hotels hosting refugees to address immediate health needs. Another PHC also suggested that there was opportunity to triage and direct newly arrived refugees, prior to any interaction with the health system, to PHC clinics with specific models of care (e.g., CHC) that would appropriately meet their health needs. In a cross-sectional study, Oda and colleagues (2017) found that almost 50% of Syrian refugees, who have lived in Canada for less than one year, report having unaddressed health needs. As the health of refugees is expected to decline during the years following migration (Zhao et al., 2010), this suggests that refugees require additional support to adequately address their health needs during their resettlement period and mitigate the risk of this health decline (Oda et al., 2017).

During the unprecedented influx of Syrian refugees between 2015-2016, PHC triage clinics were temporarily employed by local CHCs in Ottawa to meet the immediate health needs, such as acute respiratory infections, of these refugees residing in hotels (Darwish & Muldoon, 2020). Although NPs were utilized to deliver PHC in the hotel triage clinics (Darwish & Muldoon, 2020), the current study offers new recommendations in utilizing the knowledge and expertise of PHC RNs to implement and facilitate outreach programs for newly arrived refugees. These recommendations present potential areas for further research to enhance intersectoral collaboration between the Federal government and PHC organizations to implement and deliver a health systems approach to support the health of refugees.

Implications

The study findings have implications that can be applied to advance the nursing discipline in PHC. The following section will discuss the potential implications of the study findings in education, practice, policy, and research as they relate to supporting the health of recent immigrants through care delivered by PHC RNs.

Education

This study revealed implications for undergraduate nursing education and professional development opportunities in regard to delivering PHC to the immigrant population. Due to immigrants' unique experiences and barriers in healthcare access, PHC nurses require specialized knowledge and expertise to promote the health of this population. On an undergraduate level, the next generation of nurses should be prepared to adequately address these barriers and appropriately meet the needs of immigrants, especially those who are most vulnerable, including refugees. Based on the study findings, there are opportunities for nursing curricula to be strengthened regarding PHC and immigrant health. Firstly, as a primary barrier of

healthcare access, future nurses should be equipped with the skills and tools to address language discordance between HCPs and non-English speaking patients to navigate language barriers. This may also include how to effectively collaborate with professional and non-professional (e.g., family members) translators. Secondly, as immigrants are not a homogenous group, nursing education should equip nursing students with a foundational understanding of the nuanced experiences of individuals belonging to different immigration categories. Specifically, education should educate future nurses on the health and social factors that influence immigrants based on their immigration categories and how their nursing approach should be tailored when providing PHC to each group.

Regarding continuing education, study findings showed an apparent knowledge gap regarding the delivery of culturally appropriate nursing care to ethnic and cultural groups. To promote continuing cultural competency, education and training opportunities should focus on supporting cultural competencies in relation to specific ethnicities or cultural groups that they deliver nursing care to. This is particularly important for new graduate nurses and nurses new to the field of PHC, as they are establishing their knowledge base in delivering immigrant PHC. Overall, to advance the nursing specialty of immigrant PHC, education and training opportunities in this area must be enhanced among undergraduate nursing education and continuing education within Ontario.

Clinical Practice

The study revealed the current practices of PHC RNs in fulfilling their competencies related to promoting healthcare access for recent immigrants. However, there are several implications for clinical practice, specifically as it pertains to how their role and scope of practice can be optimized to improve the health of immigrants. PHC organizations should support the

expansion of the nursing scope or implementation of medical directives to improve the efficiency of nursing care. For example, as of November 2023, RNs practicing in Ontario who have successfully completed education approved by the *College of Nurses of Ontario* are authorized to prescribe specific medication and immunizations (College of Nurses of Ontario, 2023c). In response to these scope of practice changes, PHC organizations should seek to ensure that RNs have access to the education and resources necessary to safely expand their scope of practice which can improve timely access to medications and immunizations for patients, particularly newly arrived immigrants with immediate vaccination needs. Further, as recent immigrants are less likely to have routine cancer screening compared to established immigrants (Lofters et al., 2019), there is opportunity for RNs to address these gaps within or beyond the PHC clinic, including community outreach programs. Nursing leaders and PHC organizations should support enactment of the full role and scope of RNs by providing them with the necessary education, guidelines, and policies to do so.

Study findings also showed potential opportunities to utilize the expertise of RNs beyond the PHC clinic. Firstly, nurses have the knowledge and expertise to deliver PHC-based outreach programs (e.g., preventative care, diabetes management) directly in the community; however, they are often restricted to delivering PHC within the clinic due to organizational barriers. These outreach programs would be particularly beneficial for immigrant communities who may experience barriers to accessing the PHC clinic (e.g., transportation, precarious working hours). As PHC nurses demonstrated a desire to lead and engage in these types of programs, organizational leaders should seek to address these barriers (e.g., heavy workloads, lack of medical directives), as the delivery of nursing outreach programs can improve community and population for those who experience inequities in healthcare access. Secondly, the clinical

expertise of PHC RNs can be utilized to support the resettlement of newly arrived refugees. For example, there is opportunity for nurses to meet the immediate and urgent health needs of newly arrived refugees by providing direct PHC in temporary housing (e.g., hotels). To facilitate these engagements, *Immigration, Refugees and Citizenship Canada* and PHC organizations should collaborate to support PHC nurses in accessing newly arrived refugees with priority health concerns. Further, as newly arrived immigrants may have varying levels of health and social concerns, PHC nurses have in-depth knowledge of the PHC system to triage newly arrived immigrants to appropriate types of PHC settings (e.g., CHC, FHT, NPLC) that would adequately meet their unique needs. Collaborations between the *Immigration, Refugees and Citizenship Canada*, Ministry of Health, and PHC organizations should be explored to improve earlier and appropriate access to PHC services for newly arrived immigrants.

At a systemic level, there are opportunities to explore integrated models of health and social care between PHC nurses and community-based organizations, such as resettlement organizations. This is particularly important to appropriately meet the immediate needs of newly arrived immigrants through coordinated care. Future research should seek to engage health and social organizations at a local level (e.g., CHCs and FHTs) in the design, implementation, and evaluation of these potential types of integrated care models.

Policy

On a policy level, study findings can inform future policies to strengthen nursing practice and promote healthcare access for recent immigrants. Firstly, PHC nurses should be granted adequate resources and tools to address barriers unique to the immigrant population, in particular, language barriers. As discussed, nurses who worked in FHT settings either did not report or reported not having access to professional language services. This is a significant

organizational barrier to effectively communicating with individuals who do not speak English.

Governments and stakeholders should seek to coordinate availability or allocate appropriate funding to ensure all PHC settings across Ontario have access to this vital service.

Secondly, future policies should support partnerships between PHC organizations and government agencies responsible for resettling refugee groups. Specifically, as recommended by PHC RNs, government agencies (e.g., *Immigration, Refugees and Citizenship Canada* or refugee reception centres) can collaborate with PHC organizations to provide early notification of incoming refugee groups to receiving PHC organizations. This would enable PHC leadership and nurses to anticipate unique needs and provide culturally competent care for specific refugee groups which would, overall, improving the quality of nursing care delivered to these populations.

Research

Regarding nursing research, the study findings contribute to the clinical knowledge base, regarding healthcare access among recent immigrants, including the role and experiences of PHC RNs as facilitators of access for this population. The findings revealed lines of inquiry that can be further investigated through future studies. Firstly, nurses promote the health literacy of recent immigrants by tailoring and implementing various practice strategies. However, there is limited understanding of the effectiveness of these strategies in improving health literacy levels for immigrants who may also be challenged by language barriers. Future studies should investigate the effectiveness of these nursing strategies implemented in practice to promote the literacy levels of recent immigrants. Secondly, PHC nurses demonstrate specialized knowledge of the health system; therefore, they are promising educators in utilizing and navigating the health system. There are opportunities to explore the effectiveness of utilizing PHC RNs to deliver

educational programs regarding the Canadian health system for newly arrived immigrants within the PHC clinic and in the community.

This study also revealed potential future areas of study regarding specific immigrant groups who often face significant barriers to healthcare access. Regarding newly arrived refugees, PHC nurses often support this population by orientating them to Ontario's health system. As this system is often considered fragmented and complex, there are opportunities to explore how the responsiveness of PHC nurses can be better improved when addressing the educational needs for refugees when establishing their care journey in a new health system. Further, immigrants with IFH or the uninsured may experience unique access barriers compared to those with OHIP. As there was limited discussion on this topic, future studies should further investigate how PHC nurses navigate the complexities of supporting these groups in accessing health services across the health system.

Strengths and Limitations

There are several notable strengths and limitations of this study. Regarding strengths, the study sample included PHC RN participants across diverse PHC settings, including CHCs, NPLCs, and FHTs. The study sample also included nurses with a diverse range regarding the number of years practising in PHC settings (1 to >20 years). Further, at least one PHC RN was recruited in each of the five study cities (i.e., Toronto, Ottawa-Gatineau, Hamilton, Kitchener-Cambridge-Waterloo, and London). This study sample supports the transferability of findings to other clinical contexts or populations.

Several strategies were implemented throughout the analytical process to support the credibility of the findings based on the principles of *epistemological integrity*, *representative*

credibility, analytic logic, and interpretive authority (Thorne, 2016). In particular, the use of data source triangulation (e.g., semi-structured interviews, literature review, theoretical framework) supported credibility of the finding's dimensions, patterns, and interpretations. Further, the application of Levesque and colleague's (2013) framework supported the characterization of the phenomenon of how PHC RNs facilitate healthcare access for recent immigrants.

The main study limitation is related to the small number of participants (n=10). Due to this, study findings may not be transferrable to other nursing populations (e.g., RPNs, NPs) and clinical contexts (e.g., rural practice settings). Further, the recruited sample did not include PHC RNs from independent practices, limiting the transferability of the study findings to this practice setting. The sample population also comprised of only female participants. However, this is consistent with the overall RN population practising in Ontario, as just over 90% of RNs identify as female (College of Nurses of Ontario, 2023a).

Conclusion

Based on Levesque and colleague's (2013) framework, this study offers a conceptual description of how PHC RNs across various practice settings promote healthcare access for recent immigrants. They are key facilitators of access for this population by educating, coordinating care, navigating, and connecting this population to health and social services across the health system. The study also portrayed how PHC RNs address unique barriers that recent immigrants face including, but not limited to, those related to language, culture, and finances. PHC RNs have specialized knowledge in health promotion and illness prevention, immigrant health, and the healthcare system. Yet, in this study, several opportunities were identified to enhance the PHC RN role in clinical practice to improve the delivery of PHC for recent

immigrants, such as additional organizational resources, utilizing their expertise and role beyond the PHC clinic, and promoting culturally competent care. These implications can inform nursing education, clinical practice, policy, and research to optimize the role and scope of PHC RNs in practice and address inequities in health for immigrants. Overall, this study emphasized the significant value of PHC RNs in addressing barriers and supporting immigrants throughout their journey of accessing the health care which is foundational to achieving an optimal level of health and well-being.

REFERENCES

- Agrawal, S. K. (2019). Canadian refugee sponsorship programs: Experience of Syrian refugees in Alberta, Canada. *Journal of International Migration and Integration*, 20(4), 941–962. https://doi.org/10.1007/s12134-018-0640-7
- Akeroyd, J., Oandasan, I., Alsaffar, A., Whitehead, C., & Lingard, L. (2009). Perceptions of the role of the Registered Nurse in an urban interprofessional academic family practice setting. *Nursing Leadership*, 22(2), 73–84. https://doi.org/10.12927/cjnl.2009.20800
- Al Sayah, F., Szafran, O., Robertson, S., Bell, N. R., & Williams, B. (2014). Nursing perspectives on factors influencing interdisciplinary teamwork in the Canadian primary care setting. *Journal of Clinical Nursing*, 23(19–20), 2968–2979. https://doi.org/10.1111/jocn.12547
- Al Sayah, F., Williams, B., Pederson, J. L., Majumdar, S. R., & Johnson, J. A. (2014). Health literacy and nurses' communication with type 2 diabetes patients in primary care settings.

