INTEGRATED PRIMARY CARE AND SOCIAL CARE SERVICES IN ONTARIO

SUPPORTING THE IMPLEMENTATION OF INTEGRATED PRIMARY CARE AND SOCIAL CARE SERVICES: A QUALITATIVE DESCRIPTIVE STUDY

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Lay Abstract

Health systems in Canada are positioned to treat symptoms of health issues instead of addressing the root causes of illness and disease, such as lack of housing, access to healthy and nutritious food, and stable employment opportunities. Recently, health system reforms in Ontario have shifted to population health-based approaches to care which recognize and aim to address these non-medical determinants of health outcomes. Primary care, which is often an individual's first point of contact with the health system, may be uniquely positioned to fulfill this mandate due to the capabilities of primary care providers to develop and sustain relationships with patients along the life course. Primary care practitioners may be more aware of patients' underlying social needs that result in adverse health outcomes. This study aimed to identify models of care in Ontario that coordinate care for patients between health and social services such as housing and employment support. It was conducted in two phases. Phase one included a targeted document search which used government policy documents, stakeholder websites, and journal databases to identify these integrated models of care in Ontario. In phase two, 13 stakeholders identified from existing models were interviewed to explore their experiences with models that integrate primary care and social care services and the barriers and facilitators to implementing such models. The study found that most initiatives had made modifications to governance and delivery arrangements to support implementation, including the adoption of shared governance approaches and a system navigator position responsible for coordinating care for clients. The initiatives primarily experienced barriers with funding insecurity, communication and information sharing between health and social partners, and technology. However, communication and trust between health and social partners and organizational leadership support were factors that supported the implementation of initiatives. The findings from this research may support future implementation and scale-up of these coordinated models of care in Ontario.

Abstract

Background:
Within the Ontario context, a recent shift towards integrated care has led to primary care reforms that have aimed to achieve the quadruple aim benchmarks. Particular focus has been placed on population health management, a key pillar of the quadruple aim metrics, which recognizes and aims to address the broader social, structural and institutional determinants that impact upon population health outcomes. As a result, this study aims to identify and describe the key characteristics of integrated primary care and social care models, programs, and initiatives in Ontario that aim to address the social determinants of health. It also aims to identify barriers and facilitators in the implementation of these integrated care initiatives to support future implementation efforts.

Methods:
A qualitative descriptive study design was utilized and was conducted in two phases: 1) document analysis; and 2) 13 in-depth semi-structured interviews with policymakers, managers/ administrators, clinicians and service providers involved in leading integrated primary and social care initiatives in Ontario.

Results:
Developing and implementing these initiatives had primarily required the introduction of new governance and delivery arrangements. This included the adoption of shared governance structures where equal decision-making authority was often established between health and social partners, and the introduction of a system navigator role who was commonly co-located within primary care. There were minimal insights in relation to the development of new financial arrangements aside from a few joint funding agreements, as almost all initiatives did not share financial resources and few modified staff or provider remuneration. Initiatives experienced barriers including a lack of permanent or long-term funding and technological infrastructure to support patient tracking, follow-up, and information sharing between health and social partners. However, the system navigator position was found to be an essential role in bridging communication gaps between sectors and delivering integrated care for clients. In addition, factors such as pre-existing informal and formal partnerships between primary care and social care organizations, communication and trust between health and social partners, and organizational leadership support for integration were viewed as enablers.

Discussion and Conclusions:
The lessons learned from participants' experiences in planning and implementing integrated primary care and social care models are timely and can inform future implementation and scale up as the province continues to move towards integrated care arrangements in efforts to achieve the quadruple aim benchmarks. Specific recommendations for policy and future research are proposed.

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CEO – Chief Executive Officer
CHC – Community Health Centre
FHT – Family Health Team
OHT – Ontario Health Team

Chapter 1: Introduction

1.1 Background/ Context

Silos within the health system that result in fragmented care experiences have inspired reforms that aim to integrate care, with a focus on enhancing patient experiences, improving population health at manageable costs and with positive provider experiences. Known as the quadruple aim, these metrics are widely recognized as the focus areas integral to improving health-system performance.[1] Integrated care, defined as coordination along the continuum of care including primary, secondary, tertiary, rehabilitative, and long-term care, has been adopted through two approaches.[2] The first approach occurs when two previously isolated organizations with similar levels of care delivery are coordinated under one management structure.[2] The alternative approach is one that coordinates different levels of care under one management structure.[2] The implementation of these models result in varying degrees of modification to existing governance, financial, and delivery arrangements, including changes to organizational leadership, bundled payment schemes, bonuses based on health outcomes to incentivize providers, and shared electronic health information systems.[3] Integrated care has been found to reduce the risk of hospitalizations, readmissions, length of hospital stays, and overall health system costs as well as promote patient-focused care and trust building between providers and patients.[4,5]

Improving population health, a key focus of the quadruple aim, represents a fundamental shift away from the biomedical model of care towards a whole-of-person approach that recognizes broader social, structural and institutional determinants that impact upon health outcomes. These can include, but are not limited to, factors such as access to adequate food, housing, employment and income, and experiences facing systemic racism and discrimination. A population health management approach aims to address these individual and collective determinants of health to improve the health status of entire populations and reduce inequities along the life course. [6] There are three curves of population health management. The first, and smallest curve, is where organizations reactively respond to patients seeking care and services. Under the second curve, organizations move towards a proactive approach by co-designing in-reach and out-reach services that meet the needs of the population they are accountable for. Lastly, the third curve of population health management includes population-based strategies and interventions for addressing non-medical determinants of health, with the aim of shifting the entire population health curve from unhealthy to healthy.[7] The increasing recognition of these social factors in determining health outcomes has led to population-health models that aim to integrate health and social care to emerge globally, including Accountable Care Organizations (ACOs) in the United States, Integrated Care Systems in the United Kingdom, and Integrated Health and Social Service Centres in Quebec.

Primary care, often patients' first point of contact with the health-system, is focused on illness and disease prevention, health promotion, rehabilitation, and health counseling along the life course.[8] Starfield's principles of primary care delivery, which include comprehensive care, person-focused care over time, coordinated care and first contact, emphasize that person-focused care is integral to primary care practice.[9] Eissens van der Laan et al. (2014) posit that a person-

centred approach is paramount for older adults and those with chronic conditions because it comprehensively considers how unmet health needs can contribute to additional health problems, and focuses on how to meet these needs instead of solely focusing on the treatment of disease.[10] Thus, primary care is uniquely positioned to support population-health focused integrated health and social care initiatives given its emphasis on person-focused care and the ongoing relationship between primary care providers and their patients and caregivers that it facilitates.

Within the Ontario context, restructuring primary care to facilitate the integration of health and social services utilizing a population health management approach has been central to recent reforms. Currently, there are three predominant models of care in the province that involve primary care that include integration with at least some social care services in their scope. The first is Community Health Centres (CHCs), which were initially piloted in the 1970s as an approach to providing comprehensive primary care services to primarily low-income and/or marginalized communities.[11] Focused on addressing upstream determinants of health and advancing health equity, CHCs offer health-promotion and disease-prevention programming in addition to standard primary care services by bringing together a multidisciplinary team of health and social care professionals. [12] This often includes physicians, health promoters, counselors, nurses, physiotherapists, dieticians, and social workers, among other specialized professionals. There are currently over 100 CHCs across the province that provide population-specific services and programs. CHCs are governed by an elected board of directors and are primarily funded by the Ministry of Health through a bulk payment structure that is often supplemented by grants and donations.[13, 14] Physicians are reimbursed through a yearly salary instead of the standard fee-for-service model. In 1995, Aboriginal Health Access Centres were introduced, which were modeled after CHCs by delivering specialized care for Indigenous peoples including traditional healing practices, primary care, health promotion and disease prevention, and community development services.[15]

Second, in 2005, Family Health Teams (FHTs) were introduced as an alternative model of team-based primary care. Modeled after the Patient Medical Home Model that originates out of the United States, FHTs include at least seven physicians and other interprofessional care members to deliver an expanded scope of primary care services, including reproductive, rehabilitative, and palliative care, health promotion and disease prevention, and service coordination and navigation support.[16] Physicians are reimbursed through a blended model of funding that includes fee-for-service and capitation, with a bonus structure that incentivizes prevention-focused care as well as expanded service delivery such as prenatal care or home visiting.[16] Currently, there are 187 FHTs across Ontario, with 72 serving rural communities, 44 delivering care to Northern Communities, and five Aboriginal FHTs delivering specialized and culturally competent care to First Nations people.[17, 18]

The third, and most recently implemented, model is Ontario Health Teams (OHTs). In October 2018, the Ontario Premier's Council on Improving Healthcare and Ending Hallway Medicine was created to make recommendations for addressing silos within the health system that perpetuate capacity, efficiency, and coordination challenges. The first interim report of the Council, released in 2019, highlighted the implications of these issues for both patients' and caregivers' care experiences, including struggles navigating the healthcare-system, long wait times, and lack of quality healthcare received as a result of being treated in hospital hallways.[18]

In addition, the stress associated with providing hallway medicine was found to result in adverse health outcomes among providers including high rates of stress and burnout promoting staff shortages and turnover.[19] As a result, in 2020 the Ontario Ministry of Health introduced OHTs, a new model of care that groups together service providers and organizations to deliver coordinated care to a defined geographic area under one funding envelope.[20] This can include primary care, home and community care, hospital care, long-term care, mental health and addictions support, and other social services where the bulk payment covers the patient along their entire care journey as they receive services and transition between different care providers.[21] Through this model of service delivery, OHTs are focused on achieving the quadruple aim by connecting patients to services along the continuum of care within their communities. Given that the implementation process is still early with 51 OHTs introduced across the province, the effects of this new model of care on improving the quadruple aim metrics have yet to be evaluated. [21]

