Community Health Centre Approach in HKPR

Includes:

Final Report, Project Information Document, Informed Consent Waiver, Semi Structured Interview Questions

By: Chelsea Reid

Completed for: Human Services and justice Coordinating Committee for the Haliburton Kawartha Pine Ridge Region

Supervising Professor: Joel Cahn

Trent Community Research Centre Project Coordinator: Brittany Finigan

Course Code: FRSC 4890

Course Name: Forensic Community-Based Research Project

Completion Date: April, 2023

Project ID: 5113

Suite 3.10, Trent University Student Centre

1600 West Bank Drive

Peterborough, ON K9L 0G2

Phone: (705) 748-1093

Email: tcrc@trentu.ca

Website: trentu.ca/tcrc

FRSC 4890Y Community Research Project #5113

Community Health Centre Approach in Haliburton, Kawartha, Pine Ridge Region

Partnered with the Human Services and Justice Coordinating Committee- Haliburton, Kawartha, Pine Ridge Region

In Affiliation with Trent Community Research Centre & the Department of Forensic Science

Faculty Supervisor: Dr. Joel Cahn

TCRC Supervisor: Brittany Finigan

Research Report Written by: Chelsea Reid

Friday May 12th, 2023

Abstract

The Human Services and Justice Coordinating Committee wishes to gain funding for a Community Health Centre for the Haliburton, Kawartha, Pine Ridge Region that would be located in Peterborough. The purpose of this project is to investigate recruitment and retention methods that are used in primary health care, that could be implemented by the Human Services and Justice Coordinating Committee, to attract and retain more primary care providers, specifically physicians, to practice in Peterborough and at a Community Health Centre. This project also investigates the different payment models used in primary health care in Ontario, and the differences these payment models may have on primary health care provided to individuals. A literature review was conducted on recruitment and retention methods used in primary health care, as well as available payment models. Semi-structured interviews were conducted via zoom or over the phone with six primary care providers. The results of this project explore various recruitment and retention methods that should be used to recruit and retain primary care providers to the Peterborough community. For example, many physicians regard financial incentives, strong community environment, and employment opportunities for spouses as driving recruitment and retention methods. The results also suggest that there are differences in the quality of care provided to a patient based on the primary care providers payment model. For example, primary care providers who are paid on a fee-for-service model often spend less time with their patients in comparison to primary care providers who are paid on a salary model. The time spent with a patient within a visit can influence the care given, and the number of health concerns that are addressed. This project suggests that recruitment and retention methods should be implemented by the HSJCC to help attract primary care providers to the HKPR Region, and that the compensation for primary care providers working at a Community Health Centre should ensure that the marginalized individuals within the community receive the best primary health care possible.

Introduction & Background

The Human Services and Justice Coordinating Committee (HSJCC) is an organization that works to identify and influence system wide changes that support the decriminalization, deinstitutionalization, and de-stigmatization of individuals who have come into contact with the Justice System [1]. The HSJCC is comprised of provincial, regional, and local committees [1].

The Haliburton, Kawartha Lakes, Pine Ridge (HKPR) region is the host organization for this research project. The HKPR region functions to facilitate communication through effective linkages among health, criminal justice, and social service sectors, and between local committees [1]. The HKPR region wishes to identify issues with respect to service delivery and capacity, and address issues such as access to and duplication of services [1]. This region of the HJSCC consults with local committees to determine predominant issues, provides input and advice concerning system design, planning and resource allocation to the partner ministries [1]. The regional HSJCC has an array of staff members representative of OPP, adult and children's mental health, brain injury, courts, corrections, probation and parole services, adult protective services, and DSO/community living [1]. The HJSCC provides an array of different events to promote health care for individuals with mental health and addictions, individuals released from incarceration, or who have been impacted by their contact with the Justice System [1]. The HKPR region covers Peterborough City and County, City of Kawartha Lakes, Haliburton, and Northumberland Counties [2]. The HKPR region of the HSJCC recognizes that the primary health care provided across the region is inadequate, and there is an increasing number of marginalized patients without access to a primary care physician [2]. The HSJCC wishes to secure funding for a Community Health Centre for the Peterborough community [2].

A Community Health Centre (CHC) is an alternative model of primary health care, meant to de-stigmatize the health care system for vulnerable individuals who do not have access to a primary care physician [2]. A CHC provides health care and community program services designed specifically for their community [3]. CHCs serve populations that have traditionally faced barriers in accessing health services, including the homeless, seniors, refugees, new immigrants, and low-income individuals [3]. CHCs also provide their services free of charge [3]. CHCs employ a health care team comprised of physicians, nurse practitioners, nurses, counsellors, dietitians, occupational therapists, physiotherapists, social workers, psychologists, and other professionals to offer a wide range of services [3]. Examples of services provided by a CHC include check-ups, immunizations, diabetic foot care, nutrition counselling, needle exchange, youth leadership training and skills development, and parent and child programs [3]. CHC physicians and nurse practitioners are salaried as opposed to a traditional fee-for-service (FFS) model used to pay primary care physicians [3]. A CHC model of primary health care creates strong connections with other community agencies and services [2]. A CHC allows

marginalized individuals to take charge of their own health care and create social connections with other individuals within the community [3]. CHCs focus on addressing social determinants of health and are committed to health equity and social justice [4].

Purpose

The purpose of this research project is to help the HSJCC secure funding for a CHC for the HKPR Region. This project has analyzed the most common practices that aid in the recruitment and retention of primary care providers to work in rural Ontario communities where healthcare systems are affected by higher numbers of marginalized individuals. It has also investigated if there are any differences in the quality-of-care primary care providers provide their patients based on their payment model. This project will also investigate if there are differences in the types of patients a primary care provider treats based on their payment model. Research was conducted through online or phone call semi-structured interviews with primary care providers of established CHCs or physician practices in Ontario communities. I wanted to conduct this research project because it is important that all individuals within a community have access to healthcare resources. Additionally, this project would help provide evidence that there is a need for greater access to primary health care in the HKPR Region, especially within the Peterborough community. There is current evidence that suggests a large number of individuals residing in the Peterborough community do not have connections to primary health care and are struggling to gain access to health care resources [4]. This research project serves as a steppingstone to providing these individuals with greater access to primary health care resources, through the implementation of a CHC. It illustrates why analyzing primary care provider recruitment and retention methods are important to ensure the staffing and success of a CHC. The different primary care provider compensation models available in Ontario are important to understand, to gain funding for a CHC that would be a vital primary health care resource to the Peterborough community.

Significance

This community-based research project is significant because the Peterborough region has a large number of marginalized individuals living within the community [4]. A CHC in Peterborough is estimated to serve approximately 6,000 marginalized patients that are unattached

to primary health care [4]. The Peterborough Ontario Health Team has a high level of marginalization compared to other Ontario Health Teams, due to its high levels of dependency, material deprivation, and residential instability [4]. Having a CHC in Peterborough would be a benefit to the marginalized unattached patients within the community because a CHC is structured and resourced to serve the complex health needs of marginalized individuals [4]. Analysis of the data on Peterborough Ontario Health Team's unattached population indicates that there is an inverse relationship between marginalization and primary care attachment [4]. Unattached patients are more likely to be younger, poorer, and male, and are disproportionately recent immigrants [4]. Individuals who live with complex mental health and/or addictions, extreme poverty, and disability are unable to become attached to primary health care in Peterborough [4]. Newcomers, racialized individuals, Indigenous persons, and individuals who identify as 2SLGBTQ+ also identify as facing barriers to obtaining care that meets their needs [4].

Peterborough has seen a decline in the number of practicing family physicians. The most recent estimate of individuals who are unattached to primary health care in the Peterborough population is 10,851, based on March 31st, 2020, data [4]. Since the recent COVID-19 pandemic, this estimate is likely an underrepresentation of the number of individuals within the Peterborough community unattached to primary health care [4]. This is a large number of individuals within the Peterborough community that are not receiving adequate primary health care, which could have implications towards their quality of health and life [4]. There has been an increase in the number of physician retirements and in-migration to Peterborough since 2020 [4]. The decreasing number of practicing physicians in Peterborough is causing a decrease in the amount of resources that are provided to properly care for vulnerable patients [4]. This is causing an increase in poor health outcomes, higher medical costs, and a decline in the wellbeing of disadvantaged individuals within the Peterborough community [4]. The lack of access to welcoming and appropriate care is also a burden on health care and social service providers, diminishing their efficacy and increasing burnout as they struggle with the lack of a properly resourced and dedicated health care home for marginalized individuals [4].

Having a CHC in Peterborough that could help provide primary health care to individuals in the HKPR Region would greatly decrease the number of marginalized individuals within the Peterborough community that are unattached to primary health care. The services provided by a

CHC would be tailored to the needs of the community, and the challenges that individuals face. A CHC would help address health-equity issues among underserved populations and increase their engagement, as well as integrate health care with other social services [4]. A CHC would offer a diverse array of health care and social services provided by an interprofessional team to individuals who are lower income, live with mental health and substance use challenges, individuals who have acquired brain injuries or other disabilities, homeless individuals, newcomers, trans individuals, and rural and complex individuals [4].

The County of Peterborough is considered to be a rural municipality [4]. This affects the number of physicians and primary care providers who are willing to practice in the area [4]. Physicians are hesitant to practice in a rural community where patients, services, training, type of practice, and the living environment may be different from an urban community where the majority of physicians perform their medical training [4]. Some physicians do not see benefits to practicing in a rural community [4]. Introducing a CHC to Peterborough would help attract more physicians who are interested in serving disadvantaged populations to practice in the community and could help increase the quality of care provided to marginalized patients [4]. This research project has highlighted recruitment methods that could be implemented by the HSJCC to recruit more physicians to practice in Peterborough. The analysis is also extended to retention methods that could be used to retain more practicing physicians in Peterborough for a longer duration, so that a CHC could be fully staffed and operational. Without practicing primary care providers and physicians, a CHC would not be able to fully operate. Ensuring that the HSJCC can not only attract physicians to practice at a CHC in Peterborough but can also retain them for a long period of time through incentives that are known to work is vital.