 Nursing Research, 63(6), 408–417. https://doi.org/10.1097/NNR.000000000000055
- Al-Hamad, A., Forchuk, C., Oudshoorn, A., & Mckinley, G. P. (2023). Listening to the voices of Syrian refugee women in Canada: An ethnographic insight into the journey from trauma to adaptation. *Journal of International Migration and Integration*, 24(3), 1017–1037. https://doi.org/10.1007/s12134-022-00991-w
- Allard, M., Frego, A., Katz, A., & Halas, G. (2010). Exploring the role of RNs in family practice residency training programs. *The Canadian Nurse*, *106*(3), 20–24.
- Anderson, K. K., Cheng, J., Susser, E., McKenzie, K. J., & Kurdyak, P. (2015). Incidence of psychotic disorders among first-generation immigrants and refugees in Ontario.

- Canadian Medical Association Journal, 187(9), E279–E286. https://doi.org/10.1503/cmaj.141420
- Antonipillai, V., Baumann, A., Hunter, A., Wahoush, O., & O'Shea, T. (2017). Impacts of the Interim Federal Health Program reforms: A stakeholder analysis of barriers to health care access and provision for refugees. *Canadian Journal of Public Health*, 108(4), e435–e441. https://doi.org/10.17269/cjph.108.5553
- Antonipillai, V., Guindon, G. E., Sweetman, A., Baumann, A., Wahoush, O., & Schwartz, L. (2021). Associations of health services utilization by prescription drug coverage and immigration category in Ontario, Canada. *Health Policy*, 125(10), 1311–1321. https://doi.org/10.1016/j.healthpol.2021.06.007
- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using Zoom videoconferencing for qualitative data collection: Perceptions and experiences of researchers and participants. *International Journal of Qualitative Methods*, 18. https://doi.org/10.1177/1609406919874596
- Bajgain, B. B., Bajgain, K. T., Badal, S., Aghajafari, F., Jackson, J., & Santana, M.-J. (2020).

 Patient-reported experiences in accessing primary healthcare among immigrant population in Canada: A rapid literature review. *International Journal of Environmental Research & Public Health*, 17(23), 8724. https://doi.org/10.3390/ijerph17238724
- Bassil, K., & Zabkiewicz, D. (2014). *Health research methods: A Canadian perspective*. Oxford University Press.
- Beaudet, N., Richard, L., Gendron, S., & Boisvert, N. (2011). Advancing population-based health-promotion and prevention practice in community-health nursing: Key conditions

- for change. *Advances in Nursing Science*, *34*(4), E1–E12. https://doi.org/10.1097/ANS.0b013e3182300d9a
- Blackmore, R., Boyle, J. A., Fazel, M., Ranasinha, S., Gray, K. M., Fitzgerald, G., Misso, M., & Gibson-Helm, M. (2020). The prevalence of mental illness in refugees and asylum seekers: A systematic review and meta-analysis. *PLOS Medicine*, *17*(9), e1003337. https://doi.org/10.1371/journal.pmed.1003337
- Borgès Da Silva, R., Brault, I., Pineault, R., Chouinard, M.-C., Prud'homme, A., & D'Amour, D. (2018). Nursing practice in primary care and patients' experience of care. *Journal of Primary Care & Community Health*, 9, 2150131917747186–2150131917747186. https://doi.org/10.1177/2150131917747186
- Boyatzis, R. E. (1998). Transforming qualitative information: Thematic analysis and code development (pp. xvi, 184). Sage Publications, Inc.
- Brabant, Z., & Raynault, M.-F. (2012). Health of migrants with precarious status: Results of an exploratory study in Montreal—Part B. *Social Work in Public Health*, *27*(5), 469–481. https://doi.org/10.1080/19371918.2011.592079
- Braun, V., & Clarke, V. (2021). Thematic analysis: A practical guide. SAGE Publications Ltd.
- Brisset, C., Leanza, Y., Rosenberg, E., Vissandjée, B., Kirmayer, L. J., Muckle, G., Xenocostas, S., & Laforce, H. (2014). Language barriers in mental health care: A Survey of primary care practitioners. *Journal of Immigrant and Minority Health*, *16*(6), 1238–1246. https://doi.org/10.1007/s10903-013-9971-9
- Broyles, L. M., Rodriguez, K. L., Price, P. A., Bayliss, N. K., & Sevick, M. A. (2011).

 Overcoming barriers to the recruitment of nurses as participants in health care research.

- *Qualitative Health Research*, *21*(12), 1705–1718. https://doi.org/10.1177/1049732311417727
- Brunetto, E., & Birk, P. (1972). The primary care nurse—The generalist in a structured health care team. *American Journal of Public Health*, 62(6), 785–794. https://doi.org/10.2105/AJPH.62.6.785
- Burns, N. (1989). Standards for qualitative research. *Nursing Science Quarterly*, 2(1), 44–52. https://doi.org/10.1177/089431848900200112
- Busca, E., Savatteri, A., Calafato, T. L., Mazzoleni, B., Barisone, M., & Dal Molin, A. (2021).

 Barriers and facilitators to the implementation of nurse's role in primary care settings: An integrative review. *BMC Nursing*, 20(1), 171. https://doi.org/10.1186/s12912-021-00696-y
- Canadian Family Practice Nurses Association. (2019, December). *National competencies for Registered Nurses in primary care*. Cfpna. https://www.cfpna.ca/copy-of-resources-1
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council. (2018). *Tri-Council policy statement: Ethical conduct for research involving humans*.
 - http://publications.gc.ca/collections/collection_2019/irsc-cihr/RR4-2-2019-eng.pdf
- Canadian Nurses Association. (2014, August). *Optimizing the role of nurses in primary care in Canada*. https://hl-prod-ca-oc-download.s3-ca-central-1.amazonaws.com/I/2f975e7e-4a40-45ca-863c-
 - 5ebf0a138d5e/UploadedImages/documents/Optimizing_the_Role_of_Nurses_in_Primary _Care_in_Canada.pdf

- Canadian Nurses Association. (2015a, November). Framework for the practice of Registered

 Nurses in Canada. https://hl-prod-ca-oc-download.s3-ca-central
 1.amazonaws.com/I/2f975e7e-4a40-45ca-863c
 5ebf0a138d5e/UploadedImages/Framework_for_the_Pracice_of_Registered_Nurses_in_

 Canada__1_.pdf
- Canadian Nurses Association. (2015b, November). *Primary health care*. https://hl-prod-ca-oc-download.s3-ca-central-1.amazonaws.com/I/2f975e7e-4a40-45ca-863c-5ebf0a138d5e/UploadedImages/documents/Primary_health_care_position_statement.pdf
- Carter, N., Carroll, S., Aljbour, R., Nair, K., & Wahoush, O. (2022). Adult newcomers' perceptions of access to care and differences in health systems after relocation from Syria. *Conflict and Health*, *16*(1), 28. https://doi.org/10.1186/s13031-022-00457-x
- Chambers, M., Bliss, K., & Rambur, B. (2020). Recruiting research participants via traditional snowball vs Facebook advertisements and a website. *Western Journal of Nursing**Research*, 42(10), 846–851. https://doi.org/10.1177/0193945920904445
- Chowdhury, N., Naeem, I., Ferdous, M., Chowdhury, M., Goopy, S., Rumana, N., & Turin, T. C. (2021). Unmet healthcare needs among migrant populations in Canada: Exploring the research landscape through a systematic integrative review. *Journal of Immigrant & Minority Health*, 23(2), 353–372. https://doi.org/10.1007/s10903-020-01086-3
- College of Nurses of Ontario. (2018). RN and RPN practice: The client, the nurse and the environment. https://www.cno.org/globalassets/docs/prac/41062.pdf
- College of Nurses of Ontario. (2019, April). Entry-to-Practice Competencies for Registered Nurses. https://www.cno.org/globalassets/docs/reg/41037-entry-to-practice-competencies-2020.pdf

- College of Nurses of Ontario. (2022, July). *Registration statistics report* 2022. https://www.cno.org/globalassets/2-howweprotectthepublic/statistical-reports/registration-statistics-report-2022.html
- College of Nurses of Ontario. (2023a, June). *Directives*. https://www.cno.org/globalassets/docs/prac/41019_medicaldirectives.pdf
- College of Nurses of Ontario. (2023b, August). *Registration renewal statistics report* 2023. https://www.cno.org/globalassets/2-howweprotectthepublic/statistical-reports/registration-renewal-statistics-report-2023.html
- College of Nurses of Ontario. (2023c, December). *Registered Nurse (RN) Prescribing*. https://www.cno.org/globalassets/docs/prac/practice-standards-rn-prescribing.pdf
- Curnew, D. R., & Lukewich, J. (2018). Nursing within primary care settings in Atlantic Canada:

 A scoping review. *SAGE OPEN*, 8(2), 2158244018774379.

 https://doi.org/10.1177/2158244018774379
- Darwish, W., & Muldoon, L. (2020). Acute primary health care needs of Syrian refugees immediately after arrival to Canada. *Canadian Family Physician*, 66(1), e30–e38.
- De Moissac, D., & Bowen, S. (2019). Impact of language barriers on quality of care and patient safety for official language minority Francophones in Canada. *Journal of Patient Experience*, 6(1), 24–32. https://doi.org/10.1177/2374373518769008
- Degelman, M. L., & Herman, K. M. (2016). Immigrant status and having a regular medical doctor among Canadian adults. *Canadian Journal of Public Health*, 107(1), e75–e80. https://doi.org/10.17269/cjph.107.5205

- DeJonckheere, M., & Vaughn, L. M. (2019). Semistructured interviewing in primary care research: A balance of relationship and rigour. *Family Medicine and Community Health*, 7(2), e000057. https://doi.org/10.1136/fmch-2018-000057
- Divisi, D., Di Leonardo, G., Zaccagna, G., & Crisci, R. (2017). Basic statistics with Microsoft Excel: A review. *Journal of Thoracic Disease*, 9(6), 1734–1740. https://doi.org/10.21037/jtd.2017.05.81
- Edwards, J., Chiu, M., Rodrigues, R., Thind, A., Stranges, S., & Anderson, K. K. (2022).

 Examining variations in the prevalence of diagnosed mood or anxiety disorders among migrant groups in Ontario, 1995–2015: A population-based, repeated cross-sectional study. *The Canadian Journal of Psychiatry*, 67(2), 130–139.

 https://doi.org/10.1177/07067437211047226
- Etowa, J., Sano, Y., Hyman, I., Dabone, C., Mbagwu, I., Ghose, B., Osman, M., & Mohamoud, H. (2021). Difficulties accessing health care services during the COVID-19 pandemic in Canada: Examining the intersectionality between immigrant status and visible minority status. *International Journal for Equity in Health*, 20(1), 255. https://doi.org/10.1186/s12939-021-01593-1
- Farmer, T., Robinson, K., Elliott, S. J., & Eyles, J. (2006). Developing and implementing a triangulation protocol for qualitative health research. *Qualitative Health Research*, *16*(3), 377–394. https://doi.org/10.1177/1049732305285708
- Feather, J., Carter, N., Valaitis, R., & Kirkpatrick, H. (2017). A narrative evaluation of a community-based nurse navigation role in an urban at-risk community. *Journal of Advanced Nursing*, 73(12), 2997–3006. https://doi.org/10.1111/jan.13355

- Fédération interprofessionnelle de la santé du Québe. (2010, December). *Tool promoting interdisciplinarity: The collective prescription*. https://www.fiqsante.qc.ca/wp-content/uploads/2017/02/2013-fascicule-tot-5-ordonnace-collective-ang.pdf?download=1:%20FIQ;%202010
- Finlay, L. (2002). "Outing" the researcher: The provenance, process, and practice of reflexivity.