Despite evidence of the existence of integrated health and social care delivery arrangements both within and outside of the Ontario context, system-level integration efforts are limited, and most health and social care integration initiatives are also disease or population specific by, for example, providing care for those with chronic conditions, older adults, or for specific episodes of care such as hip or knee replacements. [22] As a result, the preponderance of existing literature has focused on understanding implementation mechanisms and evaluating outcomes associated with these narrowly defined types of integrated health and social care programs. Addressing the non-medical determinants of health requires an expansion of the scope of integrated health and social care efforts to include a collaboration between health system and other social system sectors such as housing, employment and income support, and access to adequate food. In addition, arrangements that do recognize a broader definition of social care and, in principle, are oriented towards addressing the social determinants of health through integration, face challenges fulfilling these objectives in practice. An evaluation of ACOs found that most were unsuccessful in effectively integrating social services with healthcare to address patients' social needs despite provider motivation due to funding timelines, data availability, and challenges in garnering effective community partnerships.[23] In the UK, the 2019 National Health Services' Long Term Plan emphasizes prevention, improving population health, and reducing inequities as priorities for funding and investment that can be fulfilled through its Integrated Care Systems, but lacks specific directives on addressing the social determinants of health.[24]

From the Ontario models described, it is evident that integration of health and social care is being undertaken across the province through models of care that involve primary care delivery. The introduction of OHTs has also provided the infrastructure to further integrate care between sectors to generate action on the social determinants of health. Thus, examining the key features and the respective barriers and facilitators to implementation of Ontario examples of integrated primary care and social care delivery can contribute to filling the gap in the literature that exists and may support the implementation and scale up of integrated primary care and social care services. Through a population health lens, supporting the implementation of integrated health and social care initiatives that aim to address the social determinants of health is also an important public health priority.

To address this gap, this study aims to identify and describe the key characteristics of integrated primary care and social care models and initiatives. Framed through the social determinants of health lens, where advances in social goals are seen to support the achievement of health goals and vice versa, it aims to identify barriers and facilitators in the implementation of primary care and social care integration to support future implementation efforts. In the context of this study, social care refers to relevant program and service areas included in the taxonomy used to organize documents in the Social Systems Evidence database (www.socialsystemsevidence.org), which is a comprehensive repository of pre-appraised, synthesized research evidence about strengthening 20 government sectors and program areas, and achieving the Sustainable Development Goals (SDGs). This includes sectors such as housing, education, children and youth services, food safety and security, and financial protection.[25]

1.2 Study Objectives

The primary objectives of the study will be the identification of existing integrated primary and social care initiatives in Ontario that aim to address the social determinants of health, their key characteristics, and barriers and facilitators to their implementation.

Chapter 2. Methods

A qualitative descriptive study design was used to address the study objective. The study was conducted in two phases: 1) document analysis; and 2) in-depth semi-structured interviews with policymakers, managers/administrators, clinicians and service providers involved in leading integrated primary and social care initiatives in Ontario.

2.1 Phase 1 – Document analysis

In phase 1, initiatives integrating primary care and social care in Ontario were identified through a targeted document analysis. The document analysis followed the READ approach for document analysis in health policy research, which includes: 1) readying the materials; 2) extracting the data; 3) analyzing data; and 4) distilling the findings.[26] This systematic approach was chosen to ensure quality and rigour in the document analysis phase. Relevant documents were identified by searching key databases including Health Systems Evidence, Social Systems Evidence, PubMed, ScienceDirect, Scholars Portal Journal, Google Scholar, and HealthSTAR using the search terms: (integrat* OR “care coordinat*”) AND (“primary care” OR “primary health care services”) AND (“social care” OR “social system” OR “social services”). Documents were also found by hand searching key government and stakeholder websites for additional documents. As described by Dalglish, Khalid, and McMahon (2020), types of documents that can be used for health policy analysis include official documents such as policy briefs or official statements, implementation documents including legal documents, scholarly work, media and communications, or other documents such as promotional materials.[26] Documents were included if they made reference to an arrangement that facilitated collaboration, coordination, and/or integration between primary care and one or more social care service areas included in the taxonomy used to organize documents in the Social Systems Evidence database. Initiatives

described as aiming to connect service users with resources to address the social determinants of health and/or community support services and listed social service organizations or agencies as partners in service delivery were also included. One member of the research team (JR) conducted the searches and document inclusion and exclusion process in consultation with the research team when uncertainties occurred. The document review phase was completed once either saturation or completeness was achieved.

Data were extracted from the included documents using an excel spreadsheet where descriptive characteristics and key features of the integration initiative were recorded by one member of the research team (JR) (Appendix 1a). The data were analyzed iteratively, with the aim of looking for similarities or variations between initiatives identified and any trends in the data (such as temporally or thematically). Documents were analyzed as both individual documents and as a whole set of documents. Initiatives were grouped thematically based on the type of initiative such as the social sectors involved, the primary care delivery approach utilized (such as a family health team or a community health centre), and/or the nonmedical determinant(s) that the initiative aimed to address. In preparation for the interviews, a preliminary profile was developed for each initiative based on the thematic analyses (Appendix 1c). This profile documented key features and activities of the initiative and any variations or unique aspects that differed from other initiatives with shared characteristics. A development and implementation timeline as well as any public information about governance, financial, or delivery arrangements that underpinned the initiative were also included. These insights were used to inform the modification of interview questions to gain insights into unique aspects of each initiative and to ensure the relevancy of all questions to each participant.

2.2 Phase 2 – Interviews

In the second phase, stakeholder interviews were undertaken to understand the experiences of those involved in the implementation of integrated primary care and social care initiatives identified in Ontario. This phase of the study aimed to incorporate a depth and breadth of experiences and perspectives involved in integration initiatives by recruiting participants of various roles and involved in varying types of integration approaches with a range of social sector partnerships.

Study sample and recruitment

a) Selection of integration initiatives

Initiatives were sampled purposively to ensure a mix of: 1) initiatives that have been established for longer and those that are new; 2) types of partners involved (e.g., from parts of the health and social systems); and 3) regions (e.g., rural, suburban, and urban). The priority was given to selecting initiatives that were either: 1) currently being implemented and have been in operation for at least six months; or 2) are no longer being implemented but were in operation for at least one year. Recent initiatives were of particular focus, given that reforms towards integrating and restructuring the primary care system in Ontario made significant strides beginning in 2018, when the province created the Premier's Council for Improving Healthcare and Ending Hallway Medicine. This Council released a report which made important recommendations for integrating care and addressing the social determinants of health and was

used to inform the creation of Ontario Health Teams, the new model of primary care that has begun to take effect across Ontario.[19] Insights from initiatives implemented during this time period were most relevant to the study objectives. OHTs also usually include other models of primary care including CHCs and FHTs as partners or collaborators, which increased the relevance of focusing on the OHT timeline.

Initiatives that fell outside of the geographical and conceptual scope were excluded. Specifically, initiatives were excluded if; 1) implementation did not occur in Ontario; 2) implementation did not occur at the primary care level; 3) the initiative did not include a social service connection or partnership; and/or 4) the initiative had not been in operation for at least six months at the time of the study being conducted in January to March 2022.

b) Selection of interview participants from the initiatives

Interview participants included policymakers, managers/administrators and clinicians and service providers involved in the planning, governance, and implementation of integrated primary and social care initiatives in Ontario. From the documents included in phase 1, public directories and websites containing information about each identified integration initiative were reviewed. Individuals listed on these public domains and through the identified documents as being involved in leadership positions within these initiatives were documented and categorized based on their role in the integration initiative (policymakers, managers/administrators and clinicians and service providers). The research team then collaborated to develop a sample that engaged leaders with varying perspectives. Suggestions for other relevant participants were also asked for during the interviews. 2-4 participants were sampled from each of the initiatives identified in the targeted document analysis for a target sample of 10-20 participants. The exception to this was in the case where more participants were selected from initiatives that are larger and more established. This sample size was also selected to ensure data saturation was achieved by involving a range of perspectives and experiences within any given initiative while minimizing redundancy in responses.

Participants were invited by email to participate. Email addresses were obtained through those available in the public domain (stakeholder websites and publications) as well as through referral from other interview participants and calls or emails to organizational administrative offices asking for contact information. Once the email addresses were obtained, the email invitation was sent, which included a study information sheet and consent form (Appendix 2a). Once the participant agreed to be interviewed, the student investigator arranged a date and time that suited the participants' schedule. The participants were asked to return the signed forms prior to the interview, and participants had the opportunity to ask questions by email or before starting the interview via phone or video conference calling.

Data collection

An interview guide (Appendix 2b) informed the direction of the semi-structured interviews, which were conducted via Zoom or Microsoft Teams. Questions focused on identifying the key features of the integration initiatives and key lessons learned from implementing it (including key implementation barriers and facilitators.) The interviews were recorded using a Voice Memo application that is not Cloud based and downloads directly to a

secure device. The audio recordings from the interviews were transcribed verbatim and a thematic analysis was conducted after the interview responses were coded in NVivo.

Data analysis

The audio recordings from the interviews were transcribed verbatim and coded in Nvivo 11 software. I used a taxonomy of health and social system governance, financial and delivery arrangements from the Social Systems Evidence and Health Systems Evidence databases as an initial organizing framework to code transcripts to identify features of integration initiatives. Data was then coded inductively to identify themes within these broader categories. Themes were refined iteratively as additional interviews were conducted and analysis was undertaken concurrently. When coding themes, each line of the transcripts was analyzed and text with meaning was used to generate a new 'tree node.' A new 'tree node' was created for each new idea identified in the transcripts. Throughout the coding process, 'tree nodes' with similar themes were grouped together to form overarching 'parent nodes.' Whenever this grouping of codes occurred, a memo was developed that described the change that took place and the theme represented by the new 'parent node.' These 'parent nodes' made up the final list of themes generated from the data. This list was finalized once no further themes could be identified from the data and saturation had been deemed to have occurred. The final list of themes from the interviews was compared with any themes identified from the targeted document analysis to compare, consolidate, or add to the themes. When no further themes were identified from the interview transcripts, the investigators were confident that the data had been utilized to its highest potential to answer the research questions and saturation had been reached. To support rigour in the data collection and analysis phase, field notes and a reflexivity journal of assumptions was maintained by the student investigator to facilitate ongoing self-reflection of any bias.