A CHC also operates on a salary model to pay its primary care providers, rather than a traditional fee-for-service (FFS) model [3]. Paying CHC physicians a salary wage would reduce possible stresses imposed by a billable model, due to the number of unregistered patients in Peterborough, and the services they may require [4]. Being compensated on a salary model would reduce financial disincentives to serving marginalized individuals that come with capitation or FFS models [4]. This research project has helped explore what type of payment model would be most beneficial to future physicians, primarily ones that would practice at a CHC. Understanding the financial incentives that primary care providers seek in a payment model is important for retaining practicing physicians, as all primary care providers should be

compensated appropriately for the services they provide. Compensating a primary care provider serving a marginalized community can be difficult, as many marginalized patients have complex health care needs that may not fit under the compensation of one primary care provider payment model. Due to this primary care providers may feel undercompensated. Marginalized patients should still receive appropriate care despite the payment model the primary care provider is paid on. A CHC is designed to treat marginalized patients, and the payment model used by these organizations ensures that primary care providers feel appropriately compensated for the treating these patients. Understanding how primary care provider payment models affect the quality of care a patient receives, or the type of patients treated, is important. As a result of this understanding, changes can be made to reduce these differences in the quality of care or types of patients, through changes related to physician compensation or through patient interactions.

Background Context

CHCs are not-for-profit organizations governed by a community board, so they are community centred [4]. CHCs focus on addressing the social determinants of health and are committed to health equity and social justice [4]. CHCs hire an array of heath care providers to deliver services based on the health care needs of the community [5]. CHCs provide primary health care and health promotion programs for individuals, families, and communities [5]. CHCs function to strengthen individuals, families, and communities to take more responsibility for their health and wellbeing [5]. Many individuals who access CHCs are viewed as “complex” patients because of the co-occurring behaviour and physical health conditions they have [6]. These patients often have difficult times receiving proper health care because the health and sociocultural resources of these “complex” patients struggle to meet the expectations in most medical settings [6]. Complex patients encounter barriers to engagement with their health behaviours and health care providers, resulting in poor outcomes [6]. Health care systems struggle to provide effective care for “complex” patients who have overlapping behavioural, physician, and socioeconomic problems [6]. Complex patients experience problems with affording care, maintaining consistent relationships with primary care, and navigating the intersection of multiple forms of marginalization that affect health behaviours and health care access [6]. CHCs enhance patient experiences and increase satisfaction in the delivery of care, especially when there is a positive relationship between patients and providers [7]. CHCs help

address health-equity issues among underserved populations and increase engagement with screening programs, cardiovascular- disease prevention, and management of chronic conditions [7]. CHCs are better equipped to address the needs of clients facing complex medical and social issues [7]. CHCs have been found to have lower costs and provide cost savings to health systems [7]. CHCs also use a different payment model for physicians in comparison with traditional primary care models. CHCs use a salary model to pay practicing physicians, as opposed to a more traditional FFS model [2]. This information is important to my research because it highlights the importance of having a CHC within a community, as it helps many undeserved populations to have access to a form of healthcare. These undeserved communities include marginalized, or "complex" individuals, and individuals unregistered with a primary care provider have access to a form of health care. CHCs offer a means of support to many individuals who feel unsafe or scared accessing traditional models of primary health care, due to discrimination or stigmatism they may face within their community.

There is a worldwide shortage of physicians in rural areas [8]. Canada's population demographic is not proportionate to where majority of doctors practice medicine [8]. Approximately 8% of physicians practice in rural Canada, whereas approximately 19% of Canadians live in rural areas [9]. The discrepancy between population distribution and physician distribution can lead to health inequalities [8]. Physician shortages are also leaving a growing number of communities desperate for care [10]. Over the years different strategies have been used to encourage physicians to establish their practice in outlying areas across rural Canada [8]. Financial incentives and adaptation of medical student selection criteria are amongst the strategies that have been used [8]. Strategy success varies depending on the financial status of the countries that implement these methods [11]. For example, effective programs used for physician retention in high-income countries include rural placements, financial incentives, and adequate workplace infrastructure [11]. In comparison to low-income countries, effective programs used for physician retention include rural-based learning programs [11]. Common factors have been found across multiple pieces of literature that relate to factors that influence a physician's decision to practice in rural communities. These categories can be summarized into three distinct phases of a physician's life: pre-medical school, medical school, and post-medical school [12]. There are 6 major themes associated with recruitment factors: type of practice, spousal interest, opportunity for teaching, training in a region, workforce planning, and quality of life [8].

Retention categories can be summarized into personal factors, family factors, community factors, and economic factors [8]. Known factors that increase rural and remote health workforce recruitment include physician rural origin and rural intention, student selection, and positive rural exposure during medical school and the early postgraduate period [11]. Physicians are more likely to practice in a rural community if they have a rural background, a spouse with a rural background, or rural training [12]. Encouraging young doctors to take up rural practice is challenging for several reasons [10]. Rural areas offer fewer opportunities for working spouses, and schools in rural communities may have fewer resources [10]. Young doctors worry that they will earn less, and subtle messages may dissuade students from rural medicine [10]. The culture that most medical students train in values specialization and diminishes the intellectual challenge or importance of family medicine in rural practice [10]. To battle these challenges physician recruitment and retention strategies need to be multifaceted and context specific [11]. The family unit rather than the individual practitioner also needs to be considered when designing interventions to influence retention [11]. Many practitioners prioritize the needs of their family and take their family into consideration when deciding where to practice [11]. Physician recruitment and retention methods for rural Ontario need to consider positive factors that influence physician decisions, including family, quality of life, and the quality of the work environment [8]. Rural placements and financial incentives have strong success in recruiting physicians to work in rural communities and could be taken into consideration when recruiting physicians to work in rural Ontario. These recruitment and retention practices are successful in attracting primary care providers to practice in rural communities. The types of patients that reside within the community may also be a factor that contributes to the recruitment of primary care providers, as some physicians are interested in treating specific populations, such as marginalized individuals or Indigenous communities. This factor is explored within this research project, as well as recruitment practices and retention factors experienced primary care providers in Ontario communities have taken into consideration when looking for a new position, or when looking to stay in a position for long term. If these recruitment and retention methods could be implemented across rural Ontario communities such as Peterborough, to help increase the number of practicing physicians within the community, the amount of health care services that are provided could be increased, which would improve many individuals' quality of life and access to health care services and community resources.

Physicians are compensated to deliver health care services and accomplish the goals of health care systems [13]. There is a body of literature that suggests financial incentives, including payment models, affect physicians' behaviours [13]. The goal of physician payment methods includes improving the quality of care, improving access to care, delivery redesign, changes in health care use, reduced costs, or improved value [13]. A fee-for-service (FFS) is a dominant payment model internationally [13]. An FFS model compensates primary care physicians each time they deliver services to a patient [14]. This model theoretically incentivizes physicians to increase the volume of services and accept sicker patients who need more services [13]. This model rewards physician productivity and theoretically matches effort with compensation [14]. Physicians operating on this model do not coordinate with other physicians, and do not deliver services that are not directly compensated [13]. An FFS model has been associated with more primary care visits or contacts, as well as more visits to specialists and diagnostic or therapeutic services, but fewer hospital referrals [13]. An FFS model can lead to supplier induced demand, where the physician may encourage the patient to consume more than necessary, stemming in part from a knowledge imbalance that exists between them [14]. It may be difficult to assign reimbursement levels associated with the multitude of physician services, and an FFS model does not always consider the indirect time associated with patient care [14]. Physicians operating on an FFS model may also provide frequent shorter visits to patients [14]. The capitation model is also a common payment model [15]. Within the capitation model, the amount paid for a patient is determined in advanced before any services have been performed [15]. The primary care physician's compensation is determined in advanced, based on agreed-on capitation payments for patients in different categories and the number of people in each category that are enrolled in the practice [15]. The capitation model exposes the physician to uncertainty with respect to workload and implies different incentives than an FFS model [15]. Capitation favours a strategy of taking on many patients but supplying each with as small a volume of services as possible [15]. Undertreatment increases the likelihood of adverse health outcomes, which may lead to increased demands for services later on [15]. Under a capitation model, patients are expected to go to the provider on whose list they appear on, whereas an FFS model patients are typically free to go to any licensed provider [15].

An increasingly popular physician payment model operates on a salary model [13]. A salary payment model is a more aggregated model [13]. A salary model is a regular wage per time

period, regardless of the number of patient visits [13]. A salary model theoretically incentivizes physicians to accept healthier patients and reduce service volume [13]. Physicians operating on a salary model coordinate with other providers [13]. A salary model has a larger number of hospital referrals compared to a billable model [13]. Compared to a salary payment, an FFS results in more patient visits, greater continuity of care, and more patients seeing their primary care provider for a recommended number of visits, but patients are less satisfied with access to their physician [13]. A salary model has the disadvantage of lower productivity compared to FFS and higher chances of taking on healthy patients [14]. A salary model gives a primary care provider the advantage of a stable and predictable income, especially when working in a region with low demand for physician services [14]. A salary method of payment is best in under-populated and under-supplied regions, providing an incentive to physicians who agree to work in areas with less predictable demand for physician services [14]. Although literature suggests that a primary care providers behaviour may be affected by financial incentives, including payment models, there is no clear answer suggesting that the quality of care provided to a patient may be different according to a primary care providers payment model. As well, the literature does not have a consensus on whether the types of patients are influenced by a primary care providers payment model. These questions are addressed within this research, with the intention to add to the growing body of literature and to provide more insights into how a primary care providers payment model and influence the quality of care a patient receives, and the types of patients that may receive treatment with primary care providers under a specific payment model.

Methodology

Sources of Information Used & Their Relevance

Information for this research project was obtained through a literature review of recruitment and retention methods used in primary health care to attract and maintain primary care provider practice. A literature review was also conducted on the different types of primary care provider payment models that are used in Ontario and Canada. Sources of information from these literature reviews included primary and secondary resources. Conducting a literature review on both recruitment and retention methods is important to determine what factors may be important in the recruitment of primary care providers to a CHC, and if any of these methods could be implemented by the HSJCC. Understanding what factors primary care providers

consider when looking for a new position, or for remaining in a position long term, may be important when trying to secure funding for a CHC that must rely on primary care providers to operate.