 Qualitative Health Research, 12(4), 531–545.

 https://doi.org/10.1177/104973202129120052
- Fournier, C., Blanchet Garneau, A., & Pepin, J. (2021). Understanding the expanded nursing role in indigenous communities: A qualitative study. *Journal of Nursing Management*, 29(8), 2489–2498. https://doi.org/10.1111/jonm.13349
- Gagnon, M., Kansal, N., Goel, R., & Gastaldo, D. (2022). Immigration status as the foundational determinant of health for people without status in Canada: A scoping review. *Journal of Immigrant and Minority Health*, 24(4), 1029–1044. https://doi.org/10.1007/s10903-021-01273-w
- Gerchow, L., Burka, L. R., Miner, S., & Squires, A. (2021). Language barriers between nurses and patients: A scoping review. *Patient Education and Counseling*, *104*(3), 534–553. https://doi.org/10.1016/j.pec.2020.09.017
- Ghahari, S., Burnett, S., & Alexander, L. (2020). Development and pilot testing of a health education program to improve immigrants' access to Canadian health services. *BMC Health Services Research*, 20(1), 321. https://doi.org/10.1186/s12913-020-05180-y
- Girard, A., Ellefsen, É., Roberge, P., Bernard-Hamel, J., & Hudon, C. (2021). Adoption of care management activities by primary care nurses for people with common mental disorders

- and physical conditions: A multiple case study. *Journal of Psychiatric & Mental Health Nursing (John Wiley & Sons, Inc.)*, 28(5), 838–855. https://doi.org/10.1111/jpm.12788
- Girard, A., Hudon, C., Poitras, M.-E., Roberge, P., & Chouinard, M.-C. (2017). Primary care nursing activities with patients affected by physical chronic disease and common mental disorders: A qualitative descriptive study. *Journal of Clinical Nursing*, 26(9–10), 1385–1394. https://doi.org/10.1111/jocn.13695
- Glaser, B. (1965). The constant comparative method of qualitative analysis. *Social Problems*, 12(4), 436–445.
- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Aldine.
- Goel, R., Bloch, G., & Caulford, P. (2013). Waiting for care: Effects of Ontario's 3-month waiting period for OHIP on landed immigrants. *Canadian Family Physician*, 59(6), e269-275.
- Goldenberg, S. M., Schafers, S., Grassby, M. H.-S., Machado, S., Lavergne, R., Wiedmeyer, M., & Team, on behalf of the I. S. (2023). 'We don't have the right to get sick': A qualitative study of gaps in public health insurance among Im/migrant women in British Columbia, Canada. *PLOS Global Public Health*, *3*(1), e0001131. https://doi.org/10.1371/journal.pgph.0001131
- Goldring, L., Berinstein, C., & Bernhard, J. K. (2009). Institutionalizing precarious migratory status in Canada. *Citizenship Studies*, *13*(3), 239-265. https://doi.org/10.1080/13621020902850643
- Goldring, L., & Landolt, P. (2013). The conditionality of legal status and rights: Conceptualizing precarious non-citizenship in Canada. In *Producing and negotiating noncitizenship:*

&type=0

Precarious legal status in Canada (pp. 3–28). University of Toronto Press. https://doi.org/10.3138/9781442663862-005

- Government of Canada. (2012, August 23). *About primary health care*.

 https://www.canada.ca/en/health-canada/services/primary-health-care/about-primary-health-care.html
- Government of Canada. (2014, December 1). *How express entry works*. https://www.canada.ca/en/immigration-refugees-citizenship/services/immigrate-canada/express-entry/works.html
- Government of Canada. (2021, December 3). *Health care in Canada: Access our universal health care system*. https://www.canada.ca/en/immigration-refugees-citizenship/services/new-immigrants/new-life-canada/health-care/universal-system.html
- Government of Canada. (2023, June). *Interim Federal Health Program: What is covered*. https://www.canada.ca/en/immigration-refugees-citizenship/services/refugees/help-within-canada/health-care/interim-federal-health-program/coverage-summary.html
- Government of Canada, S. C. (2016, March 7). *Immigrant*. https://www23.statcan.gc.ca/imdb/p3Var.pl?Function=Unit&Id=85107
- Government of Canada, S. C. (2017, February 8). *Census Profile, 2016 Census—Ontario*[Province] and Canada [Country]. https://www12.statcan.gc.ca/censusrecensement/2016/dppd/prof/details/Page.cfm?Lang=E&Geo1=PR&Code1=35&Geo2=&Code2=&SearchTex
 t=Ontario&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=35

- Gray, L., Wong-Wylie, G., Rempel, G., & Cook, K. (2020). Expanding qualitative research interviewing strategies: Zoom Video Communications. *The Qualitative Report*, 25(5), 1292–1301. https://doi.org/10.46743/2160-3715/2020.4212
- Grinspun, D., Surridge, J., Alsaffar, A., Ashley, L., Brown, P., Callahan, S., Cardinal, M.,
 Clifford-Middel, M., Cowper-Fung, B., Devereaux, G., Downs, S., Kasperski, J.,
 Manson, J., Mariano, C., Markovic, M., Martin, D., O'Rourke, T., Pensom, K., Snyder,
 C., ... Scott, K. (2012). Maximizing and expanding the role of the primary care nurse in
 Ontario. https://rnao.ca/sites/rnao-ca/files/Primary__Care_Report_2012_0.pdf
- Grundy, A., Ng, E., Rank, C., Quinlan, J., Giovinazzo, G., Viau, R., Ponka, D., & Garner, R. (2023). Mental health and neurocognitive disorder–related hospitalization rates in immigrants and Canadian-born population: A linkage study. *Canadian Journal of Public Health*, 114(4), 692–704. https://doi.org/10.17269/s41997-023-00740-1
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *ECTJ*, 29(2), 75–91. https://doi.org/10.1007/BF02766777
- Gulliford, M., e Figueroa-Munoz, J., Morgan, M., Hughes, D., Gibson, B., Beech, R., & Hudson, M. (2002). What does "access to health care" mean? *Journal of Health Services Research* & *Policy*, 7(3), 186–188. https://doi.org/10.1258/135581902760082517
- Guruge, S., Sidani, S., Illesinghe, V., Younes, R., Bukhari, H., Altenberg, J., Rashid, M., & Fredericks, S. (2018). Healthcare needs and health service utilization by Syrian refugee women in Toronto. *Conflict and Health*, *12*(1), 46. https://doi.org/10.1186/s13031-018-0181-x

- Hacker, K., Anies, M., Folb, B. L., & Zallman, L. (2015). Barriers to health care for undocumented immigrants: A literature review. *Risk Management and Healthcare Policy*, 8, 175–183. https://doi.org/10.2147/RMHP.S70173
- Harrington, D. W., Wilson, K., Rosenberg, M., & Bell, S. (2013). Access granted! Barriers
 endure: Determinants of difficulties accessing specialist care when required in Ontario,
 Canada. BMC Health Services Research, 1, 146. https://doi.org/10.1186/1472-6963-13-146
- Health Force Ontario. (2019, July). Family medicine compensation and practice models in Ontario.

 http://www.healthforceontario.ca/UserFiles/file/PracticeOntario/FM%20Compensation%
 20Practice%20Models%20EN.pdf
- Hudon, C., Bisson, M., Chouinard, M.-C., Delahunty-Pike, A., Lambert, M., Howse, D.,
 Schwarz, C., Dumont-Samson, O., Aubrey-Bassler, K., Burge, F., Doucet, S., Ramsden,
 V. R., Luke, A., Macdonald, M., Gaudreau, A., Porter, J., Rubenstein, D., Scott, C.,
 Warren, M., & Wilhelm, L. (2023). Implementation analysis of a case management
 intervention for people with complex care needs in primary care: A multiple case study
 across Canada. BMC Health Services Research, 23(1), 377.
 https://doi.org/10.1186/s12913-023-09379-7
- Hudon, C., Chouinard, M.-C., Dumont-Samson, O., Gobeil-Lavoie, A.-P., Morneau, J., Paradis,
 M., Couturier, Y., Poitras, M.-E., Poder, T., Sabourin, V., & Lambert, M. (2023).
 Integrated case management between primary care clinics and hospitals for people with complex needs who frequently use healthcare services in Canada: A multiple-case

- embedded study. *HEALTH POLICY*, *132*, 104804. https://doi.org/10.1016/j.healthpol.2023.104804
- Immigration Refugees and Citizenship Canada. (2021, December 3). *Health care in Canada:***Access our universal health care system. https://www.canada.ca/en/immigration-refugees-citizenship/services/new-immigrants/new-life-canada/health-care/universal-system.html
- Innovations Strengthening Primary Health Care Through Research [INSPIRE-PHC]. (2022).

 *Primary care data reports for Ontario Health Teams (OHTs).

 https://www.ontariohealthprofiles.ca/ontarioHealthTeam.php#OHT_table
- Jackson, K., & Bazeley, P. (2019). *Qualitative data analysis with NVivo* (3rd ed.). SAGE Publications. https://uk.sagepub.com/en-gb/eur/qualitative-data-analysis-with-nvivo/book261349
- Johnson, J. L., Tarlier, D. S., & Whyte, N. B. (2003). Voices from the wilderness: An interpretive study describing the role and practice of outpost nurses. *Canadian Journal of Public Health*, *94*(3), 180–184.
- Joo, J. Y., & Liu, M. F. (2020). Nurses' barriers to care of ethnic minorities: A qualitative systematic review. *Western Journal of Nursing Research*, 42(9), 760–771. https://doi.org/10.1177/0193945919883395
- Kalich, A., Heinemann, L., & Ghahari, S. (2016). A scoping review of immigrant experience of health care access barriers in Canada. *Journal of Immigrant and Minority Health*, 18(3), 697–709. https://doi.org/10.1007/s10903-015-0237-6

- Kallio, H., Pietilä, A.-M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965. https://doi.org/10.1111/jan.13031
- Kamran, H., Hassan, H., Ali, M. U. N., Ali, D., Taj, M., Mir, Z., Pandya, M., Steinberg, S. R., Jamal, A., & Zaidi, M. (2022). Scoping review: Barriers to primary care access experienced by immigrants and refugees in English-speaking countries. *Qualitative Research Journal*, 22(3), 401–414. https://doi.org/10.1108/QRJ-02-2022-0028
- Karam, M., Chouinard, M.-C., Couturier, Y., Vedel, I., & Hudon, C. (2023). Nursing care coordination in primary healthcare for patients with complex needs: A comparative case study. *International Journal of Integrated Care*, 23(1), 5. https://doi.org/10.5334/ijic.6729
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214–222. https://doi.org/10.5014/ajot.45.3.214
- Lane, G., & Vatanparast, H. (2022). Adjusting the Canadian Healthcare System to Meet

 Newcomer Needs. *International Journal of Environmental Research and Public Health*,

 19(7), 3752. https://doi.org/10.3390/ijerph19073752
- Levesque, J.-F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care:

 Conceptualising access at the interface of health systems and populations. *International Journal for Equity in Health*, *12*(1), 18. https://doi.org/10.1186/1475-9276-12-18

 Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE.

- Lofters, A. K., Kopp, A., Vahabi, M., & Glazier, R. H. (2019). Understanding those overdue for cancer screening by five years or more: A retrospective cohort study in Ontario, Canada. *Preventive Medicine*, 1, 105816. https://doi.org/10.1016/j.ypmed.2019.105816
- Lukewich, J., Allard, M., Ashley, L., Aubrey-Bassler, K., Bryant-Lukosius, D., Klassen, T.,
 Magee, T., Martin-Misener, R., Mathews, M., Poitras, M.-E., Roussel, J., Ryan, D.,
 Schofield, R., Tranmer, J., Valaitis, R., & Wong, S. T. (2020). National competencies for
 Registered Nurses in primary care: A delphi study. Western Journal of Nursing Research,
 42(12), 1078–1087. https://doi.org/10.1177/0193945920935590
- Lukewich, J., Edge, D. S., Van DenKerkhof, E., & Tranmer, J. (2014). Nursing contributions to chronic disease management in primary care. *Journal Of Nursing Administration*, 44(2), 103–110. https://doi.org/10.1097/NNA.000000000000033
- Lukewich, J., Edge, D. S., VanDenKerkhof, E., Williamson, T., & Tranmer, J. (2018). Team composition and chronic disease management within primary healthcare practices in eastern Ontario: An application of the Measuring Organizational Attributes of Primary Health Care Survey. *Primary Health Care Research & Development*, 19(6), 622–628. https://doi.org/10.1017/S1463423618000257
- Lukewich, J., Mann, E., VanDenKerkhof, E., & Tranmer, J. (2015). Self-management support for chronic pain in primary care: A cross-sectional study of patient experiences and nursing roles. *Journal of Advanced Nursing*, 71(11), 2551–2562. https://doi.org/10.1111/jan.12717
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: guided by information power. *Qualitative Health Research*, 26(13), 1753–1760. https://doi.org/10.1177/1049732315617444