2.3 Data Management and Confidentiality Protocols

Data containing identifiable information was securely stored at all times. The completed data forms were stored and locked in the student investigator's personal office where all notes taken during the interviews were stored in locked filing cabinets. The computer and digital recording devices for audio files were housed in the same locked and secure location. The computer security methods used to prevent unauthorized access were password and zip encryption protected using Zip Files for Mac OS 10.15.7. All excel and word documents used to record study data were also password protected in addition to zip encryption.

As soon as data collection was completed, any reference to personal identifiers was removed during transcription of interviews and before uploading the transcripts to Nvivo. Any names, addresses, or other personal identifiers that may have been included in direct quotes were removed and replaced with a pseudonym or completely removed. Each interview participant was given an interview ID number to identify them. The student investigator was responsible for the transcription. Both the identifiable and de-identified data collected was stored on a hard drive under password protection and zip encryption. This data will be destroyed five years after the last publication from the findings of the study.

Chapter 3: Results

The document search produced 17 documents relevant to the study with publication dates ranging from 2012 to 2021, which were predominantly published as webpages for the general public detailing the integrated services provided by the organization and/or the partner organizations involved (Appendix 1b). Of these documents, seven were focused on implementation of integration initiatives (including two final reports, two committee reports, an annual report, an application, and a legal joint venture agreement) and 10 were media and communications documents (including organizational information web pages and articles).

A total of 10 initiatives were identified from the 17 documents included. Based on discussions with the research team and with interview participants, two initiatives were excluded and three additional initiatives were identified and included that were not found during the document review (Table 1). Using the information in the documents, preliminary high-level profiles were developed for each initiative (Appendix 1c). The integration initiatives included two OHTs, two initiatives implemented with FHTs, two CHCs, one initiative implemented by a provincial stakeholder organization that involved multiple CHCs, three initiatives that were co-located within the social sector, and one initiative that included both FHTs and solo practitioners' offices. The OHTs in the sample included one urban initiative with an established history of delivering integrated care and one more recent initiative delivered in a northern setting covering a much larger geographic area. Of the FHTs included in the sample, two were integrated care initiatives that included academic institutions or research institutes. Lastly, of the CHCs included in the sample, one was located in an urban area and the other in a northern city. In addition, one of the participants interviewed from the initiative that involved multiple CHCs was from a CHC located in a rural and remote area. Most initiatives listed health equity, addressing the social determinants of health, and coordinating care between the health and social sectors as the goal of their initiative. In addition, underserved, high needs, and/or marginalized populations were listed as the primary target populations.

Table 1: Initiatives identified, included, and excluded for participant sampling

Initiatives Included	**Model of Integration**	**Geographic Location**	**Services Integrated**	**Target Populations**	**Urban/ Rural**
Included initiatives identified from document analysis					
East Toronto Health Partners OHT	OHT	Toronto	● Children and youth services ● Citizenship ● Community and social services ● Employment ● Financial protection ● Food safety	Initial focus on seniors and caregivers with chronic disease, mental health and substance use challenges, and priority neighbourhoods.	Urban

			and security ● Housing ● Transportation		
Centre de santé communautaire du Grand Sudbury	CHC	Sudbury	● Housing ● Children and youth services ● Community and social services ● Employment ● Culture and gender ● Consumer protection ● Recreation ● Citizenship ● Government services	Francophone patients, including LGBTQ+ and newcomers.	Not stated
Community Health Prosperity Program, Niagara Medical Group FHT	FHT	Niagara Falls	● Community and social services ● Education ● Financial protection ● Food safety and security ● Housing ● Transportation	Low-income adults and/or other marginalized patient population groups.	Urban
Social Determinants of Health Committee at St. Michaels' Academic FHT o Health Justice Program o Reach out and Read Literacy Program	FHT	Toronto	● Children and youth services ● Public safety and justice ● Education ● Financial protection	Focuses on serving low-income patients, with a particular focus on those facing precarious or unstable housing, Indigenous, those with HIV/AIDS, and/or those with disabilities.	Urban

○ Income Security Health Promoters					
Shelter Health Network	Other - co-located in social sector	Hamilton	● Community and social services ● Housing	People living in poverty, homeless, precariously housed, and/or those without a family doctor.	Urban
Somerset West Community Health Centre	CHC	Ottawa	● Housing ● Food safety and security ● Children and Youth Services ● Community and social services ● Culture and gender ● Financial protection ● Education ● Transportation ● Recreation ● Citizenship ● Government services	Isolated seniors, those facing mental health challenges, racialized and newcomer community members, homeless and housing insecure, low-income individuals.	Urban
Rx: Community Social Prescribing Pilot by the Alliance for Healthier Communities	Included multiple CHCs	Ontario-wide	● Community and social services ● Culture and gender ● Food safety and security ● Education ● Recreation	Clients who social prescribers feel could benefit from additional social support and connection or structural support including housing and food. Some pilot centres focused on isolated seniors and newcomer families.	Urban and rural locations
WoodGreen Community Services'	Other - social service	Toronto	● Citizenship ● Community and social	Newcomers to Canada.	Urban

Interprofessional Care Program	organization		services ● Financial protection ● Housing		
Included initiatives identified from the research team and participants					
Access to Resources in the Community (ARC)	Included both FHTs and solo practitioners	Ottawa and Sudbury	● Community and social services ● Financial protection ● Food safety and security ● Government services ● Housing ● Public safety and justice ● Recreation ● Transportation	None.	Not stated
Algoma Ontario OHT	OHT	Algoma Country	● Children and youth services ● Citizenship ● Community and social services ● Employment ● Financial protection ● Food safety and security ● Housing	Frail seniors and those under 75 with chronic conditions are the priority populations for year one of implementation.	Rural
Vanier Social Paediatric Hub	Other - co-located in the social sector	Vanier, Ottawa	● Children and youth services ● Citizenship ● Community and social services ● Culture and gender ● Education ● Employment ● Food safety	Children and youth 17 and under who live or attend a school in Vanier, Ottawa, with a particular focus on youth and their families with low-socioeconomic status and children and youth who are experiencing psychosocial stressors.	Urban

			• and security • Housing		
Initiatives excluded					
Inner City Health Associates					
Navigating Ottawa Resources to Improve Health (NORTH)					

From the documents and recommendations from participants for other potential key informants, 22 prospective participants were identified from the 11 included initiatives. Of these, contact information was obtained from publicly available information and through the networks of the research teams for a total of 19 participants and invitations were sent to each. The interview invitations were sent to prospective participants and their responses grouped by initiative type are outlined in Table 2. Of the 19 invitations sent, 13 participants included in the sample from nine integration initiatives consented to participate. The 13 participants had a range of roles and responsibilities within their respective initiative, including those who were primarily in a designated administration, management, and/or leadership role (n=11), and those working as health promoters and/or a lead investigator (n=2). Of the 11 participants in management or leadership roles, five were also physicians and had split responsibilities between clinical work and management.

Table 2: Interview invitations

Categories of Initiative	**Invitations**	**Consent**	**Decline**	**No response**
CHCs	2	2	-	-
FHTs	5	3	1	1
OHTs	7	5		2
Initiatives Co-Located in the Social Services Sector or Involved More than Primary Care Delivery Model	5	3	1	1
Total	19	13	2	4

Findings from participant interviews were triangulated with data from the document analysis and were grouped into two areas pertaining to the research question: 1) key features of integration initiatives and insights about their development and implementation process; and 2) lessons learned from implementation.

3.1 Key features of integration initiatives and insights about their development and implementation process

In identifying key features of integration initiatives and insights about their development and implementation process, I started with an organizing framework which included governance, financial, and delivery arrangements, implementation supports, and evaluation approaches. I then used the interview data to identify themes under this broader organizing framework, which are listed in Table 3. Appendix 1d includes a more detailed version of this table with illustrative quotes.

Governance arrangements

I identified two important governance features that were common across integration initiatives, which relate to shared governance approaches with shared decision-making authority (Table 3). For the first feature, shared governance arrangements were most commonly operationalized through an advisory or leadership table that included both health and social sector partners in the initiative. In larger initiatives with multiple partners involved such as OHTs, leadership from individual organizations such as chief executive officers or vice presidents sat at these tables as representatives. One OHT with over 50 health and social partners had established a 'coalition of coalitions' approach that utilized a diffused leadership model of six core anchor partners who represented the interests of partners from their respective health or social sector, including CHCs, home care, primary care providers, and social services.

In relation to the second governance feature of shared decision-making, participants involved in shared governance structures with multiple partners viewed their governance approach as a collaborative decision-making structure that was intended to facilitate equal decision-making authority between health and social sector partners. In smaller scale initiatives that included system navigators or social prescribing in their model, decision-making was undertaken within the existing governance structure in the primary care model, such as by the FHT's executive director or the CHC's board of directors. In initiatives that were larger and/or that had been established for longer, opportunities for decentralized decision-making were adopted primarily through subcommittees or working groups that often focused on specific project areas or populations. For example, one participant from an OHT discussed how 20 partners had come together to form a working group with OHT funding support to coordinate primary care outreach and social services to high-needs neighbourhoods that were increasingly underserved during the COVID-19 pandemic. Across all initiatives, decision-making in relation to the setting of mission, vision, and goal outcomes was primarily undertaken at the leadership and governance level and was co-created between health and social service partners. However, as described in the quote below by a director, some initiatives including both OHTs also incorporated community consultations and engagement into this process to inform the mission and vision setting and other decision-making.