Information was also collected from interviewed study participants. Study participants were recruited from the HSJCC, who recruited primary care providers via email. A diverse sample of individuals was obtained for this project, as the inclusion criteria was broad. The individuals selected for interviews met the inclusion criteria of this project by having a current position in primary health care, having primary health care work experience for greater than one year, having current employment at a CHC or a primary health care practice, past primary health care work experience in rural Ontario, physician practice located in a rural community, primary health care practiced located in a community with a patient demographic similar to Peterborough, primary health care work experience involving a salary, capitation, or FFS payment model. A total of six health care professionals were interviewed for this project, during the timeline of January 2023 to March 2023. All participants were contacted via email prior to scheduled interviews, to go over research details, as well as ethical and interview considerations. All interviews were conducted individually online via zoom or over the phone. Having the opinions of primary care providers, including primary care physicians and nurse practitioners, may help the HSJCC in deciding on a payment model for primary care providers working in a CHC, and what factors are important to the primary care providers who may be serving the HKRP community. Understanding if there are differences in the quality of care provided to patients is fundamental, if the HSJCC can circumvent these quality-of-care differences through a CHC or a different primary care provider compensation model.

Variables & Factors Examined

Factors that were examined include various recruitment and retention methods to attract primary care providers to work in rural Ontario communities with a large number of marginalized patients in the community. These factors may include but are not limited to personal factors such as rural origins or lifestyle, family factors such as employment for spouse, professional reasons such as type of practice and workload, community, economics, recruitment process, and workforce planning. The type of payment model that the research participants were paid on was a factor examined. Another variable examined was if primary care providers

consider the types of patients that reside in a community when they are looking for a new position. Another variable examined is if there are differences in primary care provider's quality of care based on the payment model they are paid on, in comparison to other payment models. This variable was examined through factors such as amount of time being spent with patients and patient load. Another variable examined is if there are differences in the types of patients based on the primary care providers payment model, in comparison to the types of patients that may be treated on other payment models. Lastly, a factor that was considered was if the research participants thought it was difficult working with marginalized patients.

Research Methodology

A detailed literature review was conducted on recruitment methods used to recruit primary health care workers, and the factors primary health care providers consider important when looking for a new position. Within that literature review retention factors that primary care providers consider were also analyzed, to determine what factors are most frequently considered when looking to stay in a primary health care position long term. A separate literature review was conducted to gain background information on the different types of primary care provider payment models used in Ontario. The salary, FFS, and capitation models were highlighted, as those models are the most common remuneration models. The literature review regarding different primary care compensation models included the FFS model, enhanced FFS, blended capitation, complement-based base remuneration plus bonuses and incentives, blended salary model, and the salaried model. The potential benefits and problems with the FFS, salary, and capitation models were investigated, as well as any potential differences in the quality of care that may be provided to patients on each model. Background information was also collected about CHCs, and their use in Ontario and Canada.

Semi-structured interviews were conducted during the time period of January 2023 to March 2023. The HSJCC recruited all participants via email. When recruiting research participants, the HSJCC ensured that all individuals met some form of the inclusion criteria for this project, listed in the sources of information section. Prior to interviews being conducted individuals were contacted by the researcher via email and given an information document regarding details of the project's purpose, the purpose for conducting interviews and how interviews were being conducted, as well as a consent form that required a signature prior to the interview. The

researcher also signed the consent forms prior to the interviews beginning. Four individuals consented to recorded zoom call interviews, and two individuals consented to audio recorded phone calls. Before interviews were recorded each participant was asked to give verbal consent to allow the interview to be recorded following its start and was informed that confidentiality would be maintained throughout the duration of the project, and all recorded data would be deleted on the completion date of the project, April 4th, 2023. After verbal consent was given by each participant the interviews were recorded and questions began. Introductory questions included asking the participants name, job location and title, how long they had been working in primary health care, and at their current position, if they had prior experience working in primary health care in rural Ontario, and what the participants hourly and patient schedule consisted of. The interview questions were split into two themes. The first theme included concerns with seeking a new job in primary health care, factors considered when seeking a new position, and if the types of patients residing in the community were a factor considered when looking for a new position in primary health care. Recruitment methods organizations used to recruit the research participants were discussed, as well as retention factors that were considered when looking for a new position in primary health care. The second theme within the interview questions included discussing the payment model of each research participant, and if they have experience with any other payment models. Participants were asked to discuss which payment model they prefer and why. Participants were asked if they think there is a difference in the quality of care provided to a patient based on the primary care providers payment model, and if there are differences in the types of patients treated on different payment models. The interviews ended with the discussion on whether the interview participants considered working with marginalized individuals difficult. All interview questions were open ended and designed to include the opinions and interpretations of each of the research participants.

Each interview was transcribed and given an identification number, consisting of the project identification number (51130) and a single digit. All the data collected from this project, including interview and literature review data underwent a thematic analysis. Common themes found in the literature regarding recruitment methods used in primary health care and retention factors considered were analyzed. Trends in the benefits and issues with different compensation models were also recorded, as well as trends in the quality of care provided to patients on each model. Key words and themes from the interview questions were highlighted in each interview

and analyzed as a whole theme across each interview question. Themes regarding recruitment and retention factors, as well as quality of care and payment models were analyzed.

Ethical Procedures & Approvals Obtained

An undergraduate ethics application was submitted to Trent University for approval for human participant research on November 21st, 2022. The course on research ethics based on the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2: CORE 2022) was completed prior to submitting the ethics application, and a certification of completion was rewarded and included within the ethics application. Ethical approval was obtained for this research project on December 8th, 2022, prior to any participant recruitment or interviews. Ethics approval was obtained by Trent University and the Forensic Science review board. Ethical approval was also obtained for the consent form, interview script and questions used for each interview that was included within the ethics application. There were no safety concerns for this project as all individual semi-structured interviews were completed virtually. All work for this project was performed remotely, and there were no travel risks. Semi-structured interview questions were designed to be neutral questions to ensure the safety and privacy of all research participants. All research participants, as well as the researcher, were required to sign a consent form prior to the interview. Before the start of each interview participants were reminded of the ethical considerations for this project, what the purpose of the project and data collection was, and how confidentiality would be maintained for the duration of the project until April 4th, 2023. After participants gave verbal consent to the interview being recorded questions began. All semi-structured interview participants had confidentiality maintained at all steps during the research project, to ensure that their safety and privacy were not compromised. No interview names have been included in the final reporting or results of the research project. Each individual participant was given an identification number based on the project identification number, followed by a single digit number, indicating the order in which the interviews were performed (ex. 511301). The interviewed participant's personal information and identification was not disclosed to anyone outside of the research project to help maintain confidentiality. The confidentiality of the research participants identifying information has been kept confidential through the storage of a secure iCloud account that only the researcher has access to. After the final presentation and reporting of this research project, original interview recordings, transcriptions, and personal

identifiers will be deleted from all technological hardware. Chelsea Reid will be responsible for all destruction of personal identifiers after the submission of the final research proposal to her research supervisor and host organization, on April 4th, 2023. No participants withdrew from the research study; therefore, no ethical concerns arose.

Results

Primary Care Provider Work History Themes

Research Participant Identification Number	**Number of Years Worked in Primary Health Care (Current Position/Total)**
511301	3 years with current position.
511302	5 years in total.
511303	20+ total years, with 2 years in current position.
511304	3 years at current position.
511305	13 years at current position.
511306	6 years in total, 3 months at current position.

Table 1: Introductory interview questions regarding research participants' work experience withing primary health care. Some interview participants discussed the total number of years practicing in primary health care, while others discussed the total they have been practicing in their current position.

Within the time frame of this study, six primary care providers consented to interviews and participated within the study. Of those six participants, one individual practices as a nurse practitioner, four practice as primary care physicians, and one is a Chief Executive Officer (CEO). There were no specific themes identified in terms of the number of years worked in primary health care, both in total and at a current position. The interview participants were also asked if they had previous experience practicing in primary health care in rural Ontario prior to their current position. Five out of six of the research participants had previous experience working in primary health care in a rural Ontario community prior to their current position.

Primary Care Provider Schedule Themes

Research Participant Identification Number	Number of Hours Worked Weekly	Number of Patients Treated Weekly
511301	37.5	Approximately 2.
511302	36	Did not discuss.
511303	50	N/A, does not see patients.
511304	40-50	Approximately 15.
511305	40-50	Approximately 30.
511306	Approximately 18 days a month.	Did not discuss.

Table 2: Introductory interview questions regarding research participants schedules. Questions were asked regarding the number of hours each research participant works weekly, and an estimate regarding the number of patients they treat weekly.

No themes were identifiable through the participant's weekly patient schedules. Each participant works in a different type of primary care position, or a combination of positions, which dictates the number of patients they treat weekly. For example, one primary care physician works with patients who have dementia and challenging behaviors, and their position requires them to spend their workday with a fewer number of patients. Another primary care provider has patients rostered to them, as part of the Family Health Organization model, and shares their patients with another physician within the practice. One primary care physician works in multiple primary care positions, in which they provide health care services to entire First Nations Communities, as well having privileges to practice obstetrical surgical skills and practice at a pregnancy clinic. Working in multiple positions with a less traditional schedule made it difficult for that primary care physician to determine the average number of patients they treat monthly.

Factors Influencing Primary Care Provider Recruitment & Retention

Factors Influencing Physician Recruitment	Factors Influencing Physician Retention
Type of practice	Family related reasons
Spousal employment	Quality of life
Opportunity for teaching	Quality of work environment
Training in a region	Financial incentives
Workforce planning	Scope of practice

Quality of life	
Rural origin	
Positive rural exposure during medical school and early postgraduate period	
Financial incentives	

Table 3: Results of the literature review thematic analysis on factors that primary care providers consider when looking for a new position, and factors that are considered for staying in a primary care position long term. All factors influencing physician recruitment and retention were obtained from references 8 and 11 within the cited reference list.

There are some overlapping themes present that influence both physician recruitment and retention that were found within the literature review. These overlapping themes include quality of life, financial incentives, and family related reasons such as spousal employment.