- Mangin, D., Premji, K., Bayoumi, I., Ivers, N., Eissa, A., Newbery, S., Jaakkimainen, L., N, D., G, M., & B, S. (2022). *Brief on primary care part 2: Factors affecting primary care capacity in Ontario for pandemic response and recovery*. Ontario COVID-19 Science Advisory Table. https://doi.org/10.47326/ocsat.2022.03.68.1.0
- Martin, D., Miller, A. P., Quesnel-Vallée, A., Caron, N. R., Vissandjée, B., & Marchildon, G. P. (2018). Canada's universal health-care system: Achieving its potential. *The Lancet*, 391(10131), 1718–1735. https://doi.org/10.1016/S0140-6736(18)30181-8
- Martin-Misener, R., Macleod, M., Kosteniuk, J., Penz, K., Stewart, N., Olynick, J., & Karunanayake, C. (2020). The mosaic of primary care nurses in rural and remote Canada: Results from a national survey. *Healthcare Policy | Politiques de Santé*, *15*(3), 63–75. https://doi.org/10.12927/hcpol.2020.26130
- May, K. A. (1991). Interview techniques in qualitative research: Concerns and challenges. In J.
 Morse (Ed.), *Qualitative nursing research: A contemporary dialogue* (pp. 188–201).
 SAGE Publications, Inc. https://doi.org/10.4135/9781483349015.n22
- McMaster University. (n.d.-a). *MacDrive*. Retrieved September 28, 2022, from https://uts.mcmaster.ca/services/communication-collaboration-and-storage/macdrive/
- McMaster University. (n.d.-b). *Using Video Conferencing Platforms for collecting data from Human Participants*. Retrieved September 29, 2022, from

 https://research.mcmaster.ca/home/support-for-researchers/ethics/mcmaster-researchethics-board-mreb/video-conferencing/
- Microsoft. (n.d.). *Welcome to Microsoft Forms*. Retrieved October 16, 2022, from https://support.microsoft.com/en-us/office/welcome-to-microsoft-forms-29cfe2e6-2f6e-4175-b88b-8fa82be33071?ns=microsoftforms&version=16&ui=en-us&rs=en-us&ad=us

- Minister of Justice. (2023, December). *Immigration and Refugee Protection Act*. https://laws.justice.gc.ca/PDF/I-2.5.pdf
- Ministry of Health. (2023, January). *Nurse practitioner-led clinics*. http://www.ontario.ca/page/nurse-practitioner-led-clinics
- Ministry of Health. (2024, February). *Community health centres*. http://www.ontario.ca/page/community-health-centres
- Ministry of Health and Long-Term Care. (2023). *Nurse Practitioner-Led Clinics*. Government of Ontario, Ministry of Health and Long-Term Care.

 https://www.health.gov.on.ca/en/common/system/services/npc/
- Morse, J. M. (2007). Ethics in action: Ethical principles for doing qualitative health research.

 *Qualitative Health Research, 17(8), 1003–1005.

 https://doi.org/10.1177/1049732307308197
- Murdie, R. A. (2008). Pathways to housing: The experiences of sponsored refugees and refugee claimants in accessing permanent housing in Toronto. *Journal of International Migration and Integration*, 9(1), 81–101. https://doi.org/10.1007/s12134-008-0045-0
- Newbold, B. (2009). The short-term health of Canada's new immigrant arrivals: Evidence from LSIC. *Ethnicity & Health*, *14*(3), 315–336. https://doi.org/10.1080/13557850802609956
- Ng, E., & Omariba, D. W. R. (2014). Immigration, generational status and health literacy in Canada. *Health Education Journal*, 73(6), 668–682. https://doi.org/10.1177/0017896913511809
- Ng, E., & Omariba, W. (2010). Health Literacy and immigrants in Canada: Determinants and effects on health outcomes.

- $http://en.copian.ca/library/research/ccl/health_lit_immigrants_canada/health_lit_immigrants_canada/health_lit_immigrants_canada.pdf$
- Ng, E., & Zhang, H. (2021). Access to mental health consultations by immigrants and refugees in Canada. *Health Reports*, *32*(6), 3–13. https://doi.org/10.25318/82-003-x202100600001-eng
- Ngune, I., Jiwa, M., Dadich, A., Lotriet, J., & Sriram, D. (2012). Effective recruitment strategies in primary care research: A systematic review. *Quality in Primary Care*, 20, 115–123.
- Oandasan, I. F., Hammond, M., Conn, L. G., Callahan, S., Gallinaro, A., & Moaveni, A. (2010). Family practice registered nurses: The time has come. *Canadian Family Physician*, 56(10), e375-382.
- Oda, A., Tuck, A., Agic, B., Hynie, M., Roche, B., & McKenzie, K. (2017). Health care needs and use of health care services among newly arrived Syrian refugees: A cross-sectional study. *Canadian Medical Association Open Access Journal*, *5*(2), E354–E358. https://doi.org/10.9778/cmajo.20160170
- Oelke, N. D., Besner, J., & Carter, R. (2014). The evolving role of nurses in primary care medical settings. *International Journal of Nursing Practice*, 20(6), 629–635. https://doi.org/10.1111/ijn.12219
- Office of the Auditor General of Ontario. (2017). 2017 Annual Report.

 https://www.auditor.on.ca/en/content/annualreports/arreports/en17/2017AR_v1_en_web.
 pdf
- Oliver, D. G., Serovich, J. M., & Mason, T. L. (2005). Constraints and opportunities with interview transcription: Towards reflection in qualitative research. *Social Forces; a Scientific Medium of Social Study and Interpretation*, 84(2), 1273–1289.

- Ontario College of Family Physicians. (2023, November). *More Than 2.2 Million Ontarians Left Without a Family Doctor*. https://ontariofamilyphysicians.ca/news/more-than-four-million-ontarians-will-be-without-a-family-doctor-by-2026/
- Ontario Health. (2024a, March). What OHIP covers. http://www.ontario.ca/page/what-ohip-covers
- Ontario Health. (2024b, March). *Registration of Ontario Health Insurance coverage*.

 http://www.ontario.ca/document/resources-for-physicians/registration-of-ontario-health-insurance-coverage
- Oudshoorn, A., Benbow, S., & Meyer, M. (2020). Resettlement of Syrian refugees in Canada.

 Journal of International Migration and Integration, 21(3), 893–908.

 https://doi.org/10.1007/s12134-019-00695-8
- Pandey, M., Kamrul, R., Rocha, M. C., & McCarron, M. (2022). Perceptions of mental health and utilization of mental health services among new immigrants in Canada: A qualitative study. *Community Mental Health Journal*, *58*(2), 394–404. https://doi.org/10.1007/s10597-021-00836-3
- Pandey, M., Maina, R. G., Amoyaw, J., Li, Y., Kamrul, R., Michaels, C. R., & Maroof, R. (2021). Impacts of English language proficiency on healthcare access, use, and outcomes among immigrants: A qualitative study. *BMC Health Services Research*, 21(1), 741. https://doi.org/10.1186/s12913-021-06750-4
- Parson, L. (2019). Considering positionality: The ethics of conducting research with marginalized groups. In K. K. Strunk & L. A. Locke (Eds.), *Research Methods for Social Justice and Equity in Education* (pp. 15–32). Springer International Publishing. https://doi.org/10.1007/978-3-030-05900-2_2

- Patel, P., Bernays, S., Dolan, H., Muscat, D. M., & Trevena, L. (2021). Communication experiences in primary healthcare with refugees and asylum seekers: A literature review and narrative synthesis. *International Journal of Environmental Research and Public Health*, *18*(4), 1469. https://doi.org/10.3390/ijerph18041469
- Picot, G., Zhang, Y., & Hou, F. (2019, March). Labour market outcomes among refugees to Canada. https://www.researchgate.net/profile/Garnett-Picot/publication/332403259_Labour_Market_Outcomes_Among_Refugees_to_Canada/links/5cb24a71a6fdcc1d499310ac/Labour-Market-Outcomes-Among-Refugees-to-Canada.pdf
- Poitras, M.-E., Chouinard, M.-C., Fortin, M., Girard, A., Crossman, S., & Gallagher, F. (2018).

 Nursing activities for patients with chronic disease in family medicine groups: A

 multiple-case study. *Nursing Inquiry*, 25(4), e12250. https://doi.org/10.1111/nin.12250
- Poitras, M.-E., Chouinard, M.-C., Gallagher, F., & Fortin, M. (2018). Nursing activities for patients with chronic disease in primary care settings: A practice analysis. *Nursing Research*, 67(1), 35. https://doi.org/10.1097/NNR.000000000000000053
- Pollock, G., & Newbold, B. (2015). Perceptions of discrimination in health services experienced by immigrant minorities in Ontario.
 - https://www.semanticscholar.org/paper/PERCEPTIONS-OF-DISCRIMINATION-IN-HEALTH-SERVICES-BY-Pollock-
 - Newbold/66851b66064ecc1da40d7b1f3911c51279c0c9dc
- Pottie, K., Batista, R., Mayhew, M., Mota, L., & Grant, K. (2014). Improving delivery of primary care for vulnerable migrants: Delphi consensus to prioritize innovative practice strategies. *Canadian Family Physician*, 60(1), e32–e40.

- Pottie, K., Greenaway, C., Feightner, J., Welch, V., Swinkels, H., Rashid, M., Narasiah, L.,
 Kirmayer, L. J., Ueffing, E., MacDonald, N. E., Hassan, G., McNally, M., Khan, K.,
 Buhrmann, R., Dunn, S., Dominic, A., McCarthy, A. E., Gagnon, A. J., Rousseau, C., ...
 Health, coauthors of the C. C. for I. and R. (2011). Evidence-based clinical guidelines for immigrants and refugees. *CMAJ*, 183(12), E824–E925.
 https://doi.org/10.1503/cmaj.090313
- Primary Healthcare Planning Group. (2011, December). Strategic directions for strengthening primary care in Ontario. https://www.afhto.ca/wp-content/uploads/PHPG_Overview-of-Process-and-Recommendations_Final.pdf
- Qualitative Solutions and Research. (2014). NVivo 10 for Windows.

 https://download.qsrinternational.com/Document/NVivo10/NVivo10-Getting-Started-Guide.pdf
- Ravichandiran, N., Mathews, M., & Ryan, B. L. (2022). Utilization of healthcare by immigrants in Canada: A cross-sectional analysis of the Canadian Community Health Survey. *BMC Primary Care*, 23(1), 69. https://doi.org/10.1186/s12875-022-01682-2
- Resnik, D. B. (2015). Bioethical issues in providing financial incentives to research participants.

 *Medicolegal and Bioethics, 5, 35–41. https://doi.org/10.2147/MB.S70416
- Reutter, L., & Kushner, K. E. (2010). 'Health equity through action on the social determinants of health': Taking up the challenge in nursing. *Nursing Inquiry*, *17*(3), 269–280. https://doi.org/10.1111/j.1440-1800.2010.00500.x
- Richards, H. M., & Schwartz, L. J. (2002). Ethics of qualitative research: Are there special issues for health services research? *Family Practice*, *19*(2), 135–139. https://doi.org/10.1093/fampra/19.2.135

- Ritvo, P. G., Myers, R. E., Paszat, L. F., Tinmouth, J. M., McColeman, J., Mitchell, B., Serenity, M., & Rabeneck, L. (2015). Personal navigation increases colorectal cancer screening uptake. *Cancer Epidemiology, Biomarkers & Prevention*, 24(3), 506–511. https://doi.org/10.1158/1055-9965.EPI-14-0744
- Romanow, R. (2002). *Building on values: The future of health care in Canada—Final report*.