> *ID07: "...we hosted a citizens' reference panel… we actually invited seven thousand citizens to be part of that. So we sent out letters also to people without addresses and things like that so shelters, other areas, to see who could participate and then identified – I think it was thirty five individuals, to meet with us for four weekends in the month of May last year and really help us design our values and principles but also our strategy going forward. So that was a big, big foundational piece for us and it was good because it didn't – it put the focus not on organizations but on the community and what they wanted."*

For most initiatives, factors that influenced the development and implementation of the governance features identified included formalizing pre-existing organizational partnerships, establishing new partnerships through asset mapping, and consulting with communities and stakeholders (Table 3).

Financial arrangements

Three features were identified in relation to financial arrangements, including: 1) shared or joint funding agreements; 2) short-term or pilot funding; and 3) long-term or permanent funding (Table 3).

In relation to shared or joint funding agreements, I found that some initiatives, primarily the OHTs, had obtained joint funding agreements through the Ministry of Health and other grant funding opportunities, including from the City of Toronto. Most joint funding obtained was earmarked for project management, administration, and evaluation activities. In the case of the OHTs, this also included the addition of new staff to support these activities who usually sat at the leadership, decision-making, and/or operations table. There was no sharing or pooling of resources from individual partners' internal budgets to contribute to the integrated care arrangement, except in the case of an academic collaboration that was undertaken by the Vanier Social Pediatric Hub. In this case, a staff position was subsidized by the Faculty of Medicine partner and the initiative was modified to become a training opportunity for medical students. To support implementation despite no pooling of financial resources among initiatives, many participants indicated that they were contributing significant in-kind resources such as staff time to help support development and implementation (Table 3). This was described by a manager in the quote below:

> *ID03: "From a question of have we taken our resources and allocated other places, no, however our leadership team and our management team have spent tons and tons of time working in the OHT. So the question that we're actually looking at, given where we're at now, is whether we continue to invest that amount of time, which costs us money."*

For the second feature identified, almost every initiative was funded through short-term or pilot funding from either the Ministry of Health or other grants, including one initiative that was funded for a three-year term through the Ontario Local Poverty Reduction Fund and another through an academic research grant from the Canadian Institutes of Health Research. Many participants discussed how they utilized a 'mixed bag' or patchwork of funding to operate the initiative including donations and one-time grants, either once their initial pilot funding had run

out or in tandem with their existing grant. One participant reported that the unstable funding they experienced caused uncertainty around the sustainability of their initiative.

For the few initiatives that had obtained long-term or permanent funding, most did not modify remuneration for existing staff appointments, even when the scope of their role may have been expanded to support the integrated care initiative (Table 3). One exception to this was the Shelter Health Network, which received an alternate funding plan from the Ministry of Health to fund their physicians who were co-located in the social sector.

Delivery arrangements

I identified five key features in the delivery of integrated primary care and social care, which include: 1) integrated services with a range of social partners included; 2) care delivered by system navigators with support from project management staff; 3) co-location of services; 4) designated referral pathways to integrated services; and 5) use of digital tools for identifying patients/ clients and coordinating care (Table 3).

Regarding the first delivery feature of providing integrated services with a range of social partners included, I found that initiatives frequently included social service partners providing food security, housing, legal aid, employment, and income assistance services to meet the diverse and intersectional social needs that clients involved in these initiatives experienced. Secondly, I found that most initiatives delivered care by system navigators with the support of project management staff. While the title of this system navigation role differed between initiatives (including titles such as social prescriber, income health promoter, and link worker), the scope of responsibilities primarily remained the same. As described in the quote below by a lead health promoter, the system navigator was responsible for meeting one-on-one with clients to gain a deeper understanding of their social needs, identifying services and supports in their community that they were eligible for, and making the connection to these services by instigating referrals, filling out forms, booking appointments, and even going to the appointment with the client or participating in joint meetings or calls with a partner organization or service to discuss care planning. This role was often also responsible for the administrative side of care delivery including tracking and follow up of patients once any referrals to community services had been made. Some system navigators had expertise in income security and were responsible for the delivery of free income tax clinics and other financial aid services.

> *ID08: "So we've [system navigators] helped people fill out disability forms, apply for regional housing, specialized transit, any sort of government income or social assistance programs, we'll help them do that. Or we'll direct them to another organization that can assist so like we frequently refer to community legal supports, we'll refer out to different mental health supports and counselling services. So anything that we can't directly help with we'll refer or we will help the client through personally as well."*

Due to lack of funds, organizations commonly repurposed social workers and health promoters to fill the system navigation role, which was identified as a factor to support the implementation of the system navigator approach (Table 3). The exception to this was the ARC initiative, which hired a lay person as a system navigator. Interestingly, the participant involved in this initiative discussed how having a highly trained individual such as a social worker or

health promoter was not necessary for the system navigation role and instead that utilizing a lay person could be implemented as a cost saving measure. The participant also emphasized that priority should be given to selecting navigators with an affinity for patient centred care and that training should be provided on patient centred communication, active listening, and motivational interviewing.

In addition to repurposing staff, expanding the scope of responsibilities for existing staff as a cost saving measure was also identified as a factor that supported the implementation of the system navigator approach (Table 3). This was most common at CHCs that participated in the Rx: Community Social Prescribing Pilot initiative, where health promoters and community health workers acted as a social prescribing team in addition to their existing responsibilities. Broadening the scope of responsibilities was also common at the leadership and management level, where participants described how they were taking on an extra workload to support the initiative by sitting at leadership tables, communicating and coordinating with partner organizations, and overseeing delivery.

For the third feature of co-location of services, I found that most initiatives that utilized a system navigator approach co-located primary care and social care services. As described in the quote below by the leader of one initiative that was co-located in the social services sector, this enabled them to meet with the client in a comfortable location that they trusted to identify their needs and develop a coordinated plan.

> *ID04: "We meet the families over a kitchen table. It's not in a formal medical room although there's an examining table but we have a screen. But there's tea, coffee, and snacks on the table… We all sit round the table. The child can be playing with the toys. And it really is very informal. So I will be asking about social issues, the social worker might be asking about some health issues. In that way, it feels more like a conversation for the family rather than going through a history taking. And that's very comfortable for the families."*

However, most initiatives were co-located at the point of primary care delivery. As a result, in relation to the fourth feature of designated referral pathways to integrated services, I found that primary care was the predominant entry point into the integrated care pathway among initiatives. Referrals were then made from a primary care provider to the system navigator, who then referred the client to the broader integrated care partner network or other community services. Participants emphasized that they consistently saw referrals to the initiative from across the interprofessional care team in FHTs and CHCs and not solely physicians. Referral pathways were established, supported, and strengthened using a range of communication measures, including phone, fax, secure emails, and modified forms in the electronic medical record. Interestingly, one participant from an OHT reported that they had adopted a biweekly virtual case rounds approach. They viewed this approach as important for addressing the social determinants of health, because it enabled them to have all the health and social service partners at one table who could discuss complex patient cases and directly coordinate a warm hand off between themselves.

Despite established referral processes, patient tracking and follow-up was limited across initiatives. The initiatives that did engage in tracking to support the implementation of designated referral pathways modified forms on the FHT or CHCs' electronic medical record (Table 3). However, these forms were not shared between health and social partners. Lastly, in relation to feature five, some initiatives utilized digital tools for identifying patients/ clients and coordinating care. For social needs screening to identify prospective clients, a few initiatives had modified EMR forms to record or flag specific social risk factors. However, as most initiatives did not utilize formal and/or standardized screening tools through EMR forms or other digital modalities, many initiatives leveraged informal patient-provider conversations and established relationships that led providers to gain an understanding of patients' social needs (Table 3). In relation to care coordination, one initiative utilized a shared record system between partner organizations that was developed by Health Links. The electronic platform, titled Health Partners Gateway, contained coordinated care plans for patients. Organizations and agencies involved in care delivery could be added to the care plan, which was a live document where providers could view patient updates from other providers in real time. Signed consent had to be obtained from patients to share their data with other partner organizations through the coordinated care plans. The lead health promoter involved in this initiative also provided home visits where they could obtain consent from patients to eliminate barriers and increase accessibility.

Implementation supports

As an important implementation feature, I found that most initiatives provided information and education to enhance awareness, participation, and to engage new partners (Table 3). Specifically, these initiatives adopted a range of strategies to promote patient, provider, and organizational awareness, education, and engagement, including public information sessions, training workshops, and discussion forums. For the two initiatives that accepted self-referrals, both aimed to increase public awareness of the initiative by advertising through billboards, newspapers, and in community services. One CHC provided information on their social prescribing program to every new client during client intake, where clients were asked by their provider if it was a program they felt they could benefit from and were referred if the client indicated interest. Through another approach, a participant from an OHT reported that tangible tools like handouts and booklets were being developed to increase client awareness of available resources and support along the integrated care pathway.

Evaluation approaches

Lastly, I identified formal and informal evaluation approaches as a key feature across initiatives (Table 3). However, evaluation approaches differed between initiatives in alignment with their established outcomes of focus (Table 3). As described in the quote below by one participant, those from OHTs viewed the initiative as aiming to create coordinated care pathways between and throughout the health and social systems. Interestingly, CHCs involved in an OHT viewed their role in the integrated care arrangement as one responsible for centering the work of the OHT on equity through advocacy at the leadership and governance levels. Within OHTs, outcomes of focus were predominantly related to healthcare utilization, readmissions, post-discharge follow-up, and other population health metrics. As a result, participants referenced formal evaluation processes for measuring outcomes including collaborative quality improvement plans and management support from an external consulting firm.

> *ID01: "Our original vision that we set out was to create a system without discharges, the idea being that if you are a resident of east Toronto and you are receiving any kind of care here, that you're just part of the network, so it's not just a hand off between one provider to another, you know you get discharged from hospital and then you're discharged and transitioned say to your primary care physician or home care or other community services. The idea being you know, that we're all one team. So you're not discharged from one to another you are actually receiving care from an integrated team. That's our vision, for what we're working towards right now."*

In contrast to OHTs, other initiatives defined their outcomes in relation to meeting the needs of underserved populations and addressing gaps in service delivery and equity. As a result, these initiatives had a significant focus on investigating qualitative outcomes related to patient experience through survey methods and focus groups.