Some of the factors influencing physician recruitment that were found in the literature review were mentioned by interview participants. One participant mentioned that quality of life was important when looking for a new primary care position. Two participants considered the location of the practice an important recruitment factor. The location of the practice was not specifically mentioned within the literature review. Three participants considered financial incentives an important recruitment factor. One participant mentioned that it was important to work in a position that offered a pension, as well as health benefits. Having health benefits was not a factor found to influence physician recruitment within the literature review. One participant said financial incentives were an important recruitment factor due to the substantial amount of debt obtained from medical school. That same participant also stated that some practices may offer financial incentives as a signing bonus on a contract, to have physicians practice for a certain amount of time. Two participants mentioned that the type of community the primary care practice serves as an important recruitment factor. This factor was also mentioned within the literature as being important for physician recruitment [11]. The quality of the relationship between physician and allied health centres was mentioned by one research participant. One participant mentioned it was important that allied health centres and physician practices have strong relationships, which was also a factor mentioned within the literature [11]. A greater workforce support and community integration were mentioned within the literature as being an important recruitment factor for some physicians [11]. Extrinsic factors such as the value one can

offer to an employer was mentioned by one research participant and was mentioned within the literature [11]. The type of practice was mentioned by four participants. One participant mentioned it was important that the practice and position was in primary care and be publicly funded. Two participants mentioned that the type of practice should be full scope and well rounded, while one said it was important that the position is a combination position, so that they are able to practice family medicine and emergency room care. This is consistent with what was mentioned in the literature, as it stated that many primary care physicians consider a position that is large in scope, which can increase the diversity and complexity of cases, and create a patient-centred practice that promotes teamwork [8]. Three out of six research participants mentioned that the types of patients within a community were an important recruitment factor. One participant specifically wanted to practice medicine in Indigenous communities, and only considered positions that had a large Indigenous population. The type of patients that reside within a community was not a factor found to be an important recruitment factor within the literature review. Spousal employment was another recruitment factor mentioned by a research participant, as their partner was also in the field of medicine, and it was important that they could also find meaningful employment. An important recruitment factor highlighted by one research participant was the rural residency placement, and how that placement allows an individual to explore different locations and gain new experiences during residency. This factor was also mentioned extensively within the literature, as individuals who have a rural background before medical school or obtained experience working in a rural practice during medical school were more likely to want to practice medicine in rural communities upon graduation [12]. Lastly, one recruitment factor that a research participant found to be very influential was listening to primary care physician podcasts. One participant said listening to family medicine podcasts and hearing of other primary care physician's experiences and excitement influenced their decision to practice in rural Ontario.

Similar factors that influence physician retention within the literature review were considered by research participants. Extrinsic factors such as feeling valued by an employer were considered by one participant. Two participants considered having a strong, supportive health care community and physician group as an important factor for retention. This was also found within the literature review under the quality of work environment [8]. Having a flexible schedule was also mentioned by one participant. The vibrancy, or scope of practice, was

considered to be an important retention factor for one research participant, and this factor was also highlighted within the literature [11]. Having a broad scope of medicine allows for greater opportunities to learn and teach, which some considered important for retention [11]. Financial incentives were highlighted by two research participants, who mentioned that having a simple pay structure was important. The literature review found that financial incentives may play a role in retention but may be context specific and not important to all physicians [11]. This is similar to the results of this project, which found that only two participants highlighted financial incentives as an important factor for retention. Lastly, another important retention factor considered by two research participants and within the literature is the supportiveness of the physician community. Having a supportive and accessible physician community, and rural community, is influential in deciding how long individuals will practice [11].

The literature review regarding factors influencing physician recruitment and retention can also be applied more generally to primary care providers, as two of the research participants in this study were not physicians and highlighted some of the themes in Table 3. For example, one participant is a nurse practitioner, but highlighted that quality of life, and financial incentives such as having a pension and health care benefits are important recruitment factors, while another participant is a CEO and considered the type of position and location of the position to be important recruitment factors.

Primary Care Provider Payment Model Themes

Two of the individuals who participated in this study are paid on a salary model, two are paid on a capitation model, and two are paid on a per diem model, as well as a blended model. The per diem payment model offers a fixed amount per day regardless of care provided or costs incurred [16]. Remuneration is based on a pre-set fee schedule [16]. The per diem model may allow for some shadow billing compensation through an FFS billing [16]. Primary care physicians may also be paid on more than one type of remuneration model, depending on the type of practice or position. For example, one participant is paid on a per diem model with an FFS shadow billing when practicing in rural Ontario, and when practicing in an addiction's clinic is paid on a blended model of a stipend and FFS. Another participant is paid on a per diem model with an FFS shadow billing.

When asked if the quality of care provided to a patient is different based on the primary care providers payment model, all six research participants agreed that there are differences in the quality of care that may be provided. There were two themes that arose when interview participants elaborated on this question. One theme was that the time each payment model allows a primary care provider to spend with a patient can dictate the amount of care they can provide. The more time a primary care provider can spend with a patient, a more comprehensive and better quality of care can be provided. One research participant who is paid on a salary model stated in their interview:

> "I have the luxury of time to spend with my patient and that is something that is important to me. I found over my career that the outcomes and information gathered when I can take the time to learn it and use it, I believe it has better outcomes for the patient. I think personally for me I think I do provide better care on a salary model because I don't feel like I am rushing through an appointment."

Another research participant stated, "when you are paid on an FFS model volume is the driver of your income." Primary care providers who are paid on an FFS have a larger incentive to increase their patient volume and work longer hours because it increases the amount of money they can make. One research participant stated, "if I know my roster is larger and I work longer days I am going to make more money." Increasing patient volume may decrease the amount of time a primary care provider can spend with each patient, and therefore decrease the amount of care, or health care concerns they are able to address in a single appointment. One individual who is paid on a blended model, where one position they are paid on a per diem model, and another position they are paid FFS, said:

> "For example, at the hospital here in Peterborough I definitely have on my mind more than I'd like to, more than is even comfortable for me, the dollar amount I am making in a given encounter. And I'd like to be someone who doesn't think about that, but I think it's, you know when you're the one submitting your billing at the end of the day and looking exactly what caused it can be easy to be frustrated by some of the billing codes. Especially in medicine the billing codes often over represent what is expected of us and that's a whole other issue. But for example, for a hospital inpatient who you're rounding on for a given day and you know especially after the first couple days next to the amount you're paid for, seeing that patient and being their most responsible person, it is really

quite small and some of these patients have very complex issues. It requires speaking to many family members especially included when the family members couldn't come in possibly yet to make special phone calls, it includes collaborating with physicians and some colleagues of mine in the hospital and maybe sometimes even myself which is a mix of having too many patients on our list, which is a separate issue. There's just literally not enough time but also that the building codes at work in the time that's needed to address all these issues and what happens is only the most you know life threatening issues are perhaps addressed or the major issue there in the hospital for, but there's all these other issues that could be addressed that it would be a good opportunity to address but because of time constraints and billing constraints those things aren't addressed. And you know back in the day you would say, 'oh that's just for their family doctor to figure out.' Like we are just you know do this acute medicine in the hospital and will distribute them to their family doctor who will manage all these little things that came up that aren't like urgent. But now with our lack of family medicine in Peterborough so many of our patients don't have a family doctor. So, if you're not sort of jumping on the opportunity to work up these small things or manage these small things, maybe not small things but non acute things, if you're not doing that it's like no one is. And so I do think part of the billable model forces physicians to focus on you know the most acute thing and not provide as like complex comprehensive care to the patients, and for me that's very at odds with how I like to practice medicine and it is giving me more internal turmoil or distress when I'm working within those billable models because the way that they are compensated don't reflect my values as a family doctor. Versus when I work up north and I know I'm being paid a daily rate and I can spend as much time with patients as I need of course, being wary of who's in my waiting room but I feel much more satisfied with my work that I'm able to do."

One research participant stated that while being paid on a per diem model:

"You are able to forget about the exact time you're meant to spend with the patient based on certain billing codes, you are able to forget about the fact that you spent an hour with someone but technically you can only bill for 15 minutes. I do feel that when you're working outside of an FFS model your focus can be more purely on the patient in front of

you and the needs of the patient at the time whether that be that they only need a short visit or whether that be that the need a more extensive visit."

The second theme that arose when research participants were speaking about why there are differences in the quality of care provided to patients based on a primary care providers payment model was patient complexity. Many marginalized individuals face barriers when trying to access health care resources, and some individuals may not have any access to health care resources [17]. These barriers contribute to marginalized individuals neglecting their health care, and negatively influence how frequently they may access health care resources [17]. Extended periods of time can pass before marginalized individuals are seen by a primary care physician, and their health care issues can become quite complex without proper diagnosis, access to care, and treatment [17]. Marginalized individuals with complex health care issues may not be able to address all their concerns within one appointment. This relates back to the first theme, where time spent with a patient can influence the quality of care provided. Primary care providers paid on a salary model may have more time to spend with a complex patient, and address more of their health concerns, whereas a physician paid on an FFS model may not be willing to spend more time than what is billable to address a complex patients health care concern. One research participant stated, "when I see people, they have like 5 plus issues that they want to deal with, and I think I would just see them and address those issues when they are there. But there is not a good way to be enumerated for dealing with all of those things at once and for dealing with the complexity of an FFS model." Another research participant stated, "I understand that the billable (FFS) has to cover the expenses so there is that pressure there." These quotes express that despite the complex health care needs of marginalized individuals, primary care providers paid on an FFS model may not be willing to spend extra time with marginalized patients who cannot address all their health care concerns in one timed appointment. This affects their quality of care, if it takes a primary care provider paid on an FFS model multiple appointments to address an individual's health care concerns. However if a primary care provider paid on a salary or capitation model is more able to spend more time with the patient to address their concerns and increase the quality of care provided to these individuals in a single appointment. In regard to the complexity of marginalized individuals and the quality of care a primary care provider can provide based on their payment model, another research participant stated:

> “especially when you’re working in rural or remote locations such as in a remote First Nations community, there are patients that don’t have access to a physician for a long time and that day that they're seeing a physician may be the only time they go see a physician potentially in years, and with high comorbidity rates in that area too people have many issues that need to be addressed and you are unable to say ‘oh just book back with me in two weeks because there's no doctor there in two weeks. And so, it really requires you to give space to that patient and to spend the time to address all their different issues as best as you can which really wouldn't work well with the billable model, and I think that's why specifically in that area it's been understood that billable models wouldn't function well for that that patient population.”