 Commission on the Future of Health Care in Canada.

 https://publications.gc.ca/collections/Collection/CP32-85-2002E.pdf
- Ruiz-Casares, M., Cleveland, J., Oulhote, Y., Dunkley-Hickin, C., & Rousseau, C. (2016).
 Knowledge of healthcare coverage for refugee claimants: Results from a survey of health service providers in Montreal. *PloS ONE*, 11(1).
 https://doi.org/10.1371/journal.pone.0146798
- Sanmartin, C., & Ross, N. (2006). Experiencing difficulties accessing first-contact health services in Canada. *Healthcare Policy*, 1(2). http://www.longwoods.com/content/17882/healthcare-policy/experiencing-difficulties-accessing-first-contact-health-services-in-canada
- Saunders, N. R., Chiu, M., Lebenbaum, M., Chen, S., Kurdyak, P., Guttmann, A., & Vigod, S. (2019a). Suicide and self-harm in recent immigrants in Ontario, Canada: A population-based study. *The Canadian Journal of Psychiatry*, *64*(11), 777–788. https://doi.org/10.1177/0706743719856851
- Saunders, N. R., Chiu, M., Lebenbaum, M., Chen, S., Kurdyak, P., Guttmann, A., & Vigod, S. (2019b). Suicide and self-harm in recent immigrants in Ontario, Canada: A population-based study. *The Canadian Journal of Psychiatry*, 64(11), 777–788. https://doi.org/10.1177/0706743719856851

- SecureDocs. (n.d.). *How does it work?* Retrieved January 8, 2023, from https://www.securedocs.ca/Help.aspx?c=1003
- Selfridge, M., Card, K. G., Lundgren, K., Barnett, T., Guarasci, K., Drost, A., Gray-Schleihauf,
 C., Milne, R., Degenhardt, J., Stark, A., Hull, M., Fraser, C., & Lachowsky, N. J. (2020).
 Exploring nurse-led HIV pre-exposure prophylaxis in a community health care clinic.
 Public Health Nursing, 37(6), 871–879. https://doi.org/10.1111/phn.12813
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75. https://doi.org/10.3233/EFI-2004-22201
- Smith, M., & Bowers-Brown, T. (2010). Different kinds of qualitative data collection methods.

 In L. Dahlberg & C. McCaig (Eds.), *Practical Research and Evaluation: A Start-to-Finish Guide for Practitioners* (pp. 111–125). SAGE Publications.
- Smith, T. (2016). SharePoint 2016 user's guide: Learning Microsoft's business collaboration platform. Apress.
- Ssendikaddiwa, J. M., Goldenberg, S., Berry, N. S., & Lavergne, M. R. (2023). Sex, immigration, and patterns of access to primary care in Canada. *Journal of Immigrant and Minority Health*, 25(3), 548–559. https://doi.org/10.1007/s10903-023-01459-4
- Statistics Canada. (2022, October 26). *Immigrant population by selected places of birth, admission category and period of immigration, 2021 Census*.

 https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/dv-vd/imm/index-en.cfm
- Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice*. Taylor & Francis Group. http://ebookcentral.proquest.com/lib/mcmu/detail.action?docID=4511832

- Thorne, S. (2020). Applied interpretive approaches. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (2nd ed., pp. 143–166). Oxford University Press. http://academic.oup.com/edited-volume/34283/chapter/290633059
- Thorne, S., Kirkham, S. R., & O'Flynn-Magee, K. (2004). The analytic challenge in interpretive description. *International Journal of Qualitative Methods*, *3*(1), 1–11. https://doi.org/10.1177/160940690400300101
- Todd, C., Howlett, M., MacKay, M., & Lawson, B. (2007). Family practice/primary health care nurses in Nova Scotia. *Canadian Nurse*, *103*(6), 23–27.
- 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. https://doi.org/10.1093/intqhc/mzm042
- Tsai, P.-L., & Ghahari, S. (2023). Immigrants' experience of health care access in Canada: A recent scoping review. *Journal of Immigrant and Minority Health*, 25(3), 712–727. https://doi.org/10.1007/s10903-023-01461-w
- Tu, K., Kristiansson, R. S., Gronsbell, J., Lusignan, S. de, Flottorp, S., Goh, L. H., Hallinan, C.
 M., Hoang, U., Kang, S. Y., Kim, Y. S., Li, Z., Ling, Z. J., Manski-Nankervis, J.-A., Ng,
 A. P. P., Pace, W. D., Wensaas, K.-A., Wong, W. C., & Stephenson, E. (2022). Changes in primary care visits arising from the COVID-19 pandemic: An international comparative study by the International Consortium of Primary Care Big Data
 Researchers (INTRePID). *BMJ Open*, 12(5), e059130. https://doi.org/10.1136/bmjopen-2021-059130

- Turin, T. C., Haque, S., Chowdhury, N., Ferdous, M., Rumana, N., Rahman, A., Rahman, N., Lasker, M., & Rashid, R. (2021). Overcoming the challenges faced by immigrant populations while accessing primary care: Potential solution-oriented actions advocated by the Bangladeshi-Canadian community. *Journal of Primary Care & Community Health*, 1–11. https://doi.org/10.1177/21501327211010165
- Turin, T. C., Rashid, R., Ferdous, M., Chowdhury, N., Naeem, I., Rumana, N., Rahman, A., Rahman, N., & Lasker, M. (2020). Perceived challenges and unmet primary care access needs among Bangladeshi immigrant women in Canada. *Journal of Primary Care & Community Health*, 11, 2150132720952618. https://doi.org/10.1177/2150132720952618
- Turin, T. C., Rashid, R., Ferdous, M., Naeem, I., Rumana, N., Rahman, A., Rahman, N., & Lasker, M. (2020). Perceived barriers and primary care access experiences among immigrant Bangladeshi men in Canada. *Family Medicine and Community Health*, 8(4), e000453. https://doi.org/10.1136/fmch-2020-000453
- United Nations High Commissioner for Refugees. (2020). *Convention and protocol relating to the status of refugees*. https://www.unhcr.org/protection/basic/3b66c2aa10/convention-protocol-relating-status-refugees.html
- Vang, Z. M., Sigouin, J., Flenon, A., & Gagnon, A. (2015). The healthy immigrant effect in Canada: A systematic review. *Ethnicity & Health*, 22(3), 209–241. https://doi.org/10.1080/13557858.2016.1246518
- Wang, L., Guruge, S., & Montana, G. (2019). Older immigrants' access to primary health care in Canada: A scoping review. *Canadian Journal on Aging*, *38*(2), 193–209. https://doi.org/10.1017/S0714980818000648

- Webber-Ritchey, K. J., Aquino, E., Ponder, T. N., Lattner, C., Soco, C., Spurlark, R., & Simonovich, S. D. (2021). Recruitment strategies to optimize participation by diverse populations. *Nursing Science Quarterly*, *34*(3), 235–243. https://doi.org/10.1177/08943184211010471
- World Health Organization, & United Nations Children's Fund. (2020). *Operational framework* for primary health care. https://www.who.int/publications-detail-redirect/9789240017832
- Xue, L. (2008, February). *Initial labour market outcomes: A comprehensive look at the*employment experience of recent immigrants during the first four years in Canada.

 https://www.canada.ca/content/dam/ircc/migration/ircc/160nglish/pdf/research-stats/lsic-employment-outcome.pdf
- Yuille, L., Bryant-Lukosius, D., Valaitis, R., & Dolovich, L. (2016). Optimizing registered nurse roles in the delivery of cancer survivorship care within primary care settings. *Nursing Leadership* (1910-622X), 29(4), 46–58.
- Zhao, J., Xue, L., & Gilkinson, T. (2010). Health status and social capital of recent immigrants in Canada. In T. McDonald, E. Ruddick, & A. Sweetman (Eds.), *Canadian immigration:*Economic evidence for a dynamic policy environment. McGill-Queen's University Press.
- Ziegler, E. (2021). The integral role of nurses in primary care for transgender people: A qualitative descriptive study. *Journal of Nursing Management (John Wiley & Sons, Inc.)*, 29(1), 95–103. https://doi.org/10.1111/jonm.13190
- Ziegler, E., Valaitis, R., Risdon, C., Carter, N., & Yost, J. (2020). Models of care and team activities in the delivery of transgender primary care: An Ontario case study.

 Transgender Health, 5(2), 122–128. https://doi.org/10.1089/trgh.2019.0082

Zoom Video Communications Inc. (2016, July). Security guide.

https://d24cgw3uvb9a9h.cloudfront.net/static/81625/doc/Zoom-Security-White-Paper.pdf

APPENDICES

Appendix A: Search Strategy

Purposeful	Phenomenon of		Context	Setting
Sample	Interest	TT 1/1	D	0.4. :
nurses	Immigrants	Healthcare access	Primary care clinics	Ontario
Nurs*	Defugee*	Health care access*		Ontonio
	Refugee* Emigrant*	Healthcare access*	Primary health care	Ontario Canada
Registered Nurs*	<u>o</u>		Primary care Disease	Callada
	Immigrant*	Healthcare service		
Registered	Migrant*	access*	management	
Practical	Asylum seek*	Health service	Public health	
Nurs* staff	Displaced person*	access*	Community health	
		Access to care	Community health	
		Access to health care	care	
		Access to med*	General pract*	
		Access to health	Public Health Nurs*	
		service*	Primary Care Nurs*	
		Health service	Community Health	
		availability	nurs*	
		Health care	Family Pract*	
		availability	Preventative care	
		Patient navigat*	Health promotion	
		System navigat*	Preventative Health	
		Health service		
		accept*		
		Health care accept*		
		Health care		
		utilisation		
		Health care use		
		Health service use		
		Case Manag*		
		Health literacy		
		Health care need*		
		Health care seek*		
		Health care reach*		
		Health care coord*		
		Health service		
		coord*		

OVID Medline Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

Purposeful	Phenomenon of		Context	Setting
Sample	Interest			
Nurses	Immigrants	Healthcare access	Primary care clinics	Ontario
	_	KEYWORDS		
Nurs*	Refugee*	Health care access*	Primary health care	Ontario
Registered	Emigrant*	Healthcare access*	Primary care	Canada
Nurs*	Immigrant*	Healthcare service	Community health	
Registered	Migrant*	access*	Community health	
Practical Nurs*	Asylum seek*	Health service	careGeneral pract*	
Nurs* staff	Displaced	access*	Primary Care Nurs*	
Licensed	person*	Access to care	Community Health	
practical nurs*		Access to health care	nurs*Family Pract*	
Community		Access to med*	Community health	
health nurs*		Access to health	cent*	
Primary care		service*	Community health	
nurs*		Health service	clinic*	
Practice nurs*		availability	Primary care clinic*	
Staff nurs*		Health care	Family health team*	
		availability	Community health	
		Patient navigat*	services	
		Health service	Group practice	
		accept*	Primary health care clinic*	
		Health care accept* Health care		
		utilisation	Community clinic* Walk-in clinic*	
		Health service use	waik-iii ciiiiic	
		Case Manag*		
		Health literacy		
		Health care need*		
		Health care seek*		
		Health care reach*		
		Health care coord*		
		Health service		
		coord*		
		Care coord*		
		Access to primary		
		care		
		"Patient Acceptance		
		of Health Care"		
		"Health Services		
		Needs and Demand"		
		"Continuity of		
		Patient Care"		
		Continuity of care		
		Nursing role*		
		Nurse's role*		

		Disease Management		
		Chronic disease		
		management		
		Preventative care		
		Health promot*		
		Preventative Health		
		Nurse activit*		
		Delivery of health		
		care		
		Preventative		
		medicine		
	•	MeSH Terms		
Nurses	Refugees	Health services	Primary Health Care	Ontario
Nursing Staff	Transients and	accessibility	-	Canada
Licensed	Migrants	Patient Navigation	Community Health	
Practical Nurse	Emigrants and	"Patient Acceptance	Services	
Nurses,	Immigrants	of Health Care"	Community Health	
Community		Case Management	Centers	
Health		Health Literacy	Family Practice	
		"Health Services	General Practice	
		Needs and Demand"	Community Health	
		"Continuity of	Nursing	
		Patient Care"	Public Health	
		Access to Primary	Nursing	
		Care	Primary Care	
		Nurse's Role	Nursing	
		*Chronic Disease /	Group Practice	
		nu [Nursing]	_	
		"Delivery of Health		
		Care"		
		Disease Management		
		Preventative		
		medicine / nu		
		[Nursing]		

OVID Emcare

Publication Date: 2003-Current

Purposeful Sample	Phenomenon of Interest		Context	Setting	
Nurses	Immigrants	Healthcare access	Primary care clinics	Ontario	
KEYWORDS					