Table 3: Key features of integration initiatives and factors influencing their development and implementation process

Key features of integration initiatives		Factors influencing the development and implementation process
Governance arrangements	Shared governance approaches with shared decision-making authority ● Across most initiatives, this was operationalized through advisory or leadership committees with social-sector partners involved. ● In all initiatives, decision making authority was established at the highest levels of advisory or leadership and was often shared between partners involved. ● Within smaller-scale initiatives, decision-making was often through their executive director or board of directors. ● The setting of mission, vision, and goal outcomes was primarily the responsibility of leadership and shared governance structures across initiatives, however, some initiatives involved community consultations to contribute to setting mission, vision, and goals. ● In larger initiatives, subcommittees or working groups under an overarching governance mechanism were developed that often focused on specific project areas or populations. These groups included diverse stakeholders including organizations and agencies, patients, providers, and people with lived experience of inequity.	Formalizing pre-existing partnerships ● Most initiatives had pre-existing organizational partnerships that were in place either formally or informally prior to the implementation of the initiative that they could leverage. These partnerships were often strengthened through the formalized integrated care initiative. Establishing new partnerships ● New partnerships were primarily established through asset mapping to identify and target new partnership opportunities. Social sector organizations were primarily approached by health sector organizations in the establishment of new partnerships. ● The lead health promoter of one initiative delivered regular information sessions on the program for prospective partner organizations including shelters, medical school programs, and public health. Consulting with communities and stakeholders ● Some initiatives organized public consultations through information sessions and focus groups to co-design the approach taken, often targeting these consultation opportunities towards demographics of focus for the initiative and prospective partner organizations.
Financial arrangements	Shared or joint funding agreements ● For the few initiatives with joint funding agreements, funding primarily went to support project management, administration, and evaluation.	Contributing in-kind resources ● In response to a lack of sharing or pooling of financial resources, many participants reported that their organization was contributing significant staff time out of their own internal budgets to support development and implementation.

	● There was rarely a sharing or pooling of financial resources from individual organizations' internal budgets across all initiatives.	
	Short-term or pilot funding ● For most initiatives, short-term and/or pilot funding often came through the Ministry of Health, research grants, donations, and other one-time grants.	Leveraging integrated partnerships for funding opportunities ● For one participant, being an organizational partner in their OHT benefitted them when applying to new funding proposals and mobilizing resources to supplement their existing short-term funding, especially during the COVID-19 pandemic.
	Long-term or permanent funding ● A few initiatives were able to secure longer-term funding, particularly when funding for specific integrated care staff roles were integrated into existing family health team funding.	Remuneration for existing appointments or staff roles ● Most initiatives did not modify remuneration for existing staff appointments, except for two initiatives that obtained longer-term funding. For the Shelter Health Network, an alternative funding plan was provided to physicians co-located within the social service sector by the Ministry of Health. Additionally, for another initiative, stipends were provided by an academic department to support administrative support roles.
Delivery arrangements	Integrated services with a range of social service partners included ● Across initiatives, there were a diverse range of partnerships between primary care and employment centres, social assistance agencies including ODSP and Ontario Works, shelters including Salvation Army, legal aid services, food banks, housing, and newcomer services.	Reviewing Canadian and international initiatives ● To inform the approaches to integrated service delivery taken, some initiatives examined Canadian and international initiatives in Quebec, the United Kingdom, and the United States including the Vanier Social Pediatric Hub, Rx: Community Social Prescribing Pilot, the Health Justice Program, and the Reach Out and Read Literacy Program. Identifying target populations and their needs to inform the partnerships and services involved ● OHTs had priority populations of focus based on Ministry of Health funding requirements, often identified from emergency department and other hospital usage metrics.

		● Other initiatives were generally focused on providing care for underserved populations who experience barriers in access to health and social care.
	Care delivered by system navigators with support from project management staff ● Most initiatives that brought in new staff utilized a system navigator position and staff for project management. ● Most commonly, the system navigator role was responsible for one-on-one meetings with clients to gain a deeper understanding of their social needs, identifying services and supports in their community, screening eligibility, and communicating with services on behalf of the client.	Re-purposing of staff ● In most cases, health promoters or social workers were repurposed to support the system navigation and social prescribing roles, typically as an expansion to their existing roles and responsibilities. Sharing of staff between organizations ● Within OHTs, staff were shared between partners to support joint delivery initiatives and/or leadership and project management, often through secondment-type arrangements.
	Co-location of services ● Almost every initiative was co-located at the point of primary care delivery, with two initiatives co-located within the social service sector.	Designating office space within primary care delivery ● Most initiatives with a system navigator or income health promoter designated office space within the FHT or CHC where they could meet with clients or hold case coordination and planning meetings. Tailoring service location to client accessibility and needs ● Vanier Social Pediatric Hub co-located services within a community resource centre. ● The Shelter Health Network assigned their staff physicians to 16 different community partner sites including shelters, drop-in centres, and transitional housing programs. ● Other unique service delivery locations included home visiting with targeted mobile primary care and social services outreach.
	Designated referral pathways to integrated services	Utilizing a range of communication measures

	• Within FHTs and CHCs, referrals to the initiative commonly came from across the interprofessional care team and not solely physicians. • Some initiatives accepted referrals from community organizations, individual primary care offices, and self-referrals. • In most initiatives, once a referral was received, a system navigator or link worker would connect clients with internal or external programs and services between their organizational partners and other supports in the community.	• To support referral pathways within initiatives, methods of communication between health and social providers included fax, phone, and email. Tracking and follow-up of patients • To strengthen referral pathways, patient tracking between partner organizations was primarily done through the electronic medical record used by FHTs and CHCs. • Due to the lack of shared electronic records between health and social partners in most initiatives, follow-up of patients after referrals usually occurred through phone calls, faxing, and email.
	Use of digital tools for identifying patients/ clients and coordinating care • Most initiatives did not use formal or standardized screening tools to identify social needs. • Other initiatives elicited social demographic data during regular client intake or used a curated screening tool that drew from other existing tools. • Some initiatives utilized other digital tools to assist with patient tracking, care coordination, and follow up, including modified electronic health record forms, the Health Partners Gateway platform, and Google Documents.	Leveraging patient-provider relationships • As most initiatives did not use formal social screening toolers, the initial identification of social needs primarily occurred informally through conversation and relationship building between patients and their primary care provider. Additional social needs were also identified by the system navigator after the client was referred. Drawing on external integration support • One FHT's partnership with Health Links enabled them to set up coordinated care plans through Health Partners Gateway and to develop new organizational partnerships. Developing alternative digital platforms • To address the lack of shared records between health and social partners, one initiative created a shared Google Document to anonymously track patient referrals.
Implementation supports	Information and education provided to enhance awareness, participation, and to engage new partners • Information and educational initiatives were used for providers and organizations including workshops,	Developing forums for ongoing implementation support • Some initiatives provided open and ongoing discussion forums to answer questions and provided educational sessions for providers on requested topics and issues of interest.

	training sessions, information sessions, and open discussion forums. ● Some initiatives also designated clinical champions to promote uptake among providers. ● To raise awareness of new or revised programs and processes for community members and prospective service users, some initiatives with self-referral processes utilized public advertisements.	
Evaluation approaches	Formal and informal evaluation approaches ● OHTs were involved in formal evaluation processes related to healthcare utilization and care coordination. They utilized approaches like collaborative quality improvement plans. ● Other initiatives like CHCs had undertaken surveys and focus groups to evaluate qualitative outcomes.	Establishing outcomes of focus to inform evaluation approaches taken ● OHTs were focused on metrics related to coordinated care across the health and social system and quantitative outcomes related to health care utilization. ● Other initiatives were focused on qualitative outcomes related to patient experience and removing barriers in access to care for underserved groups. Some participants reported that their initiative had resulted in improved quality of life, reductions in social isolation, and improvements in social connectedness for participants.

3.2 Lessons learned from implementation

Key findings related to barriers and facilitators in the development and implementation of initiatives are listed in Table 4 along with illustrative quotes. Appendix 1e includes a more detailed version of this table with additional illustrative quotes.

Barriers

A few key factors were identified as consistent challenges across initiatives, including: 1) trust, transparency, and accountability; 2) funding; 3) information sharing and communication; 4) health human resources; 5) organizational leadership; and 6) showing equity-focused outcomes. First, despite the adoption of shared governance structures that were intended to facilitate collaborative decision-making among multiple partners, participants from OHTs still experienced challenges with transparency in decision-making. This was noted as diminishing or undermining trust between partners, particularly among partners that were not members of the formal operational or decision-making table. In addition, when decision-making authority was unclear it was difficult to implement mechanisms of accountability. Funding insecurity was also consistently highlighted as a barrier to implementation, particularly for initiatives that required staff to broaden the scope and workload of their existing responsibilities to contribute to the initiative due to a lack of funds. Across initiatives, challenges with information sharing and communication between health and social partners were prevalent, particularly in larger initiatives where multiple partners were involved. This had implications for the tracking and follow-up of patients, as the existing electronic medical record system infrastructure was not designed to track non-clinical referrals or to be shared with those outside of the health sector. As a result, tracking and follow-up of patients between health and social partners was limited or required an increased administrative burden on staff members.

Initiatives also experienced operational challenges related to service delivery, specifically in relation to health human resources and staffing coordination. In addition to a lack of staff, participants from OHTs reported that bringing together staff members who were accountable to different organizations was problematic during joint delivery arrangements. Staff from different organizations had different end goals that they were working to advance due to their organizational mandates, which resulted in the misalignment of expectations and deliverables. In addition, some participants cited challenges with obtaining buy-in from providers to deliver the initiative. One participant from a CHC reported that because screening for social needs by primary care providers did not have an impact on their funding, providers did not feel a responsibility or accountability to participate in the integrated care arrangement or to be fully engaged.