Another factor a research participant addressed in relation to the quality of care provided to patients based on the primary care providers payment model is the “no show” rate. The research participant stated:

> “The “no show” rate can be challenging in those populations and communities than maybe it would be in more urban centres. And the reason is multi fold- there is a lack of childcare in those areas, there is lower in general socioeconomic status that affects people's ability to make appointments and schedules for a variety of reasons, but also people sometimes have traveled outside of the community to go to an appointment elsewhere or to escort their child to their dentist appointment and they are out of town, and they’re booked. So, there's so many complicating factors that lead to this “no show” problem and for people who are working on a purely billable model “no shows” can be really challenging and can lead to frustration.”

This “no show” issue adds to the complexity of marginalized patients, and patients living in rural and remote areas. These issues that complex or marginalized patients face affect their health, and overall quality of care if primary care providers paid on an FFS model are not as patient or willing to spend extra time with individuals who have complex health care concerns.

When research participants were asked if a primary care provide may treat different types of patients based on the primary care providers payment model, two out of six participants agreed. The two participants that agreed both had similar opinions, in that primary care providers paid on an FFS model are less likely to take on marginalized patients. One research participant stated:

> "Billable versus salary models, there's more pressure on the billable, they have to see a certain number of patients in a day to make whatever they're income is, pay the bills, all of those things. So, the types of patients that they are willing to accept into their practice, they can be pickier, and they are, so the marginalized population often I have witnessed, are often not accepted or sustained in a billable model practice."

The other research participant who agreed there are different types of patients treated based on the primary care providers payment model said:

> "Salary is intended to allow physicians to work with a more complex patient because the time spent with the patient is less relevant. In the FFS model your income, your compensation, is going to go up the more patients you see in a day. So, to take on, I'm not saying all physicians, certainly most physicians don't make this part of their selection criteria, but in an FFS model you're going to make more money seeing people who don't need a lot of your time, 10 to 15 minutes as opposed to individuals who might need 45 minutes of your time. Whereas the salary model it doesn't make a difference so you can provide the time that's necessary in your bind to care for the patient."

Of the research participants that disagreed that the primary care providers payment model does not affect the types of patients treated, each had different opinions as to why the types of patients treated are not different because of the primary care providers payment model. One individual stated:

> "the patients I have that are on fee-for-service are because they are accessing outside use and traditionally that has been people that are at a methanol clinic, so sometimes that ends up being people with substance use disorders that are being treated elsewhere, you might not roster them and just do a fee-for-service model, but the care I provide is no different, and the access to the services as part of the Family Health Team are no different."

Another research participant stated, "personally I don't think about nickeling or diming a single patient, when it comes to the quality of care you provide. I try to go out of my way to provide the best care I can in the current system we are in. And that doesn't really matter to me the type of patient that is." Another patient related the patient types to geographic reasons. In remote regions of Ontario, the individuals living within the community may not have access to more than one primary care provider, which my provide a limitation to both patients and providers. It may limit

how many providers patients can see, and may limit the providers' ability to serve a broader range of patients. This research participant stated:

> "In the region where I am the patients are the patients. So that's a big difference between the Sioux Lookout region and a lot of smaller rural or remote places, whereby you move to a town of 1,200 people, you are not going to be like, 'you are only going to roster x of people or type of people.' You are the doctor, you see the people, and it's the same with the first nation community I serve. I am a doctor for them and everyone in that reserve is my patient. In Sioux Lookout there is one primary care clinic that serves the town and surrounding, and there is one clinic, and they see all the people. I don't think that in terms of rurality (in terms of rurality index), it might make a difference, but in a smaller place where the people you see are the people you see, you can't pick and choose. So, I don't think it makes a difference in the type of people you see. And I do think it makes a difference in the terms of quality of care you can provide to those people and make a living doing it."

Primary Care Provider Difficulty Working with Marginalized Patients

When research participants were asked if it is difficult working with marginalized patients, four out of six participants agreed. One theme that arose from the individuals who agreed that it was difficult working with marginalized patients related to patient complexity. The needs of marginalized individuals extend past having access to a primary care provider. There are other factors such as access to transportation, contacting individuals who do not have phones, and needing childcare to make an appointment that complicate the care of marginalized patients. Due to the complex health care concerns marginalized individuals may have, who often do not see a primary care provider for extended period of time, their visits with primary care physicians can often be extended to cover all their health concerns. One research participant stated in relation to the difficult of working with marginalized patients:

> "I mean it takes more time, and people are more complex. If you are treating people with substance abuse issues that are also marginalized, there are some codes in the schedule of benefits that can pay you more for doing that, and some time-based codes. If it is just working with people who are marginalized and don't have great access to care and have a lot of complexity, there's nothing in there to renumerate people for that. It is difficult, and

it does take more time. And it wouldn't even be that difficult if they could make it to my clinic, but to make it to my clinic, I'm not downtown, you have to take a bus or a cab, you have to pay for parking, you have to get to your appointment on time. So, some patients do make it to my clinic, and I do offer some flexibility in terms of when I can see them, and some people can just walk in, and others have to book an appointment. So, I try to accommodate but I couldn't do that to my whole roster if they are all marginalized folks. It works because I might have a couple walks ins in a day, and I can accommodate that."

Another research participant also stated:

"There are definitely challenges. Part of it can be related to the fact that I have a large number of individuals who simply don't come to their appointments. And this is a pretty well-known phenomenon in a marginalized community, that there is a lot of missed appointments and no-show appointments. Generally, I have a rule in my practice that if you no show more than 3 times in a year I will do a final warning and that's bad because I can't have all these empty slots when I have people that really want to come see me and will come. Am I as strict with that with people who don't have a phone? I don't enforce that rune with high marginalized patients because I understand that there are huge barriers."

Another individual who said that it was difficult working with marginalized patients stated:

"I have in the past and occasionally I do now even with my senior population think it is difficult because we have a medical model mindset we like to identify and solve things and that's not always the patients' goals or wishes, so sometimes it's difficult to fully ascertain what they want from your interactions and the care you're offering. And then sometimes I find you have to find and layout what you could offer them and allow them the time and space to respond and except out of that. It is definitely more stressful, more time consuming and definitely more resource heavy in that sometimes I need to reach out to external agencies to understand their situation and navigate support for them."

Of the research participants who disagreed that working with marginalized individuals is difficult, they both had similar opinions, in that working with marginalized individuals is

challenging, rather than difficult, and that the challenge can be rewarding. One research participant stated:

> "no, I find that sometimes the most rewarding aspect of my job. Up north people that would be considered marginalized are probably 90% of the work that I do and at the addiction's clinic. So, I think providing care to people without health cards in the billable model is very frustrating. Thankfully again at the RAAM clinic with our extra stipend and everything it balances out a little bit for the people without health cards but definitely still when you're doing your own billing at the end of the day and you're aware that you've spent you know an hour with the patient and you're not able to capture that, it still leads to this just a little bit of frustration. Up north when I am paid on a per diem I don't even have any idea of people with health cards or not, it doesn't matter to me whatsoever which is good. And for whether people have family doctors or not it's certainly a challenge. At the hospital it is a huge challenge for patients who don't have family doctors to be able to discharge patients from the hospital knowing they don't have a medical home but it's one of the most biggest challenges right now of our time and certainly the same at the addictions clinic because many of our patients don't have family doctors for various reasons, they're really some of the most marginalized people in the community. And it can be a challenge because we really only have the capacity to focus on addictions at the clinic, but people have so many other issues and it can be hard to not have a medical home address. And those patients have very few options or any options to get those addresses switched which is an ongoing challenge." Another individual who disagreed that working with marginalized patients is difficult stated, "yes it is very challenging. Difficult is an interesting word, the word difficult has some resonance in a kind of negative connotation. In family medicine, there is a concept of the difficult patient, and people being difficult. And so, I would say it is challenging for various reasons. But it's rewarding for being challenging, that's kind of why I decided to do it, is because of the challenge both in medicine and to myself of practicing in a way that is ethically suitable to how I wanted to practice medicine."

Discussion

The Haliburton, Kawartha, and Pine Ridge Region, specifically the City of Peterborough and County of Peterborough, does not have adequate health care resources to support the community. Approximately 10,000 individuals living within the Peterborough community are unattached to primary health care and a primary health care provider [4]. This number primarily consists of marginalized individuals, such as the senior population, cultural minorities, the LGBTQ+ community, persons with mental health illness and mental health challenges, and the homeless [4]. It is well known that the city of Peterborough is facing a state of emergency in terms of the number of individuals that are homeless and living in Peterborough. As of 2022 there is on average approximately 300 individuals experiencing homelessness in the city of Peterborough and Peterborough County ever month [18]. The reasons for this state of homeless are multifactorial and continue to impact the health and overall quality of life of these individuals. There are many personal and structural barriers that prevent marginalized individuals from accessing health care resources, and marginalized individuals who can access these resources often don't receive equal treatment [19]. Many marginalized individuals do not have access to a primary care provider, or are unregistered with a primary care provider, and must go to the hospital emergency department for any and every health issue [19]. The Peterborough Ontario Health Team has the 4th highest level of marginalization of 42 Ontario Health Teams [4]. This data clearly indicates that there needs to be an increase in the primary health care resources offered to the city and county of Peterborough. A CHC would benefit the entire community, and specifically marginalized individuals. A CHC could help reduce the number of marginalized individuals accessing hospital resources for services that could be provided by a primary care provider. A CHC could also increase primary care connections to the community, and close gaps in services that are desperately needed by marginalized individuals within the community. A CHC in Peterborough should consider the health care needs of the marginalized individuals when designing its services and hiring health care professionals. Offering specific times or days individuals could make drop-in appointments, rather than specifically booking them could be a benefit to the marginalized individuals within the Peterborough community, who may have difficulties committing to an appointment time for a variety of reasons. Marginalized individuals may face challenges in getting access to transportation or childcare or may not have a cellphone or means of communication to make

appointments or follow up with a primary care provider or specialist. Offering counselling and mental health resources could also be a beneficial service.