Nurs*	Refugee*	Health care access*	Primary health	Ontario
Registered Nurs*	Emigrant*	Healthcare access*	care	Canada
Registered	Immigrant*	Healthcare service	Primary care	Cunada
Practical Nurs*	Migrant*	access*	Primary medical	
Nurs* staff	Asylum seek*	Health service access*	care	
Licensed practical	Displaced	Access to care	Community	
nurs*	person*	Access to health care	health	
Community health	person	Access to med*	Public health	
nurs*		Access to health	Community	
Primary care		service*	health care	
nurs*		Health service	Community care	
Practice nurs*		availability	General pract*	
Staff nurs*		Health care availability	Primary Care	
Starr right		Patient navigat*	Nurs*	
		Health service accept*	Community	
		Health care accept*	Health nurs*	
		Health care utilization	Family Pract*	
		Health service use	Community	
		Case Manag*	health cent*	
		Health literacy	Community	
		Health care need*	health clinic*	
		Health care seek*	Primary care	
		Help seeking behav*	clinic*	
		Health care reach*	Family health	
		Health care coord*	team*	
		Health service coord*	Family health	
		Care coord*	Community	
		Access to primary care	health services	
		"Patient Acceptance of	Group practice	
		Health Care"	Primary health	
		Patient attitude	care clinic*	
		"Health Services	Community	
		Needs and Demand"	clinic*	
		"Continuity of Patient	Walk-in clinic*	
		Care"		
		Continuity of care		
		Patient care		
		Nursing role*		
		Nurse role*		
		Disease Management		
		Chronic disease		
		management		
		Preventative care		
		Health promot*		
		Preventative Health		
		Nurse activit*		

		Delivery of health care			
		Health care delivery			
		Preventative medicine			
	MeSH Terms				
Nurse	Refugee	Health care access	Primary health		
Nursing	Emigrant	Health care availability	care	Ontario	
Registered nurse	Immigrant	Patient navigation	Primary medical	Canada	
Nursing staff	Forced Migrant	Health care utilization	care		
Licensed practical	Asylum seeker	Case management	Public health		
nurse		Health literacy	Community care		
Staff nurse		Health care need	General practice		
		Help seeking behavior	Community		
		Patient attitude	health nursing		
		Patient care	Health center		
		Nursing role	Family Health		
		Disease management	-		
		Chronic disease			
		Preventative medicine			
		Health promotion			
		Health care delivery			

CINAHL

Publication Date: 2003-Current

Purposeful	Phenomenon of		Context	Setting
Sample	Interest			
Nurses	Immigrants	Healthcare access	Primary care	Ontario
			clinics	
		KEYWORDS		
Nurs*	Refugee*	Health care access*	Primary health	Ontario
Registered Nurs*	Emigrant*	Healthcare access*	care	Canada
Registered	Immigrant*	Healthcare service	Primary care	
Practical Nurs*	Migrant*	access*	Primary medical	
Nurs* staff	Asylum seek*	Health service access*	care	
Licensed	Displaced	Access to care	Community	
practical nurs*	person*	Access to health care	health	
Community		Access to med*	Community	
health nurs*		Access to health	health care	
Primary care		service*	Community care	
nurs*		Health service	General pract*	
Practice nurs*		availability	Primary Care	
Staff nurs*		Health care	Nurs*	
		availability	Community	
		Patient navigat*	Health nurs*	
		Health service accept*	Family Pract*	

		Health care accept*	Community	
		Health care utilization	health cent*	
		Health service use	Community	
			health clinic*	
		Case Manag*		
		Health literacy	Primary care	
		Health care need*	clinic*	
		Health care seek*	Family health	
		Help seeking behav*	team*	
		Health care reach*	Family health	
		Health care coord*	Community	
		Health service coord*	health services	
		Care coord*	Group practice	
		Access to primary care	Primary health	
		"Patient Acceptance of	care clinic*	
		Health Care"	Community	
		Patient attitude	clinic*	
		"Health Services	Walk-in clinic*	
		Needs and Demand"		
		"Continuity of Patient		
		Care"		
		Continuity of care		
		Nursing role*		
		Nurse role*		
		Disease Management		
		Chronic disease		
		management		
		Preventative care		
		Preventative Health		
		Care		
		Health promot*		
		Preventative Health		
		Nurse activit*		
		Delivery of health care		
		Health care delivery		
		Health Resource		
		Utilization		
		Preventative medicine		
		Integrated Health Care		
	1	MH	1	ı
Nurses+	Refugees+	Health Services	Primary Health	Canada+
Registered	Immigrants	Accessibility+	Care	Ontario
Nurses	Emigration and	Patient Navigation	Community	
Practical Nurses	Immigration	Health Services Needs	Health Centers	
Staff Nurses	Transients and	and Demand+	Community	
Starr Trurses	11001010100 0010		•	
Community Health Nurses+	Migrants	Case Management+	Health Nursing+ Family Practice	

		Case Management Nursing Health Literacy Help Seeking Behavior Health Care Delivery, Integrated Access to Primary Care Patient Attitude Continuity of Patient Care Nursing Role Disease Management+ Preventative Health Care+ Health Care Delivery Health Resource Utilization Healthcare Disparities Health Promotion	Community Health Services Group Practice	
--	--	---	--	--

Appendix B: Recruitment Flyer

RESEARCH University VOLUNTEERS NEEDED

Seeking Registered Nurses (RN) working in Primary Health Care (PHC) Settings in Toronto, Ottawa-Gatineau, Hamilton, Kitchener-Cambridge-Waterloo, or London

If you...



Are an RN with the College of Nurses of Ontario



Are currently practising full-time or part-time in a PHC setting



Have experience working with recent immigrants?

If you answered YES to the above, you may be eligible to participate



What does it Involve?

If you participate, you will be asked to participate in a 45-60 minutes oneon-one interview via Zoom/phone to share your experiences in promoting access to healthcare for immigrants. Interview date and times are flexible.

Participants will receive a \$20 gift card for the interview!

For more information or to participate in the study, please contact Eugenia Ling via email at linge6@mcmaster.ca

This research study is being conducted by the student investigator, Eugenia Ling, RN, MSc Student. The Hamilton Integrated Research Ethics Board has reviewed this study under project #15592

Version 2. February 22, 2023

Caption for Facebook/Website/Email/Newsletter Advertisement:

Research Volunteers Needed

Researchers from the School of Nursing at McMaster University are looking for volunteers who are Registered Nurses working in primary health care settings within Toronto, Ottawa-Gatineau, Hamilton, Kitchener-Cambridge-Waterloo, or London. The purpose of the study is to understand how Registered Nurses working in primary health care settings facilitate access to health care for recent immigrants. Potential participants will be screened during an initial telephone call to determine if they are eligible for the study.

The study involves a one-on-one interview that will take approximately 45-60 minutes and will involve one session. The interview will take place using Zoom (or by phone) and interview date and times are flexible. All participants will receive a \$20 gift card following completion of the interview.

For more information about this study, or to volunteer for this study, please contact Eugenia Ling via email: Linge6@mcmaster.ca

This study has been reviewed by the Hamilton Integrated Research Ethics Board (Project #15592).

Caption for Twitter/Instagram Advertisement:

Are you a primary health care Registered Nurse (PHC-RN) in Ontario?

You might be interested in a research study at @McMasterU exploring how PHC-RNs act as facilitators of healthcare access for recent immigrants

Contact Eugenia Ling at linge6@mcmaster.ca for more information

McMaster University – School of Nursing

M.Sc. Thesis – Eugenia Ling

Appendix C: Email Script to PHC RN Organizations

Subject Line: McMaster University Study – Participant Recruitment

To [Organizational Representative]:

I hope this email finds you well. As discussed previously, I am requesting your support to help

disseminate the attached recruitment flyer and messaging (provided below) to the members of

your network.. The recruitment flyer and caption for each platform have been reviewed by the

Hamilton Integrated Research Ethics Board (HiREB) (Project #15592).

If you have any questions, concerns or would like to discuss any details of the study, please do

not hesitate to contact me via phone at 613-762-0042 or via email at linge6@mcmaster.ca.

Thank you, in advance, for your support.

Sincerely,

Eugenia Ling, RN

MSc Student, School of Nursing,

McMaster University

Phone: (613) 762-0042

Email: Linge6@mcmaster.ca

Study Title: "How do Primary Health Care (PHC) Registered Nurses working in PHC

settings facilitate healthcare access among recent immigrants in Ontario?"

Caption for Facebook/Website/Email/Newsletter Advertisement:

Research Volunteers Needed

Researchers from the School of Nursing at McMaster University are looking for volunteers who are Registered Nurses working in primary health care settings within Toronto, Ottawa-Gatineau, Hamilton, Kitchener-Cambridge-Waterloo, or London. The purpose of the study is to understand how Registered Nurses working in primary health care settings facilitate access to health care for

171

M.Sc. Thesis – Eugenia Ling

recent immigrants. Potential participants will be screened during an initial telephone call to determine if they are eligible for the study.

The study involves a one-on-one interview that will take approximately 45-60 minutes and will involve one session. The interview will take place using Zoom (or by phone) and interview date and times are flexible. All participants will receive a \$20 gift card following completion of the interview.

For more information about this study, or to volunteer for this study, please contact Eugenia Ling via email: Linge6@mcmaster.ca

This study has been reviewed by the Hamilton Integrated Research Ethics Board (Project #15592).

Caption for Twitter/Instagram Advertisement:

Are you a primary health care Registered Nurse (PHC-RN) in Ontario?

You might be interested in a research study at @McMasterU exploring how PHC-RNs act as facilitators of healthcare access for recent immigrants

Contact Eugenia Ling at linge6@mcmaster.ca for more information

Appendix D: Recruitment Email Script

Subject: McMaster University – "How do Primary Health Care (PHC) Registered Nurses working in PHC settings facilitate healthcare access among recent immigrants in Ontario?"

Hi [Insert Participant Name],

Thank you for your interest in participating in the study. I'd like to arrange a time for us to meet to determine if you are eligible to participate and share more information about the study with you. If you would like to participate, you will then provide your verbal consent and we will complete the interview. This meeting should take approximately 75 minutes. Could you please let me know specific date(s) and time(s) that you are available to speak and if you prefer to meet via phone or Zoom? If you prefer phone, please provide a phone number to reach you.

I have attached the Letter of Information/Consent Form. Please take the time to review this prior to our scheduled meeting. You will also have the opportunity to ask any questions related to the study during our call. I have also attached a copy of the study flyer. I would appreciate if you could please share it with any Registered Nurses working in primary health care you know who may be eligible and interested in participating in the study.

If you have any question and/or concerns regarding details of the study before our appointment, please do not hesitate to contact me during the weekdays between 9am-5pm via phone at 613-762-0042 or via email at linge6@mcmaster.ca. Once again, I appreciate your interest and look forward to speaking with you.

M.Sc. Thesis – Eugenia Ling

Sincerely,

Eugenia Ling, RN MSc Student, School of Nursing, McMaster University

Phone: (613) 762-0042

Email: Linge6@mcmaster.ca

Note: This study has been reviewed by the Hamilton Integrated Research Ethics Board under

Project #15592.

Appendix E: LETTER OF INFORMATION / CONSENT FORM

Study Title: "How do PHC RNs working in PHC settings facilitate healthcare access among recent immigrants in Ontario?"

Investigators:

Local Principal Investigator: Student Investigator:

Dr. Rebecca Ganann

School of Nursing

McMaster University

Hamilton, ON, Canada

Physical Control (2015) 525 2142 (2015)

Phone: (905) 525-9140 ext. 22456 Phone: (613) 762-0042

E-mail: Ganannrl@mcmaster.ca E-mail: Linge6@mcmaster.ca

Purpose of the Study

This research study is being conducted by Eugenia Ling as part of her fulfillment of a Master of Science in the School of Nursing at McMaster University. The purpose of this study is to explore how Registered Nurses working in primary health care settings within Ontario facilitate healthcare access among immigrants who have lived in Canada for less than 10 years.

Procedures involved in the Research

If you agree to participate, you will be invited to participate in a one-on-one interview with the student investigator using Zoom, a videoconferencing platform, or by phone. The interview will last 45 to 60 minutes. The purpose of the interview is to collect in-depth information on the experiences of Registered Nurses working in primary health care settings in promoting access to healthcare services and programs for recent immigrants. The interview will be audio-recorded which will be transcribed following the interview and analyzed. You also will be invited to complete an electronic demographic questionnaire using Microsoft Forms. The purpose of the questionnaire is to understand the characteristics of participants being interviewed and whether the study results can be applied to other groups or settings.