Lastly, many participants discussed challenges with measuring and demonstrating the outcomes related to reducing barriers to care and addressing the social determinants of health. Specifically, participants referenced a lack of infrastructure for social demographic data collection to evaluate improvements in social needs. For initiatives that collected data on qualitative outcomes related to patient experiences through surveys and focus groups, participants reported that these types of outcomes were not valued within the health system to the

same extent as quantitative data. As a result, it was challenging to capture the effects an initiative had on clients and to translate these outcomes in a way that was valued in evaluations and funding applications. Lastly, a participant described how the intended benefits of their initiative were likely to be realized in the long-term and did not align with the popular appeal of short-term outcomes associated with reduced healthcare costs and utilization, which also had implications for obtaining funding.

Facilitators

In the development and implementation of initiatives, a few key factors were identified as facilitators, including: 1) trust, transparency, and accountability; 2) communication; 3) leadership support and culture change; 4) model of primary care delivery; 5) location of service delivery; and 6) designated staff and support roles. For most initiatives, established trust that had been developed over years of partnership building between organizations was a significant facilitator to implementation. This may indicate that the maturity of the model may influence whether participants viewed trust as a facilitator. Trust was also promoted when leadership maintained transparency and accountability at the decision-making level. To further ensure accountability within the initiative, one participant described how building the integrated care work into their academic department's strategic plan helped to increase accountability for the work and ensured it was maintained as a highly visible priority. Secondly, establishing and sustaining ongoing communication between organizational partners and providers was cited as a facilitator in both larger and smaller scale initiatives. One participant from an OHT reported that having a designated communications team responsible for coordinating messaging and information across the integrated care partner network was a facilitator in implementation. During development and implementation of initiatives, participants highlighted that obtaining support from their organizational leadership including academic departments, executive directors, and board of directors was viewed as an enabler. Examples of tangible leadership support included building designated time and funding into existing staff roles and responsibilities to support the initiative.

In relation to delivery, some participants reported that the CHC model of primary care was an important facilitator to implementation. First, some participants viewed the salaried provider remuneration model in CHCs as giving physicians flexibility in the time they were able to spend with patients, which may increase their likelihood of identifying social needs. Secondly, two participants reported that CHCs' model of health and wellbeing mandate was a significant enabler in implementing primary care and social care, as CHCs had a long history of working from an equity and social determinants of health lens. Lastly, participants from CHCs described how they were able to draw on and leverage the longstanding formal and informal community relationships and partnerships that CHCs had engendered over time to support the implementation of their initiative. In addition to the CHC primary care model, many participants viewed the system navigator role as fundamental to their initiative as they bridged the gap between primary care and social care services. Finally, the co-location of the initiative within primary care or the social sector was also emphasized as an important feature. From the client perspective, co-locating services removed barriers in access for clients as it was conveniently located at places where clients were already receiving care. Some participants reported that co-location enabled them to walk a patient down the hall to another provider or service, which facilitated a warm hand off. From a provider perspective, the co-location of services was

beneficial in facilitating convenient communication, relationship building, and care coordination between staff including primary care providers, system navigators, and partner organizations.

Table 4: Lessons learned from implementation

Lessons learned from implementation	**Key findings**	
Barriers	Lack of trust, transparency, and accountability	● Particularly in larger initiatives like OHTs, a lack of trust, transparency, and accountability within governance and decision-making structures were identified as challenges. ● ID10: "Despite having this bit of a solid structure, we still as a cluster of CHCs don't really feel like there's a lot of transparency and a lot of information sharing because by the time it gets to the CEO level or the operational level it seems many of the decisions are being made and a certain percentage of things come to that people. So we're not all clear of what's happening at the OHT level, who's doing what, who's getting funded, why, what are the priorities."
	Insufficient and uncertain funding	● Most initiatives experienced funding insecurity, particularly for those that were funded through one-time grants and/or on a pilot basis. ● As most of the funding obtained was earmarked for evaluation and project management support, organizations relied on out-of-pocket spending from their internal budgets since partners were unwilling to pool or share financial resources. ● ID01: "Funding to do the work – you know, all this right now while we get a bit of funding from the Ministry, no one is actually funded to, from the partner perspective, to run their organization AND work with [the OHT] to deliver integrated models of care. For example, I can't tell you … how much time they spend, you know, trying to run their own organization and then create an integrated care model. So that's hard, it's off the side of peoples' desks. And of course respond to COVID at the same time. So that's an ongoing issue."
	Inability to share information and communicate	● The inability to have shared electronic records between health and social partners produced challenges for tracking, follow-up, and general communication between providers, specifically at the delivery level.
	Lack of health human resources and staffing coordination challenges	● In addition to a lack of staff to support delivery, initiatives also cited staffing structure and coordination as issues when bringing together staff from different organizations to deliver care.

		● ID03: "I think one of the challenges is how the work gets done. So we have different positions that are accountable to different organizations… Nobody is accountable to the higher level coordination positions… and I think some of the staffing structure is problematic, because if you're working for me and someone else is working for someone else, if we don't have the same kind of end goals, how do you get to a common place? And so then expectations are not as clear as they need to be. Deliverables are not the same."
	Lack of organizational leadership and provider buy-in	● The amount of resources an organization had affected their level of buy-in and engagement in the initiative. This resulted in inequitable participation between health and social partners. ● As participation in an initiative was not a precursor to physician remuneration, some participants cited provider buy-in as a challenge due to a lack of accountability. ● ID02: "The other thing is that it needs to be a part of their accountability. So for our centres it was really hard even in a centre that has health equity as the model, it was really hard to get clinicians to start doing this work because its not counted like in their accountability. So they're like, "why do I need to track this? Like I don't need to report this to anyone, it doesn't change my funding, like, there's no – why would I need to do this?" so it needs to be, like that equity lens and the kind of like addressing social determinants has to be part of accountability."
	Inability to show equity-focused outcomes	● Qualitative outcomes related to patient experience and the removal of barriers were difficult to demonstrate, due to their misalignment with existing health system data collection infrastructure. These outcomes were also not valued by existing funding structures in comparison to quantitative outcomes. ● ID09: "One of the big challenges for us is that, we just don't have great kind of social demographic data. This is a problem throughout the healthcare system, right, that it's really hard to see equity focused outcomes without having that type of data available. Right, even on things like race or ethnicity or income level or housing status, you know, employment status, like it's just not there"
Facilitators	Trust, transparency, and accountability	● Trust that had been established through long-standing relationships and partnerships promoted confidence in sharing and aligning resources under new and/or formalized integration initiatives.

	Communication	● Creating channels that facilitated and sustained communication between partners and staff at the governance and delivery level was viewed as a strength of some initiatives. ● ID03: "I think the other thing though… our OHT has a communications team. The communication leads for the anchor leads meet regularly. We have consistent branding and an approach so that people are constantly getting information, right. So in the high points of COVID… we were having weekly information sessions. So they were being organized centrally, people would dial in to Zoom or phone in, they could ask questions, they could engage. So one of the key successes I would say of our OHT is the need to constantly have strong communication networks that are both ways."
	Leadership support and culture change	● Leadership support for the initiative promoted culture change towards integration and resulted in greater buy-in from primary care providers and staff.
	Model of primary care delivery	● Participants viewed the CHC model as a facilitator of integrated care arrangements due to their funding model, organizational mandates, and community relationships and connections.
	Location of service delivery	● Co-locating services had benefits for patients and providers, including maintaining trust and facilitating communication and convenience. ● ID08: "The communication is a lot more open and effective just for a sense of convenience of me being onsite and the other health promoters here. So it's easier for us to run down and ask one of the doctors or providers here a question, or communicate through our EMR"
	Designated staff and support roles	● Adopting a system navigator, social prescriber, or link worker role was viewed as an integral component of delivery in many initiatives. ● Designated project management and administrative support staff including clinical champions were also viewed as enablers.
	Other unique facilitators	● One initiative's partnership with Health Links enabled them to establish infrastructure for coordinated care plans, which was viewed as an important facilitator early in the implementation of its system navigation program. This partnership also benefited them in connecting and partnering with other organizations through Health Link's network. ● One participant emphasized that having an organized primary care network as a partner in the initiative was integral to obtaining provider-buy in and engagement.

		• ID01: "So…having organized primary care has made a huge difference, so our family practice network - I don't know how we would have done this without them. Because they actually do provide leadership that represents family practice, family physicians in east Toronto, and there's a go-to place where you can say, "ok we want to do this with family physicians" and we can work with them to make it happen. It would have been impossible before I really don't know how we would have done that."

Chapter 4: Discussion

From documents and interviews with participants leading integrated primary care and social care arrangements in Ontario, I found that most initiatives involved the FHT or CHC model of primary care delivery and were built on pre-existing and longstanding community partnerships. This finding was unsurprising, as FHTs are the closest provincial initiative to the primary care medical home model and CHCs have a long-standing history of providing team-based primary care partnered with social supports for marginalized population groups.[28] As a result, this finding reflects policy legacies in Ontario that provide the resources and incentives for new integrated care initiatives within these modes of primary care delivery. Examples include reforms that introduced interprofessional primary health care teams and modified remuneration approaches including salary and capitation in the CHC and FHT models.[29] In addition, the maturity of these models may have influenced the features identified within initiatives and perceived barriers and facilitators to implementation given they have been established for longer.