Recruitment & Retention Factors

The results of this research suggest that there are recruitment and retention methods that could be considered by the HSJCC when hiring primary care providers, and physicians to practice at a CHC. One research participant stated that, "Peterborough has done a particularly poor job of trying to retain and recruit. I have spoken to several of the residents currently training at the Kawartha resident site that are family medicine specialization in town, and none of them plan on staying here long term." This indicates that there are currently not enough incentives, or not enticing enough incentives for physicians to stay in Peterborough. This research participant also highlighted that other health organizations are willing to offer financial incentives to new graduates and physicians. The research participant stated, "one of the reasons my current student highlighted was that her colleagues she knows from medical school are being offered large sums of cash to entice and recruit, and I think sadly this is where we have gotten to. There is such demand and need everywhere that you have to sweeten the pot. In BC there is more incentive to work in under-deserved communities, and that doesn't happen in Ontario. I don't know what the answer to this problem is right now, and I think that there will be a mass exit of primary care providers in the next year, because they are eligible to retire, and there is no one available to take their spot, or there is no one coming to." The HSJCC could consider offering financial incentives to new graduates or relocating physicians, as this recruitment method seems to be popular in many provinces [20]. At least five provinces have announced retention bonuses of tens of thousands, or other recruitment perks to keep or attract doctors and nurses [20]. However, some researchers and recruiters say that one-time financial incentives are not enough to keep primary health care practices [20]. Some provinces and territories also use a return-of-service agreement or grant, offered to new graduates or internationally trained physicians to help offset some of their training or other costs [20]. This is consistent with what was found in this study, as one research participant stated that the financial incentive they received as a signing bonus was beneficial to help pay off their medical school debt.

Focusing on recruiting physicians and other primary care providers that have experience working in a CHC could also be beneficial, as they may prefer this type of work and see the

benefit of this type of primary health care work. Physicians working in CHCs report tremendous satisfaction from care for marginalized individuals and the underserved [21].

This research also suggests that having a strong, supportive health care community is important for both recruiting and retaining physicians. Enforcing the idea that a CHC encourages collaborations and teamwork could appeal to individuals who consider having a supportive health care community an important retention or recruitment factor.

The results of this project also suggest that considering the family unit, rather than the physician or primary care provider alone, may be beneficial to help recruit and retain primary care providers. Often primary care providers must think about their family when looking for a new position, and if there will be work for their partner, and good quality education for their children [8]. One important long term retention method that must be considered when attracting primary care providers, physicians, and specialists to practice at a CHC is the quality of life. Quality of life is an important retention method because it can dictate how long an individual is willing to stay and practice in a community [8]. Every primary care provider has a life outside of their practice and must consider how the community and location of the practice will influence the quality of their life. One research participant stated, "a lot of rural communities really sell themselves in terms of access to outdoors. Sioux Lookout in particular has a housing opportunity that's on a road called Government Road that is all about 10 detached rural houses, and the physician incorporated owns it and rents it exclusively to doctors. And it has a huge green big, shared backyard, and is own a lake. And it's a really nice community, and the physician community takes it upon themselves to really be active and to do lots of events." Having access to housing and outdoor amenities can influence the quality of a primary care provider's life and influence their decision to stay in a position long term. Other studies have also reported that quality of life can be an important factor for primary care provider and physician recruitment [8].

Quality of Care Provided to Patients Based on Primary Care Provider Payment Model

The results of this research suggest there is a difference in the quality of care provided to a patient based on the primary care providers payment model. A common theme was found across many of the research participants answers to this question, in that the FFS payment model may be related to less comprehensive care. Primary care providers and physicians that are paid on an FFS model may spend less time with their patients because they can only bill for a certain

amount of time spend with the patient. Spending less time with a patient may only allow the patient to address their most serious health care concerns, or the most acute concerns, and not provide the primary care provider with a full scope of their health care concerns. This was mentioned specifically by one research participant who is paid via FFS for one of their positions. They stated that the FFS model forces physicians to focus on the most pertinent health care concern(s). It may take a primary care provider who is paid on an FFS payment model multiple appointments to address all of the concerns that a primary care provider who is paid on a salary model can in a single appointment. These results are supported by the literature. With primary care providers and physicians that are paid via FFS, their income increases with the volume of the services they provide [15]. The ability of these primary care providers and physicians to influence patients' demand for their services might lead toward an "overtreatment" or the production and use of more physician services that can be justified strictly by the expected health benefits [15]. Overtreatment tends to raise total spending on physician services, but it does not produce better health outcomes [15].

The results of this project suggest that primary care providers who are compensated on a salary model are able to spend more time with each patient and offer more comprehensive care. There is no direct evidence that suggests that a salary model provides patients with a better quality of care. The literature suggests that a salary model may not provide better quality of care to patients in comparison to an FFS or capitation model. A salary model does not provide extra incentives or bonuses in comparison to other models, and there is no motive to bring on new patients [22]. Despite this uncertainty in the literature, one research participant was able to speak to the popularity of the salary model. The research participant stated, "my understanding is that for the first time more than 50% of new grads going into family medicine would prefer a salaried model. I think they want predictability. I think they're young, they want to have families, they want to know that they're working Monday to Friday or what their schedule is. The benefits of salary, the paid vacation, these things are more appealing." Young physicians prefer the salary model due to the stability it offers, which may be a benefit when recruiting primary care providers and physicians to work at a CHC, where the compensation model is a salary model.

It must also be taken into consideration that primary care providers may be paid on a payment model, in which some of their payment may be through an FFS model. This result was unexpected, as there was little information about the frequency of blended payment models in

primary health care. Blended payment models may include a blended capitation model or a blended salary model. A primary care provider or physician being compensated on a blended capitation model receives the majority of their income through capitation fees and may receive some compensation through FFS [23]. A primary care provider or physician being compensated on a blended salary model receives the majority of their income through a salary and may receive some compensation through FFS [23]. There is little information in the literature to suggest whether blended payment models affect the quality of care provided to a patient, and if blended payment models may be more appropriate compensation models. A blended payment model may be a more appropriate way to compensate primary care providers and physicians in rural and remote locations, where the patient inflow may be unpredictable, and the services provided to some patients may be difficult to compensate through one specific compensation model. A blended payment model may provide more stability to primary care providers in rural and remote communities, but more research would need to be done to provide evidence of this.

This research does not provide clear evidence to suggest that one payment model provides better quality of care over another, only that are differences in the quality of care provided to patients. Differences in the quality of care provided to a patient based on the primary care providers' payment model can be attributed to factors such as time spent with a patient, patient load, and patient complexity.

Differences in Types of Patients Based on Primary Care Provider Payment Model

The results of this research suggest that there are no differences in the types of patients treated based on a primary care providers payment model. The differences in the types of patients treated was attributed to factors such as geographic location. Primary care providers and physicians who provide care to rural and remote communities may only be supplying services to a smaller population of individuals, in comparison to the population density of more urban communities. One research participant stated that because they are the only physician providing care to a First Nation community of 200 individuals, they cannot select which patients receive treatment. They are responsible for providing care to all patients, and do not have a patient selection criterion. Southern Ontario also has slightly better geographic accessibility to primary care providers than the provincial average [24]. The primary care provider distribution is also unequal across the urban-rural continuum, with the lowest accessibility in rural and small

populations [24]. There is also a mismatch between the distribution of primary care providers and high proportions of seniors, and many seniors have to travel long distances to access the desired health care resources [24]. These factors may contribute to the overall health of an urban and rural population. If urban populations have greater access to health care resources, individuals living in these areas may access them more frequently, and thus have a better quality of health. In comparison, rural and remote communities that do not have easy access to health care resources or a primary care provider may not receive appropriate health care treatment and may have a lower quality of health. These factors may contribute to the differences in the types of patients in different geographic locations, and the types of patient's primary care providers may treat. The differences in the types of patients may be attributed to the patient's access to health care resources, and the frequency of health care resource, rather than a primary care providers payment model.

The literature suggests that primary care providers and physicians that are paid via FFS may have a tendency to be more readily available in major urban centres than in less populated areas, such as rural and remote communities [15]. This can also contribute to an uneven distribution of primary care providers and physicians, if more physicians prefer an FFS model. The geographic distribution problem reflects the fact that doctors who are paid by FFS and are able to influence the average amount of services they supply each patient do not have a strong incentive to relocate to places where there is a shortage of primary care providers or doctors, or where the patient population may be less dense [15]. Primary care providers working in rural areas may be more likely to select a form of a capitation model, in comparison to primary care providers practicing in urban area [25]. The literature was unclear whether primary care providers that are compensated via salary are more likely to practice in rural or urban locations.

Difficulty Working with Marginalized Patients

The results suggest that primary care providers believe that it can be difficult working with marginalized patients. Research participants attributed the challenges to working with marginalized patients due to the challenges they face accessing health care resources. Low attendance levels in medical appointments can occur due to limited access to transportation. Many health care services are located in inaccessible locations for marginalized individuals, who have to rely on public transportation to make it to their appointments on time. Having a CHC

located closer to downtown would make health care resources more accessible for marginalized individuals and could help lower the no-show rate of patients. Contacting individuals who do not have access to a cellphone for follow-up appointments was another factor mentioned by research participants that attributed to the difficulty of working with marginalized patients. Many times, primary care providers and their office will communicate with patients via phone to schedule follow-up appointments, and to refill prescription medications. It can be difficult to ensure marginalized individuals receive adequate follow-up care if primary care providers are unable to communicate with them outside of their scheduled appointments. Patient behaviour has also been linked to low attendance levels in medical appointments [26]. It can be frustrating for primary care providers when patients do not attend scheduled appointments. If patients do not attend appointments for primary care providers who are compensated on an FFS model, they will lose money. In compensation models such as a salary and capitation model, those frustrations may be less, but are still present, because time is wasted preparing to treat patients that do not attend appointments.