Potential Risks or Discomforts:

It is not likely that there will be any harms or discomforts associated with participating in the study. You do not need to answer any questions (in the demographic questionnaire and interview) that you do not want to answer or that make you feel uncomfortable. If you do feel uncomfortable at any point, the interview will be stopped and/or you may take a break. You can also withdraw (stop taking part) of the study at any time without consequences.

This study interview will be conducted via telephone or Zoom, an externally hosted cloud-based service. A link to Zoom's privacy policy is available here: https://zoom.us/privacy. McMaster University has an institutional subscription for Zoom. Institutional subscriptions offer certain protections to members of the McMaster community that are not present with services for which there is no institutional subscription. The Hamilton Integrated Research Ethics Board has approved using the Zoom platform to collect data for this study; however, there is a small risk of a privacy breach for data collected on external servers.

Potential Benefits

The research will not benefit you directly. This study seeks to learn more about your experiences as a Registered Nurse working with recent immigrants in primary health care settings. We anticipate that the study findings help us to better understand how the role of Registered Nurses in primary health care settings can be best utilized to facilitate health care access. Participants may also benefit from participating in the study by sharing their experiences.

Incentive/Payment or Reimbursement

You will receive a \$20 gift card following completion of the interview.

Confidentiality

Your name and personal information will not be disclosed with anyone outside the research team except with your consent. All study files, including audio-recordings and transcripts, will be labelled with a unique study number. Audio-recordings of the interview, including any names or personal information shared during the interview, will be transcribed in confidence by a third-party transcription service. Following transcription of the audio-recordings, your name will be replaced with a unique study number and any potential information (e.g., workplace name) that could be used to identify you in the transcripts will be replaced with generic terms. Every effort will be made to protect your confidentiality and privacy. I will not use your name or any information that would allow you to be identified. However, we are often identifiable through the stories we tell. Please keep this in mind in deciding what to tell us.

The information you provide will be electronically stored on password-protected, secure network servers where only I and the research team members will have access to it. The audio-recordings will be transcribed word for word; transcripts will be de-identified and verified against the audio-recordings by the student researcher. The audio-recordings will be deleted as soon as possible following the transcription process.

Your name and any potentially identifying information will not be published. Direct quotes may be included in the published results, but generic terms will be used to describe the participant. Once the study is complete, any identifiable information (name and contact information) will be

deleted immediately. An archive of non-identifiable data and study files will be kept for three years on a password-protected laptop and then deleted.

Despite the protections described in this section, there is a small risk of an unintentional or accidental release of study data without authorization.

For the purposes of ensuring proper monitoring of the research study, it is possible that representatives of the Hamilton Integrated REB (HiREB), this institution, and affiliated sites or regulatory authorities may consult your original (identifiable) research data to check that the information collected for the study is correct and follows proper laws and guidelines. By participating in this study, you authorize such access.

Participation and Withdrawal

Your participation in this study is voluntary. If you decide to participate in the study and provide consent, you can decide to withdraw from the study at any point in the study without penalties. If you decide to withdraw, there will be no consequences to you. Alternatively, you may also request that any personal details or collected data be removed. However, following your interview, the collected data will be anonymized, analyzed, and grouped with data from other interviews which will make it difficult to isolate your data and remove it. For this reason, please notify the student investigator of your intentions to withdraw from the data no later than two weeks following your interview.

Participation in this study does not preclude your participation in other research studies. Further, your employer will not know whether you have participated. Lastly, you do not waive any rights to which you may be entitled under the law by participating in this study.

Information about the Study Results

We anticipate that this study will be completed by approximately December 2023. If you would like to receive a summary of the results, please provide the the student investigator with the preferred email to send the results to.

Questions about the Study

If you have questions and/or need more information about the research process, please contact the student investigator Eugenia Ling via phone at (613) 762-0042 or via email at linge6@mcmaster.ca. If you would like to speak to the Local Principal Investigator, Dr. Rebecca Ganann may be contacted via phone at (905) 525-9140 ext. 22456 or via email at Ganannrl@mcmaster.ca.

This study has been reviewed by the Hamilton Integrated Research Ethics Board (HiREB). The HiREB is responsible for ensuring that participants are informed of the risks associated with the

research, and that participants are free to decide if participation is right for them. If you have any questions about your rights as a research participant, please call the Office of the Chair, HiREB, at 905.521.2100 x 42013.

VERBAL CONSENT

I have read and understand the information presented in the letter about the study being conducted by Eugenia Ling, a student researcher, of McMaster University.

I have had the opportunity to ask questions about my involvement in this study and to receive additional details I requested.

I understand that if I agree to participate in this study, I may withdraw from the study at any time. I will be given an electronic copy of this form. I agree to participate in the study.

Name, Person Providing Verbal Consent	Date
I agree that the interview can be audio-recorded: Yes []	No []
Name, Person Providing Verbal Consent	
Signature of person obtaining verbal consent: "I believe that the involved in the study and voluntarily agrees to take part in it."	
Name, Person Obtaining Verbal Consent (Printed)	Role in Study
Signature, Person Obtaining Verbal Consent (Printed)	Date (DD/MMM/YYYY)
Study Results	

M.Sc. Thesis – Eugenia Ling

[] Yes, I would like to receive a summary of the study results via email.

[] No, I do not want to receive a summary of the study results.

Appendix F: Recruitment & Informed Consent Script

Study Title: "How do Primary Health Care (PHC) Registered Nurses working in PHC settings facilitate healthcare access among recent immigrants in Ontario?"

Hello, my name is Eugenia Ling, a student researcher from McMaster University. Thank you for your interest in participating in the study.

Have you taken the time to review the consent form that was provided to you? [If individual says no, request that the individual review the consent form and re-schedule recruitment & informed consent call]

Today, I will provide you with information on the study and determine if you are eligible to participate. You will also have the opportunity to ask any questions regarding the study. If you are still interested in participating in the study, I will ask you to provide verbal consent and we will then complete the interview.

The research study is being conducted to understand how Registered Nurses working in primary health care settings facilitate health care access for immigrants who have lived in Canada for less than 10 years. This is part of my Masters studies in the School of Nursing at McMaster University in Hamilton, Ontario. I'm working under the supervision of Dr. Rebecca Ganann, who is a faculty member in the School of Nursing at McMaster University.

I will now ask you some background questions to determine if you are eligible for the study.

Note: participants must answer YES to the following inclusion criteria to be eligible to participate

- Are you a Registered Nurse with the College of Nurses of Ontario? [Yes/No]
- Are you currently practising full-time or part-time in a primary health care setting in at least one of the following cities: Toronto, Ottawa-Gatineau, Hamilton, Kitchener-Cambridge-Waterloo, or London? [Yes/No]
- Do you have at least one year of experience providing direct nursing care in a primary
 health care setting within one of the cities mentioned earlier? Examples of primary health
 care settings include Community Health Centres, Family Health Teams, independent
 practices, or walk-in clinics. [Yes/No]
- Do you have experience working with immigrants with immigration statuses such as economic-class, family-sponsorship class, and refugees? [Yes/No]

If the participant does not meet the eligibility criteria:

Unfortunately, you do not meet the criteria to participate in the study. Thank you for your time and interest in the study [end telephone call].

If the participant meets the eligibility criteria:

Thank you for time taking the time to answer those questions.

I will now take the time to provide you with more information about the study and highlight important information from the consent form.

If you decide to participate, you will be asked to complete an electronic demographic questionnaire and participate in a one-on-one interview that will take approximately 45-60

minutes to understand more of your role and experience as a Registered Nurse. The interview will be audio-recorded and transcribed for data analysis purposes.

I will now take some time to share some of the risks and/or benefits you may experience if participating in the study. During the interview, you do not need to answer questions that you do not want to answer or that make you feel uncomfortable. If you do feel uncomfortable or would like to pause at any point, the interview will be stopped, you may skip the question, or you may take a break. You can also stop taking part of the study at any time without any consequences. Further, the research will not directly benefit you, but we hope that the study findings will help us to better understand how the role of Registered Nurses in primary health care settings can be best used to facilitate health care access for immigrants.

The information provided by you before, during, and after the interview will remain confidential and only shared with those involved in the research study, including the research team and third-party transcription company. The information you provide will be electronically stored on a password-protected secure network server. With the data collected during the interview, your name will be replaced with a unique study number and any potential information that could be used to identify you will be replaced with generic terms. All study files will also be labelled with your unique study number. Every effort will be made to protect your confidentiality and privacy. I will not use your name or any information that would allow you to be identified. However, we are often identifiable through the stories we tell. Please keep this in mind in deciding what to tell us. Lastly, despite the protections outlined, there is always small risk of an unintentional release of study data without authorization.

Your name and any potentially identifying information will not be published. Direct quotes may be included in the published results but generic terms (e.g., Registered Nurse) will be used to describe the interviewee. If you agree to participate, you will receive a \$20 gift card following completion of the interview. Lastly, if you would like, a summary of the study findings will be shared with you.

Are you still interested in participating in the study?

If participant is not interested in participating in the study:

Thank you for taking the time to meet with me today. I appreciate your interest in the study and the time that you took the time to speak with me today.

If participant is interested in participating in the study:

Your participation is completely voluntary, and you may withdraw from the study at any time without any consequences. This means you do not have to participate if you do not want to.

Now I would like to ask for your verbal consent to participate in the study. By providing verbal consent, you acknowledge that:

- You have read the information presented in the information letter about a study being conducted by Eugenia Ling, a student researcher, of McMaster University.
- You have had the opportunity to ask questions about your involvement in this study and received additional details you requested.
- You understand that if you agree to participate in this study, you may withdraw from the study at any time.

McMaster University – School of Nursing

M.Sc. Thesis – Eugenia Ling

• You have been given an electronic copy of this form.

Do I have your verbal consent to participate in this study? [If yes, record consent in verbal consent log and continue with script; if no, thank participant for their time and end telephone call]

Do I have your verbal consent for the interview to be audio-recorded? [Record response in verbal consent log]

Would you like to receive a summary of the study findings? [Record response in study key] If so, what is the best way to share this with you?

We will now complete the interview. I would like to remind you that you do not need to answer questions that you do not want to answer or that make you feel uncomfortable. If you do feel uncomfortable at any point, please let me know and we can stop the interview and you may take a break. You can also withdraw (stop taking part) of the study at any time. Do you have any questions or concerns before we get started?

[Begin interview]

. . .

[End of interview]

Thank you for your time and participation in the study. Following this meeting, I will email you a link to the demographic questionnaire. I kindly ask that you complete the questionnaire at least 48 hours following this meeting. Further, I would appreciate if you could share the study flyer with any nurses working in PHC in Ontario who may be

interested in participating in the study. If you have any questions or concerns, please do not hesitate to contact me.

Appendix G: Interview Guide

1. As a Registered Nurse, what do you believe access to care for recent immigrants means?

Probes:

- What health system factors influence an immigrant's opportunity to access health care? [probes: approachability, acceptability, availability and accommodation, affordability, and appropriateness]
- What individual factors influence an immigrant's opportunity to access health care? [probes: ability to perceive, seek, reach, pay, and engage]
- 2. Can you tell me how you support this population to access the health care they need as they settle in Canada?

Probes:

- What strategies do you use to promote access to primary health care?
- What strategies do you implement to promote access beyond primary health care,
 (e.g., specialty care).
- What strategies do you use to address the social determinants of health when promoting access?
- 3. Can you tell me how you support recent immigrants of different immigration classes to access the health care they need?

Probes:

- How do the strategies you use differ when helping refugees, family-class, or economic-class immigrants gain access to health care?
- How do your strategies differ for newcomer immigrants (less than 10 years)
 versus more established immigrants (10 or more years)?

4. What factors influence how you support this population to access health care?

Probes:

- What system, organizational/institutional, or health professional factors act as barriers or facilitators to promoting access for immigrants? How do you address these barriers?
- What personal factors make it easier or more difficult for you to promote access?
- 5. Can you tell me how your role as a Registered Nurse can be better utilized in practice to promote access for this population?