To address the social determinants of health impacting clients through integrated services that enabled health and social needs-related referrals to be made, it required initiatives to bring together sectors that are traditionally siloed. As a result, developing and implementing these initiatives had primarily required the introduction of new governance and delivery arrangements. This included the adoption of shared governance structures where equal decision-making authority was often established between health and social partners, and the introduction of a system navigator role who was commonly co-located within primary care. There were minimal insights in relation to the development of new financial arrangements aside from a few joint funding agreements, as almost all initiatives did not share financial resources and few modified staff or provider remuneration. Despite the more recent reorientation towards integration in the province of Ontario, initiatives still experienced barriers that were reflective of broader health system challenges including a lack of permanent or long-term funding and technological infrastructure to support patient tracking, follow-up, and information sharing between health and social partners. However, the system navigator position was found to be an essential role in bridging communication gaps between sectors and delivering integrated care for clients, in addition to the co-location of primary care and social care services. Specifically, these approaches facilitated connection between provider teams and with patients which enabled a warm hand-off to ensure referral chains weren't broken, communication was maintained, and clients remained engaged along the care pathway. In addition, factors such as pre-existing informal and formal partnerships between primary care and social care organizations, communication and trust between health and social partners, transparency and accountability within governance structures, and organizational leadership support for integration were viewed as enablers of successful implementation and should be priority areas of focus in future integrated care initiatives and/or scale up of existing initiatives.

To our knowledge, this is the first study to focus specifically on identifying and describing how primary care is integrated with social care in Ontario from a social determinants of health perspective, and to focus on examining associated barriers and facilitators to implementation. However, our findings concur with existing studies that have examined key features, barriers, and facilitators to integrated health and social care initiatives more broadly.

Some studies have found that primary barriers encountered in integrated care initiatives include funding and a lack of shared electronic records and digital infrastructure, specifically for the tracking of patients involved in the initiative.[29,30] Other studies support the findings that pre-existing partnerships between health and social care, relationship building and trust between partners, forms of provider remuneration, and organizational culture and leadership support are strong facilitators to implementation.[30,31] In addition, the initiatives I identified are consistent with the types of social interventions in primary care identified by Bloch and Rozmovits (2021), which included social prescribing, income security health promotion specialists, medical-legal partnerships, and literacy interventions.[32] Lastly, our finding that there are minimal funding changes being undertaken to support initiatives is reflective of the findings by Mason, Goddard, Weatherly, and Chalkley (2015) and Wodchis et al. (2020), which demonstrated that other countries are more advanced in implementing new financial arrangements to support integrated health and social care arrangements, such as pooled funds, aligned budgets, lead commissioning with aligned incentives, and cross charging in the USA, the UK, and Australia.[33, 34]

Strengths and limitations

This study had two significant strengths. Firstly, by using a purposive sampling method, I was able to draw on the network of participants and members of the research team in identifying key stakeholders involved in integrated primary care and social care delivery. This ensured a diverse range of roles and professional backgrounds were invited to participate in the study, including health promoters, physicians, and senior management. Secondly, the iterative approach to data analysis enabled themes to be derived from the initial familiarization with the interview data and then refined through conversations with the research team and from further interviews as new themes were identified. As such, the initial coding framework changed over time to adequately reflect the data. In addition, the triangulation of interview findings with the documents helped to enrich the data and provide a fulsome picture of the initiatives.

There are some potential limitations that should be noted. First, while the sampling method ensured a diverse range of roles and professional backgrounds were involved in the interviews, there were no participants interviewed from the social services sector. As such, perspectives on lessons learned were reflective of those from the health sector, which may not be representative of the perspectives of stakeholders from the social sector who may perceive unique challenges and facilitators. Secondly, this study focused only on initiatives found in Ontario. As a result, the findings of this research may not be applicable to the health and social system contexts of other jurisdictions. However, given that Ontario is undergoing a period of transformational change towards integration, the lessons learned may be useful for other jurisdictions that are looking to implement or scale up integrated primary care and social care arrangements. Lastly, while this study used a three-pronged approach for identifying initiatives through the document analysis, research team network, and recommendations from participants, it is possible that not every integrated primary care and social care initiative in Ontario was identified in this study.

Implications for policy

As Ontario continues its shift towards integration, insights in relation to key features of existing integrated primary care and social care initiatives and the governance, financial, and

delivery arrangements that underpin them are useful for policymakers and health system leaders involved in the design, implementation, and scale up of future initiatives. Specifically, by identifying barriers and facilitators to their implementation, this study highlights key areas to focus investments and resources to mitigate existing and future challenges facing integrated care initiatives. Additionally, as some participants from initiatives reported that they are looking to expand the scope of their initiatives to include other forms of integrated primary care and social care like social prescribing and system navigation, the key lessons learned from participants already involved in these initiatives may prove useful.

Implications for future research

As the implementation barriers identified in this study include broader health system challenges (e.g., shared records and long-term and/or flexible funding), next steps for future research could include an analysis of possible options to address these barriers based on the experiences of other jurisdictions that have implemented similar initiatives. Secondly, as this study focused only on describing key features of initiatives, a proposed next step for future research is to evaluate outcomes associated with these types of integrated primary care and social care initiatives to determine their effectiveness in relation to the quadruple aim metrics. Lastly, an analysis could be undertaken to determine if there are factors which contributed to the sustainability of initiatives that are older versus younger.

Conclusion

This research study has identified and described the key features of nine initiatives in Ontario that integrate primary care and social care to address a range of determinants of health. In addition, it has identified key barriers and facilitators to their implementation, which are reflective of broader health system challenges. Drawing on the perspectives of stakeholders representing a diverse range of initiatives implemented in both rural and urban settings in Ontario, this study fills a gap in the existing integrated care literature by focusing specifically on how primary care is integrated with social care through a social determinants of health lens. The lessons learned from participants' experiences in planning and implementing these initiatives are timely and can inform future implementation and scale up as the province continues to move towards integrated care arrangements in efforts to achieve the quadruple aim benchmarks. As the initiatives included in this study were specifically developed for high needs, underserved, and/or marginalized populations, investments in these integrated care initiatives as an upstream and preventative approach may contribute to reduced health care utilization costs and should be of particular focus for policymakers and health system leaders. While the provincial government has further developed the infrastructure for integrated care through the introduction of the Ontario Health Team model, system-level challenges remain and should be addressed to support future implementation and scale up. As a next step for research, efforts should be undertaken to evaluate outcomes in relation to the quadruple aim metrics associated with these integrated care initiatives to further determine the case for their investment.

Appendices

Appendix 1a: Data Extraction Template

Source		Study Characteristics		Key features			Lessons learned
Citation	Type of document (journal, government website, policy brief, etc.)	Program/ Initiative Name	Year implemented- end date (if applicable)	Description of integration initiative	Social sector(s) involved	Health system context (governance, financial, delivery arrangements)	Barriers and facilitators to implementation

Appendix 1b: Documents identified

Type of Document	**Title**	**Date**	**Document Developer**	**Location the Document Applies To**	**Document Description**
Implementation documents: Application	"Ontario Health Team Full Application Form." [35]	2019	East Toronto Health Partners	Toronto	This application summarizes how East Toronto Health Partners proposes to meet the integrated care requirements of an Ontario Health Team. It describes specific plans for redesigning care and changing practice (including care coordination and system navigating services), and plans for addressing diverse population health needs.
Media and Communications: Email	"Ontario Health Team Submission from the East Toronto Health	2019	East Toronto Health Partners	Toronto	Email from the President and CEO of a partner organization on behalf of the East Toronto Health Partners which outlines the organizational members of their network, the collective populations they serve, and their goals for transforming care through the integrated Ontario

	Partners." [36]				Health Team model.
Implementation Document: Joint Venture/ Cooperation Agreement	"ETHP Joint Venture Agreement." [37]	2019	East Toronto Health Partners	Toronto	Outlines the anchor partners involved, guiding principles, and governance and funding arrangement of the initiative.
Media and Communications: Webpage Article	"Primary and Community Care (PCC) Response Teams." [38]	No date.	East Toronto Health Partners	Toronto	This article on the organization's website describes the PCC Response Teams program offered by the ETHP OHT. It details specifics on their client base, the partner organizations involved, the services offered, and the referral process for patients.
Implementation Document: Committee Report and Powerpoint Presentation	"PCC Response Teams 2021/2021 Year-End Report." [39]	2021	East Toronto Health Partners	Toronto	The PowerPoint presentation details findings from the evaluation report including governance and operational arrangements of PCC Response Teams, as well as key milestones achieved. This included 364 service connections made with 186 care plans created.
Media and Communications: Webpage	"Social Prescribing." [40]	No date.	Alliance for Healthier Communities	Ontario-wide	This webpage describes the Social Prescribing Pilot Project that was undertaken to connect primary- care patients to social services in their communities to address the social determinants of health. It outlines how social prescribing as a model

Article					works including the actors involved in the program such as healthcare providers and social prescribing navigators. It includes links to research reports and publications that evaluate outcomes.
Implementation Document: Final Report	"Rx: Community - Social Prescribing in Ontario Final Report." [41]	2020	Alliance for Healthier Communities	Ontario-wide	This document highlights the findings of a mixed-methods evaluation that was undertaken on the Social Prescribing Pilot program in Ontario. It includes key findings related to patient experience (improvements in clients' mental health and self-management of health, decreased loneliness, and increased sense of connectedness and belonging) as well as key barriers and facilitators to implementation and recommendations for scaling social prescribing in Ontario.
Media and Communications: Webpage Article	"Health Justice Program." [42]	2021	Unity Health Toronto	Toronto	Includes a description of the medical-legal partnership integrated care arrangement, the services provided, and the partner organizations involved.
Media and Communications: Webpage Article	"Social Determinants of Health." [43]	2021	Unity Health Toronto	Toronto	The webpage outlines initiatives the Social Determinants of Health Committee by the St. Michael's Academic FHT has undertaken to integrate action on social factors into programs and services. This includes the development and adoption of clinical tools, community engagement, sociodemographic data collection, research, and training for medical students and family physicians.
Imple	"Practisin	2020	St. Michael's	Toronto	This report describes the Social