Some research participants do not find working with marginalized patients difficult, but rather challenging. The difference between the two may be attributed to having a positive opinion about working with marginalized patients. Research participants that stated working with marginalized patients is challenging used that terminology to explain the rewards of working with marginalized patients. Providing care to marginalized patients may be challenging for some primary care providers, but it is a challenge that is rewarded, and may be welcomed, by some. Some primary care providers embrace the challenge as part of medicine, as was stated by one research participant. It was difficult to find information in the literature that supported either argument, that working with marginalized patients is difficult or challenging. This could be due to primary care providers not wanting to speak about the negative aspects of working with marginalized patients. There was literature regarding the no-show rate of marginalized individuals, and that it may be higher among marginalized populations, and having easy access to health care resources may impact the no-show rate and frequency of health care appointments [26].

Limitations

There are some limitations to this research project. Due to the timeframe of this project, there was a limited sample size. Only six primary health care providers consented to participating in this research project. Future studies should consider expanding the sample size and consider looking at primary care providers with experience in rural or remote Ontario communities, or Ontario communities that have a high number of marginalized individuals within the community, that have a similar demographic to the city and county of Peterborough. Interviewing more primary care providers that have experience working at a CHC could also be beneficial to future research projects, to better understand why the salary model is ideal for primary care providers who practice at a CHC. Only one primary care provider that participated in this study had previous work experience at a CHC. Future projects should also consider interviewing more primary care providers that work directly in Peterborough to get their perspective on working with and providing care to marginalized patients and how their payment model may influence the quality of care provided.

Another limitation to this study is that none of the primary care providers that participated in this research project were paid on a strict FFS payment model. Only two of the research participants have experience with the FFS model, and it is through one of their multiple primary care positions, or it was through shadow billing on the per diem payment model. All research participants spoke of the FFS model when asked about differences in the quality of care provided to a patient based on the primary care providers payment model. The predominant method of reimbursement for physicians' clinical activity in Canada involves FFS [27]. Interviewing some primary care physicians who are paid directly on an FFS model, or have experience with an FFS model, may provide more insights into why primary care providers believe that there are differences in the quality of care provided to patients under the FFS model.

One limitation to including nurse practitioners in this study is that they only have experience with the salary payment model. If more nurse practitioners are interviewed than primary care physicians in future research, it could potentially limit the scope of the research. Nurse practitioners are paid on a salary model and will not have personal experiences being paid on any other payment model. They may only be able to speak to the differences in quality of care provided to a patient due to personal anecdotes and speaking to colleagues. Future studies should focus on interviewing primary care physicians, or primary care providers who may have more

experience with more than one payment model, to get a more diverse sample of individuals with different payment models.

Conclusion

This research project was able to highlight the significance and use of some recruitment and retention methods used in primary health care, including financial incentives, scope and vibrancy of practice, quality of life, and family factors. Each of these recruitment and retention methods should be considered when looking to not only recruit new primary care providers and physicians to a practice, such as a CHC, but also for retaining primary care providers and physicians. It is important that primary care providers are enticed to practice in the HKPR region, and at a CHC in Peterborough, but that they stay motivated to practice in the area long term. The idea of a CHC should also reinforce the idea of a strong, supportive health care community, and the connections it could have to other health care providers in Peterborough, such as the Peterborough Family Health Team and Peterborough Region Health Centre.

It is also important to consider primary care provider compensation. A CHC in Peterborough would be a fast, pace, high volume health care resource, that would require primary care providers physicians to dedicate their time and efforts to providing health care knowledge and resources to the community. It is important that they are compensated for their work, time, and dedication, as all primary health care providers should. CHCs traditionally compensate their primary health care providers through a salary model, but the HSJCC could consider offering other financial renumerations where possible. Offering a blended model or signing bonuses could be investigated, if appropriate.

When gaining funding for a CHC, focus should also be given for other medical staff and personnel that are required. Hiring physicians, nurse practitioners, nurses, receptionists, specialists in fields such as mental health or addictions, and counselors should also be recognized. All these health care professions will contribute to the success of a CHC, no matter their involvement. A CHC is a team effort, that requires addition health care professions to operate and provide access to well-rounded health care resources that will service the needs of the marginalized individuals within the City and County of Peterborough. A CHC would be a substantial benefit to the entire HKPR region, as it would allow an increase in health care resources to be provided, and a wide range of new health care positions to be available.

Future research projects should consider interviewing recent primary health care and physician graduates. Interviewing recent graduates for their opinions on what they are looking for in terms of recruitment to a health care position, and factors they would consider for retention could be different from primary care providers with years of experience. Interviewing recent graduates could also offer new insights into what they consider important or beneficial in a payment model, and if it influences their decision to practice. Future projects could also consider speaking directly to other CHCs that have a similar patient demographic as Peterborough. Ten CHCs were contacted during the course of this project, however none responded to the general inquiry email sent. Having the opinion of primary care providers who have work experience at a CHC could be beneficial to understanding renumeration models, as well the difficulties and challenges associated with caring for marginalized patients. Future projects could consider highlighting the option of practicing at a CHC for a rural residency placement in medical school programs. For example, the Family and Community Medicine program at the University of Toronto offers placements in communities such as Barrie, Collingwood, Kawartha Lakes, Midland, New Tecumseth, Orangeville, and Orillia. If a CHC were to be functional in Peterborough, introducing this rural placement in a Family and Community Medicine Program such as the one at the University of Toronto could increase the exposure of the CHC health care model. The School of Queen's Medicine may also be a beneficial program to suggest this to, however Kingston does have its own CHC that medical students and graduates could practice at. Allowing medical school students and recent graduates to have exposure to this form of non-traditional health care could influence their later decisions on where to practice in health care. IT could also highlight the important health care services that are provided at a CHC, and why the CHC model is important for communities with a high number of marginalized individuals within the community.

To conclude, the impact a CHC would have to the HKPR region, specifically to the City of Peterborough and County of Peterborough would be greatly beneficial. It would allow more marginalized individuals, as well as non-marginalized individuals, to have access to more primary care providers, such as family doctors and nurse practitioners, which would ultimately increase the amount of primary care resources offered to the community. Peterborough is in need of greater access to health care resources. Not only is the marginalized population of the community struggling, but there are many individuals without connections to primary health care

that are looking for some. Having more health care resources would allow the current primary care providers practicing in Peterborough to lighten their patient load or feel less overwhelmed with their current patient load. Every individual deserves to have access to appropriate health care resources, despite their status. Understanding the factors that influence primary care providers' choices to practice and stay at various practices and geographical reasons is important, so that the HSJCC could implement those methods to attract primary care providers to the HKRP region. All physicians should be compensated for the services they provide, and more research needs to be done to better understand how the different compensation models affect the quality of care provided to patients. There needs to be a balance between the quality of care provided to patients and primary care provider compensation, because neither should feel neglected for the services they are provided or accessing.

References

1. Human Services & Justice Coordinating Committee. Haliburton-Kawartha Lakes-Pine Ridge regional HSJCC. 2021. https://hsjcc.on.ca/haliburton-kawartha-lakes-pine-ridge-regional-hsjcc/. Accessed on 16 Mar 2023.
2. Human Services & Justice Coordinating Committee. Project 5113: Community health centre approach in HKPR. Community-based research project proposal form. Sept 2022.
3. Ministry of Health and Long-Term Care. Community health centers. VFM. 2017. 3.03. p. 1-44.
4. Peterborough Ontario Health Team. Community health centre proposal. May 2022.
5. Ministry of Health and Long-Term Care. Community health centers. 2019. https://www.health.gov.on.ca/en/common/system/services/chc/. Accessed on 16 Mar 2023.
6. Madden EF, Kalishman S, Zurawski A, O'Sullivan P, Arora S, Komaromy M. Strategies used by interprofessional teams to counter healthcare marginalization and engage complex patients. Qual Health Res. 2020;30(7):1058-71. doi: 10.1177/104973230909100.
7. Bhuiya AR, Scallan E, Alam S, Sgarma K, Wilson MG. Rapid synthesis identifying the features and impacts of community health centers. McMaster Health Forum. 2020;1-46.
8. Levesque M, Hatcher S, Savard D, Kamyap RV, Jean P, Larouche C. Physician perceptions of recruitment and retention factors in an area with a regional medical campus. Can Med Educ J. 2018;9(1):74-83.
9. Canadian Medical Association. Quick facts of Canada's physicians. 2022. https://www.cma.ca/quick-facts-canadas-physicians. Accessed on 16 Mar 2023.
10. Jaret P. Attracting the next generation of physicians to rural medicine. AAMC News. 2020 Feb 3.
11. Kumar S, Clancy B. retention of physicians and surgeons in rural areas- What works? J Public Health. 2020;43(4):689-700.
12. Asghari S, Kirkland MC, Blackmore J, Boyd SE, Farrell A, Rourke J, et al. A systematic review of reviews: Recruitment and retention of rural family physicians. Can J Rural Med. 2019;25(1):20-30. doi: 10.4103/CJRM.CJRM_4_19.

13. Quinn AE, Trachtenberg AJ, McBrien KA, Ogundeji Y, Souri S, Manns E, et al. Impact of payment model on the behaviour of specialist physicians: A systematic review. Health Pol. 2020;124(4):345-58.
14. Souri S. A comparison between alternative primary care physician payment models: A systematic review and policy analysis. University of Calgary. 2020. https://prism.ucalgary.ca/bitstream/handle/1880/112587/ucalgary_2020_souri_sepideh.pdf?sequence=2&isAllowed=y. Accessed on 22 Oct 2022.
15. Blomqvist A, Wyonch R. Health teams and primary care reform in Ontario: Staying the course. C.D. Howe Institute. 2019.
16. World Health Organization. Price setting and price regulation in health care. https://extranet.who.int/kobe_centre/sites/default/files/pdf/1_3_Chapter%203_Payment%20methods.pdf. Accessed 20 Mar 2023.
17. Ramsay N, Hossain R, Moore M, Milo M, Brown A. Health care while homeless: Barriers, facilitators, and the lived experiences of homeless individuals accessing health care in a Canadian regional municipality. Qual Health Res. 2019;29(13):1839-49. doi: 10.1177/1049732319829434
18. Giunta M. Homelessness crisis continues to worsen in City of Peterborough and Peterborough County. Global News. 2022 Sept 21.
19. Peterborough editorial: Province continues to neglect local health-care needs. The Peterborough Examiner. 2022 May 11.
20. Dubois S. Why financial incentives aren't enough to deal with health-care staffing shortages. CBC News. 2022 Aug 12.
21. Cole A, Chen FM, Ford PA, Phillips WR, Stevens NG. Rewards and challenges of community health center practice. J Prim Care Community Health. 2013;5(2):148-53. doi: 10.1177/2150131913501519
22. Courtney ML. Physician payment models. *Dr. Bill.* 2019.
23. HealthForceOntario. Family medicine compensation and practice models in Ontario. 2019. http://www.healthforceontario.ca/UserFiles/file/PracticeOntario/FM%20Compensation%20Practice%20Models%20EN.pdf . Accessed 2023 Mar 24.