Probe:

- Can you tell me about the challenges you've experienced when supporting healthcare access for recent immigrants?
- Can you tell me what needs, resources, or preparation would help to address these challenges?
- 6. Is there anything else that you would like to share with me about the role of Registered Nurses working in primary health care helping recent immigrants to access health care?

Appendix H: Demographic Questionnaire
Participant ID #: Date:
Thank you for participating in the study and taking the time to complete this demographic
questionnaire. All responses you provide will remain confidential and your name will not be
associated with your responses. You do not have to provide a response to every question. If you
do not want to or do not feel comfortable responding to a question, you may skip and leave the
question blank.
1. Age (in years):
2. Gender: □ Female □ Male □ Other: (specify)
☐ Prefer not to answer
3. Highest Level of Education: □ College Diploma □ University Degree
☐ Masters ☐ PhD ☐ Other:
4. Years of Nursing Experience: □ 1-5 years □ 6-10 years □ 11-15 years
☐ 16-20 years ☐ More than 20 years
5. Years of Primary Health Care Experience: □ 1-5 years □ 6-10 years □ 11-15 years □
16-20 years □ More than 20 years
6. Primary Employment Setting: □ Community Health Centre □ Family Health Team
☐ Independent Practice ☐ Walk-in Clinic ☐ Other:
7. City of Employment: ☐ Toronto ☐ Ottawa-Gatineau ☐ Hamilton ☐ Kitchener-
Cambridge-Waterloo □ London
8 Iob Title: ☐ Staff Registered Nurse ☐ Advanced Practice Nurse ☐ Manager

12. Have you received formal training on how to facilitate healthcare access for your patients? ☐ Yes ☐ No ☐ Maybe ☐ I don't know

13. If you answered YES to Question #12, please specify: _____

McMaster University – School of Nursing

M.Sc. Thesis – Eugenia Ling

Appendix I: Follow-Up Email

Subject: McMaster University – "How do Primary Health Care (PHC) Registered Nurses

working in PHC settings facilitate healthcare access among recent immigrants in

Ontario?"

Hello,

I would like to extend my appreciation for your time and effort to participate in the interview.

A link to the demographic questionnaire can be found here [insert link to electronic demographic

questionnaire]. I kindly ask that you complete the questionnaire within 48 hrs of receiving it.

Once again, I have attached a copy of the recruitment flyer that you may share with any

individuals you know who may be eligible and willing to participate.

If you have any question and/or concerns regarding the study, please do not hesitate to contact

me during the weekdays between 9am-5pm via phone at 613-762-0042 or via email at

linge6@mcmaster.ca. A summary of the study findings will be sent to you in the near future [if

applicable]. Thank you again for your participation in the study!

Thanks,

Eugenia Ling, RN

MSc Student, School of Nursing,

McMaster University

Phone: (613) 762-0042

Email: Linge6@mcmaster.ca

Appendix J: Study Key

Status (Eligible, Pending, Declined, Ineligible, Unable to Reach, Enrolled)	ID Number	Name	City of Practise	Email	Primary Phone Number	Permission to Leave Voicemail (Y/N)	Secondary Phone Number	Permission to Leave Voicemail (Y/N)	Screening Date	Scheduled Interview Date [Phone/Zoom]	Information Email Sent (consent form, demographic questionnaire, Zoom link, recruitment flyer) (Y/N)

ID Number	Participant Name (Last, First)	Consent to Audio- Record Interview (Y/N)	Email	Primary Phone Number	Permission to Leave Voicemail (Y/N)	Secondary Phone Number	Permission to Leave Voicemail (Y/N)	Interview Date [Zoom/Phone]	Demographic Questionnaire Completed (Y/N)	Interview Audio- Recorded (Y/N)	Notes

Appendix K: Coding Frame

Coding Label	Definition	How to Apply
		Code is applied if the following aspects are present
Approachability	Degree to which existence of health services can be identified and attained	TransparencyOutreachInformationScreening
Ability to perceive	To understand a need to receive health care	Health literacyHealth beliefsTrust and expectations
Acceptability	Factors that act as barriers and/or facilitators to accept specific health service features	Professional valuesNormsCultureGender
Ability to seek	Choosing to seek care based on personal choice and capacity; knowledge about available health care options and individual rights	 Personal and social values Culture Gender Autonomy
Availability and accommodation	Degree to which health services can be physically acquired in a timely manner	 Geographic location Accommodation Hours of opening Appointment mechanisms
Ability to reach	Capacity to acquire health care services, (e.g., mobility, transportation, occupational flexibility, and knowledge)	 Living environments Transport Mobility Social support

Affordability	Health service costs	Direct costsIndirect costsOpportunity costs
Ability to pay	Financial capabilities	IncomeAssetsSocial capitalHealth insurance
Appropriateness	Fit between health services and client needs	Technical and interpersonal qualityAdequacyCoordination and continuity
Ability to engage	Capacity to participate and be involved in health care decisions	EmpowermentInformationAdherenceCaregiver support

Appendix L: Verbal Consent Log

Participant Study ID	Consent obtained for:	Date verbal consent was obtained	Name of individual obtaining verbal consent	Signature of individual obtaining verbal consent
	☐ Participation in the study ☐ Audio-recording of interview ☐ Receive a summary of the study results			
	☐ Participation in the study ☐ Audio-recording of interview ☐ Receive a summary of the study results			
	☐ Participation in the study ☐ Audio-recording of interview ☐ Receive a summary of the study results			

Appendix M: Privacy and Confidentiality Agreement

MUTUAL NON-DISCLOSURE AGREEMENT

PARTIES: McMaster University ('University')

1280 Main Street West Hamilton, ON L8S 4L8

Transcription Plus Inc.

40 Thornton Trail, Dundas, Ontario, L9H 6Y2 ('Recipient')

DATE: February 22, 2023 ('Effective Date')

In consideration of the mutual covenants set out in this Agreement and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the Parties), the Parties agree as follows:

1. DEFINITION OF CONFIDENTIAL INFORMATION

Confidential Information means any information disclosed by University to Recipient relating directly or indirectly to the research project, "Primary Health Care Registered Nurses as Facilitators of Healthcare Access for Recent Immigrants in Ontario" (the "Project") provided by the University.

2. EXCEPTIONS TO CONFIDENTIAL INFORMATION

This Agreement does not apply to information that:

- was available to the public at the time of disclosure, or subsequently became available to the public without fault of Recipient;
- ii. was known to Recipient at the time of disclosure or was independently developed by Recipient, provided there is adequate documentation to confirm such prior knowledge or independent development;
- was received by Recipient from a third party and Recipient was not aware that the third party had a duty of confidentiality to University in respect of the information;
- iv. is used or disclosed by Recipient with University's prior written approval; or
- is required to be disclosed by law, provided that Recipient gives University sufficient prior written notice of any such disclosure to allow University to contest the disclosure.

3. DESIGNATED REPRESENTATIVES

Each party designates a representative for coordinating receipt, release and delivery of Confidential Information, which for the University will be Rebecca Ganann and for Recipient, [Insert Transcriptionist Name], or another individual(s) as the party may designate in writing to the other party.

4. USE OF CONFIDENTIAL INFORMATION

Recipient may only use the Confidential Information for the purpose of providing transcription services for the University's research project ('Permitted Purpose'). Recipient must not use the Confidential Information for any other purpose without the prior written approval of University.

5. NON-DISCLOSURE

Recipient must keep the Confidential Information in confidence. Recipient may only disclose the Confidential Information to its employees, directors, officers, agents, and



consultants who have a need-to-know the Confidential Information for the Permitted Purpose, provided that they are advised of the confidential nature of the Confidential Information and are under an obligation to maintain its confidentiality. Recipient must not otherwise disclose Confidential Information to any person or third party without the prior written approval of University.

6. STANDARD OF CARE

Recipient must use at least the same standard of care in protecting the confidentiality of the Confidential Information as it uses in protecting its own information of a similar nature and, in any event, no less than a reasonable standard of care. Recipient must notify University promptly upon discovery that any Confidential Information has been accessed or otherwise acquired by or disclosed to an unauthorized person.

7. RETURN OF CONFIDENTIAL INFORMATION

If requested in writing by University, Recipient must cease using, return to University and/or destroy all Confidential Information and any copies of Confidential Information in its possession or control. Recipient may retain one archival copy of such Confidential Information for the sole purpose of establishing the extent of the disclosure of such Confidential Information, provided that such information is not used by Recipient for any other purpose and is subject to the confidentiality requirements set out in this Agreement.

8. NO LICENCE OR OTHER RIGHTS

All Confidential Information remains the property of University and no licence or any other rights to the Confidential Information is granted to Recipient under this Agreement. This Agreement does not obligate the University to make any disclosure of Confidential Information to the Recipient or require the parties to enter into any business relationship or further agreement.

9. LIMITED WARRANTY & LIABILITY

University warrants that it has the right to disclose the Confidential Information to Recipient. University makes no other warranties in respect of the Confidential Information and provides all information "AS IS" without any express or implied warranty of any kind, including any warranty as to merchantability, fitness for a particular purpose, accuracy, completeness or violation of third party intellectual property rights. Neither party will be liable for any special, incidental or consequential damages of any kind whatsoever resulting from the disclosure, use or receipt of the Confidential Information.

10. TERM

This Agreement and Recipient's obligation to keep Confidential Information confidential expires three (3) years after the Effective Date.

11. GENERAL PROVISIONS

11.1 Notices - All notices given under this Agreement must be in writing and delivered by courier or registered mail, return receipt requested, or facsimile, to the address of the party set out on page one of this Agreement. All notices to the University must be addressed to:

Executive Director McMaster Industry Liaison Office 175 Longwood Road South McMaster Innovation Park, Rm. 305 Hamilton, ON L8P 0A1 Tel. 905.525.9140, ext. 23164 Fax. 905.546.1372



and all notices to the Company must be addressed to:

Transcription Plus Inc. 40 Thornton Trail, Dundas, Ontario, L9H 6Y2

Notices will be deemed to have been received on the date of delivery, if delivered by courier, on the fifth business day following receipt, if delivered by registered mail or on the first business day following the electronic confirmation of the successful transmission of the facsimile, if sent by facsimile.

- 11.2 Remedies Recipient agrees that damages may not be an adequate remedy for any breach or threatened breach of the Recipient's obligations under this Agreement. Accordingly, in addition to any and all other available remedies, University will be entitled to seek a temporary or permanent injunction or any other form of equitable relief to enforce the obligations contained in this Agreement.
- 11.3 No waiver Failure of a party to enforce its rights on one occasion will not result in a waiver of those rights on any other occasion.
- 11.4 Assignment Neither party may assign any of its rights or obligations under this Agreement without the prior written consent of the other party.
- 11.5 Regulatory compliance Each party must comply with all applicable laws, regulations and rules in its jurisdiction, including but not limited to those relating to the export of information and data.
- 11.6 Entire Agreement This Agreement represents the entire agreement between the parties with regard to the Confidential Information and supersedes any previous understandings, commitments or agreements, whether written or oral. No amendment or modification of this Agreement will be effective unless made in writing and signed by authorized representatives of both parties.
- 11.7 Severability If any provision of this Agreement is wholly or partially unenforceable for any reason, all other provisions will continue in full force and effect.
- 11.8 Binding Effect This Agreement is binding upon and will endure to the benefits of the parties and their respective successors and permitted assigns.
- 11.9 Execution This Agreement may be executed in any number of counterparts, each of which when executed and delivered shall constitute a duplicate original, but all counterparts together shall constitute a single agreement. This Agreement may be executed electronically and delivered by email. All such counterparts, email correspondences, scanned copies and PDF copies shall together constitute one agreement. The parties agree that electronic signatures have the same effect as original signatures.
- 11.10 Governing Law This Agreement will be governed and construed in accordance with the laws of the Province of Ontario and the laws of Canada and the parties attorn to the exclusive jurisdiction of the courts of the Province of Ontario.



UNIVERSITY	Transcription Plus Inc.
Gay Yuyitung Executive Director, MILO	Name & Signature of Signatory
Date	 Date
Agreement and agrees to be bound by	ersity acknowledges the terms and conditions set out in this y the confidentiality obligations contained within it. The Principal y or staff dealing with the Confidential Information are aware of the abide by them.