24. Shah TI, Clark AF, S JA, S S, G JA. Geographic accessibility to primary care providers: Comparing rural and urban areas in Southwestern Ontario. HEAL. 2019. 3.
25. Rudoler D, Deber R, Barnsley J, Glazier RH, Dass AR, Laporte A. Paying for primary care: The factors associated with physician self-selection into payment models. Health Econ. 2015;24(9):1229-42. doi: 10.1002/hec.3221
26. Ferro DB, Brailsford S, Bravo C, Smith H. Improving healthcare access management by predicting patient no-show behaviour. Decis Support Syst. 2020;138:113398. doi: 10.1016/j.dss.2020.113398
27. CIHI. An overview of physician payments and cost per service. 2022. https://www.cihi.ca/en/health-workforce-in-canada-in-focus-including-nurses-and-physicians/an-overview-of-physician. Accessed 24 Mar 2023.

Appendix

Project Information Document

Research Project Title: Community Health Centre Approach in HKPR

Research Investigator: Chelsea Reid

Email: chreid@trentu.ca

About the Project:

There is an alarming number of marginalized individuals within the City and County of Peterborough, Ontario, that do not have attachments to a form of primary health care, such as a primary care physician. There are an estimated 13,000 unregistered patients from marginalized communities in Peterborough County. The Human Services and Justice Coordinating Committee (HSJCC) Haliburton, Kawartha, Pine Ridge Region (HKPR) functions to identify and influence system-wide pressure that support the decriminalization, deinstitutionalization, and de-stigmatization of individuals who experience mental health, addiction and relation conditions who come into contact with the Justice System. The HSJCC wishes to accomplish this through the implementation of a community health centre. The HSJCC is seeking funding to establish a community health centre for the City and County of Peterborough. A community health centre is an alternative model of primary health care that promotes a means of de-stigmatizing the health care system, by offering health care services tailored to the needs of the community in which it is established. A community health centre employs a variety of health care professionals, including but limited to, primary care physicians, nurse practitioners, nurses, dietitians, social workers, and more. Community agencies are connected to community health centres to provide 'wrap-around' services to the diverse individuals that may access a community health centre. A community health centre operates on a different payment model in comparison to traditional primary health care organizations. Traditional primary health care organizations pay their physicians through a billing model, as opposed to a salary model used by community health centres. A community health centre allows marginalized patients to take more control of their health care and create social connections with individuals and organizations within the community. The purpose of this research project is to help secure funding for a community health centre for the HSJCC HKPR region. This project will be investigating the best practices to aid in the recruitment and retention of primary care physicians to work in rural Ontario communities with a high number of

marginalized patients. This project investigates if there are differences in the quality of care physicians provide to patients when they are paid on a salary or billable model. These research questions will help provide evidence that incoming health care workers such as primary care physicians and nurse practitioners are committed to working in rural Ontario communities, so that a community health centre will have the staff to support the health care needs of the community. As well, providing evidence into which payment model is more appropriate for health care providers may ensure they are compensated fairly while working at a community health centre, while providing the best quality of care to marginalized patients. The participants of the research study will undergo a 60 minute interview with the researcher to answer prepared open-ended interview questions.

Rights as a Participant:

At any point during the interview process or before Tuesday March 21st, 2023, you can withdraw the professional and personal information provided during your interview.

- You have the right to refuse to answer any question asked during the interview process.
- You have the right to request your personal information be left out of academic papers and presentations.
- You have the right to request access to the audio record of your interview.
- You have the right to request no audio record be taken during your interview

Risk:

As a participant, you will not be exposed to any risk during the interview process. The interview will be conducted over Zoom or phone call, following COVID19 guidelines. There will be no professional or personal risk accompanying this research project. This research project has been reviewed and approved by the Trent University Research Ethics Board. The information collected during each interview will be destroyed prior to the completion of the research project on April 4th, 2023.

Compensation:

As a participant, you will not be receiving any compensation. There is no monetary benefit attached to this research project.

Contact Information:

Please feel free to contact the research investigator at any time during or after the interview process. You can reach them at their institutional email, chreid@trentu.ca

Informed Consent Waiver

Research Project Title: Community Health Centre Approach in HKPR

Research Investigator: Chelsea Reid

Research Participant Name: _____

The interview will take approximately 60 minutes. We do not anticipate any risks associated with your participation, but you have the right to stop the interview or withdraw from the research at any time. Please review the information sheet provided.

Thank you for agreeing to be interviewed as part of the Community Health Centre Approach in Haliburton, Kawartha, Pine Ridge Region research project, in collaboration with the Human Services and Justice Coordinating Committee (HSJCC). Ethical procedures for academic research undertaken from Trent University require that interviewees explicitly agree to being interviewed and how the information contained in their interview will be used. This consent form is necessary for us to ensure that you understand the purpose of your involvement and that you agree to the conditions of your participation. Would you therefore read the accompanying Information Document and sign this form to certify that you approve of the following:

- The interview will be audio recorded.
- You may request that any personal information be omitted from the interview, and/or request that the interview be re-done.
- The audio record of the interview will be produced and analyzed by Chelsea Reid, as research investigator.
- Access to the interview audio record will be limited to Chelsea Reid.
- Any variation of the conditions above will only occur with your explicit approval.
- The information collected during the interview will be destroyed after the completion of the research project on April 4th, 2023.

Your words may be quoted directly in the final report of this research. With regards to being quoted, please initial next to any of the statements that you agree with:

_____ I wish to review the audio record collected during my interview.

_____ I agree to be quoted directly.

_____ I agree to be quoted directly if my name is not published.

The information you provide in your interview may be used in:

- Academic papers.
- Presentations by the research investigator, Chelsea Reid.

By signing this document, I agree that:

1. My participation in this project is voluntary.
2. I can stop taking part in the research and withdraw my information at any point.
3. I will not be receiving any compensation for involvement in this research.
4. I can access the audio recording of my interview.
5. I may contact the researcher through email at any time during or after the interview process.
6. I have read and agree to the Informed Consent Waiver and the Information Document.

_____

Printed Name

_____ _____

Participant's Signature Date **(YYYY-MM-DD)**

Researcher's Signature Date **(YYYY-MM-DD)**

Contact Information

This research has been reviewed and approved by the Trent University Research Ethics Board. If you have any further questions or concerns about this research, please contact:

Research Investigator: Chelsea Reid

E-mail: chreid@trentu.ca

Semi Structured Interview Script/Questions

Interviews Conducted by Chelsea Reid via zoom or phone call

All interviews will begin with asking for verbal consent to begin the interview. This will consist of asking each research participant for their consent to allow the following zoom call or phone call to be voice recorded and to allow the researcher (Chelsea Reid) to transcribe the conducted interview at a later date to aid in data collection and interpretation. The researcher conducting interviews will ask for consent to ask the following interview questions and inform participants that no personal or confidential information disclosed during the interview, such as name, place of employment, and other personal information shared will be disclosed to any individuals outside of this research project and will not be included in the final reporting of this research project. The only information that will be used in the final reporting of this research project is the participants job title (i.e., if you are a primary care physician or nurse practitioner), which is part of the inclusion criteria for this project. Participants will also be reminded that by giving verbal consent before the start of the interview they are allowing the data that is being collected in the interview to be used in the final reporting and interpretation of this research project. Participants will be reminded that after the competition of the research project on April 4th 2023, the audio interview recordings will be destroyed. As soon as verbal consent has been given by each individual participant, the interview can proceed to be recorded, and questions can be asked.

Introductory Interview Questions:

- Participant's name
- Job location and title
- How long they have been working in primary health care and current position
- Have they worked in a primary health care position in rural Ontario before your current position
- What the participants schedule is like, in terms of the number of hours worked weekly, and patient schedule

Interview Question 1: when seeking a new job in primary health care in rural Ontario, what were you most concerned about?

Interview Question 2: what factors did you consider when seeking a primary health care position in rural Ontario? Did you consider the type of patients that reside in the community (such as if there was a large population of marginalized patients)? Were there any enticing recruitment

methods organizations used to recruit you? What were the most important retention factors you considered when looking for a new primary health care position?

Interview Question 3: are you paid on a salary or billable model at your current health care job? Have you ever been paid on both a salary and billable models, or just one of those models?

Interview Question 4: do you prefer a salary or billable payment model? (explain why)

Interview Question 5: do you think the quality of care you provide a patient is different because you are paid on a salary/billable model, compared to being paid on the opposite model in a primary care position? Do you think the quality of care you provide a patient is different because you are paid on a salary/billable model, compared to other primary health care providers who have the same position and are paid on the opposite model?

- Question worded two ways because some research participants may not have personal experience with both payment models, so may choose to compare to individuals they know working the same primary care position on a different payment model
- Follow up question with “if so how,” or “if not, why not?”

Interview Question 6: do you notice that there are differences in the types of patients you treat when being paid on a salary/billable model, compared to the types of patients you treated when being paid on a billable/salary model?

- Follow up question with “if so how,” or “if not, why not?”

Interview Question 7: do you consider working with marginalized individuals, or unregistered individuals, a difficult aspect of your job?

- Follow up question with “if so how,” or “if not, why not?”