mentation Document: Committee Report	g equity-focused health care." [44]		Unity Health Toronto		Determinants of Health Committee by the St. Michael's Academic FHT including its governance and funding structure as well as specific programs that have been implemented including the Income Security Promotion Program, and Health Justice Legal Services Program, and the Reach Out and Read Literacy Program.
Media and Communications: Webpage Article	"Navigating Ottawa Resources to Improve Health (NORTH)." [45]	No date.	uOttawa Faculty of Medicine Undergraduate Medical Education	Ottawa	This webpage describes the rationale, governance, and model underpinning the NORTH Clinic pilot project to address the social determinants of health of patients in Ottawa. The pilot took place between January and August 2018.
Media and Communications: Webpage Article	"Income Tax Clinics." [46]	No date.	Somerset West Community Health Centre	Ottawa	The webpage describes the Income Tax Clinic as an integrated primary- and social care initiative offered by the Somerset West Community Health Centre. It describes the target service users and operational details regarding the use of volunteers.
Media and Communications: Webpage Article	"Nouveaux arrivants francophones en Ontario." [47]	No date.	Centre de santé communautaire du Grand Sudbury	Sudbury	This webpage outlines the Centre de santé communautaire du Grand Sudbury's programs and service areas for newcomers to Ontario, including its housing support services offered in partnership with the Homeless Network. It also lists the members of its interprofessional care team, including social workers and a community development coordinator.
Media and Communicati	"Improving Communi ty	2012	Association of Family Health Teams of Ontario	Ontario-wide	This document describes the Community Health Prosperity Program offered by the Niagara Medical Group Family Health

ons: Advertisements and Posters	Prosperity by Addressing Social Determinants Of Health." [48]				Team. It details the service areas the program provides, including social assistance applications, housing, food security, employment, and income tax support. The Niagara Medical Group Family Health Team partnered with Niagara Region Public Health to operate this initiative. The program serves 12 municipalities of Niagara including patients who are both rostered and non-rostered.
Media and Communications: Webpage Article	"Who We Are." [49]	No date.	Shelter Health Network	Hamilton	The webpage describes the issues facing those living in poverty or who are homeless in Canada and the barriers they face to accessing health and social services. It describes how the Shelter Health Network, located in Hamilton, was created to address these issues and the interprofessional care team involved.
Implementation Document: Annual Report	"Inner City Health Associates Annual Report 2019-2020." [50]	2020	Inner City Health Associates	Toronto	This report summarizes key outcomes related to the Inner City Health Associates' activities in Toronto between 2019 and 2020, including the number of patient encounters and primary care visits.
Implementation Document: Final Report	"Resettling Health and Wellness: The Value of Integrated Newcomer Care." [51]	2021	WoodGreen Community Services	Toronto	This document details the integrated care program that was implemented to address the lack of health and social support for newcomers to Canada. It defines the client population, types of integrated care arrangements, and recommendations for supporting integrated care based on lessons learned from implementation.
Total	17				

Documents	

FHT = Family Health Team

Appendix 1c: Profiles of initiatives identified

Name	Year Implemented	Model of Integration	Description	Social System Program and Service Areas	Goal(s) of Initiative/ Outcome(s) of Focus	Priority Populations
Somerset West Community Health Centre	1978	Community Health Centre	The CHC provides a range of health and social services with a particular focus on vulnerable individuals who face barriers in accessing care. Key programs include an Income Tax Clinic, Social Services Walk-In, and Good Food Box service.	● Housing ● Food safety and security ● Children and Youth Services ● Community and social services ● Culture and gender ● Financial protection ● Education ● Transportation ● Recreation ● Citizenship ● Government services	Health equity and improving the social determinants of health.	Isolated seniors, those facing mental health challenges, racialized and newcomer community members, homeless and housing insecure, low-income individuals.
Centre de santé communautaire du Grand Sudbury	1990s	Community Health Centre	Integrated primary care services with a wide range of community partners in Sudbury. Interprofessional care teams include doctors, registered nurses, dietician, social workers, community health workers, health promotion coordinator, socio-community liaison officer, and community development	● Housing ● Children and youth services ● Community and social services ● Employment ● Culture and gender ● Consumer protection ● Recreation ● Citizenship	Health equity and improving the social determinants of health	Francophone patients, including LGBTQ+ and newcomers.

			coordinator.	• Government services		
Shelter Health Network	2005	Co-location of primary care in social service organizations, shelters, and drop-in centres	Through a collaboration with a network of health and social service organizations, primary care is delivered to those without a family doctor, those living in poverty, or who are homeless. Care is provided in shelters, transitional houses, drop-in centers and other facilities in Hamilton.	• Community and social services • Housing	Foster collaboration and coordination between health and social sectors and link clients with family physicians in the community	People living in poverty, homeless, precariously housed, and/or those without a family doctor.
St. Michael's Academic Family Health Team Social Determinants of Health Committee	2013	Family Health Team	Interprofessional care team offering specialized services and care programs with five clinics across downtown Toronto. It houses the Social Determinants of Health Committee, which spearheads the Health Justice Legal Services Program, the Income Security Health Promotion Program, and the Reach Out and Read Literacy Program.	• Children and youth services • Public safety and justice • Education • Financial protection	Health equity and addressing the social determinants of health	Focuses on serving low-income patients, with a particular focus on those facing precarious or unstable housing, Indigenous, those with HIV/AIDS, and/or those with disabilities.
The Vanier Social Pediatric Hub	2017	Co-located with social services	A social medicine collaboration between Vanier Community Service Centre, Children's Hospital of Eastern Ontario, Montfort hospital, and Sandy Hill Community Health Centre that	• Children and youth services • Citizenship • Community and social services • Culture and gender	Helping children to reach their full potential by connecting them with health and	Children and youth 17 and under who live or attend a school in Vanier, Ottawa, with a particular focus on youth and their families

			provides integrated health and social care. Delivery is through a team of paediatricians, social workers, a nurse practitioner, mental health workers, lawyers, and a care coordinator.	● Education ● Employment ● Food safety and security ● Housing	social resources that enable them to thrive	with low-socioeconomic status and children and youth who are experiencing psychosocial stressors.
Woodgreen Community Services' Interprofessional Care (IPC) Program	2017	Comprehensive Healthcare Network and Family Health Group	This program integrates primary care, settlement support, and other social services to connect newcomers with resources to address both health and social needs.	● Citizenship ● Community and social services ● Financial protection ● Housing	Supporting clients in comprehensively addressing social and medical needs, addressing the social determinants of health, and achieving the Quadruple Aim	Newcomers to Canada.
Access to Resources in the Community (ARC)	2017	Family Health Team and solo practitioner offices	Research project that embedded navigators into primary care practices to assist patients in addressing health and social needs by accessing resources in the community.	● Community and social services ● Financial protection ● Food safety and security ● Government services ● Housing ● Public safety and justice ● Recreation ● Transportation	Addressing health and social needs.	None.
Rx:	2018-2020	Community	Pilot project included 11	● Community and social	Health equity	Clients who social

Community - Social Prescribing Pilot by the Alliance for Healthier Communities		Health Centre	community health centre member organizations across Ontario including urban, rural, and Francophone centres. Social prescribers connected participants to food subsidies, housing navigation support, peer-run social groups, and arts and culture engagement.	services ● Culture and gender ● Food safety and security ● Education ● Recreation	and addressing the social determinants of health	prescribers feel could benefit from additional social support and connection or structural support including housing and food. Some pilot centres focused on isolated seniors and newcomer families.
Niagara Community Health Prosperity Program		Family Health Team	Through a partnership with Niagara Region Public Health and the Niagara Medical Group Family Health Team, the program connects patients with health promoters and a financial advisor to increase access to health, social, financial, and legal needs.	● Community and social services ● Education ● Financial protection ● Food safety and security ● Housing ● Transportation	Health equity and addressing the social determinants of health	Low-income adults and/or other marginalized patient population groups.
East Toronto Health Partners Ontario Health Team	2020	Ontario Health Team	Health and social services provided by a health team of six anchor partners including Michael Garron Hospital, Providence Healthcare, South Riverdale Community Health Centre, VHA Home Healthcare, WoodGreen Community Services and East Toronto Family Practice Network. Services. A network of other community organizations are also involved in service delivery.	● Children and youth services ● Citizenship ● Community and social services ● Employment ● Financial protection ● Food safety and security ● Housing ● Transportation	Health equity, delivering coordinated and integrated care, advancing the Quadruple Aim, and addressing health and social care needs.	Initial focus on seniors and caregivers with chronic disease, mental health and substance use challenges, and priority neighbourhoods.

Algoma Ontario Health Team	2020	Ontario Health Team	An integrated care network for patients in Algoma with 15 core partner organizations and collaborations with other health and social service providers. The patient population includes high proportions of Indigenous and Francophone people, those of low-income, older adults, and those with chronic conditions.	• Children and youth services • Citizenship • Community and social services • Employment • Financial protection • Food safety and security • Housing	Integrated, seamless care for residents.	Frail seniors and those under 75 with chronic conditions are the priority populations for year one of implementation.
N= 11						

Appendix 1d: Key features of integration initiatives and factors influencing their development and implementation process

Key features of integration initiatives		Factors influencing the development and implementation process	Illustrative quotes
Governance arrangements	Shared governance approaches with shared decision-making authority ● Across most initiatives, this was operationalized through advisory or leadership committees with social-sector partners involved. ● In all initiatives, decision making authority was established at the highest levels of advisory or leadership and was often shared between partners involved. ● Within smaller-scale initiatives, decision-making was often through their executive director or board of directors. ● The setting of mission, vision, and goal outcomes was primarily the responsibility of leadership and shared governance structures across initiatives, however, some initiatives involved community consultations to contribute to setting mission, vision, and goals. ● In larger initiatives, subcommittees or working groups under an overarching governance mechanism were developed that often focused on specific project areas or populations.	Formalizing pre-existing partnerships ● Most initiatives had pre-existing organizational partnerships that were in place either formally or informally prior to the implementation of the initiative that they could leverage. These partnerships were often strengthened through the formalized integrated care initiative. Establishing new partnerships ● New partnerships were primarily established through asset mapping to identify and target new partnership opportunities. Social sector organizations were primarily approached by health sector organizations in the establishment of new partnerships. ● The lead health promoter of one initiative delivered regular information sessions on the program for prospective partner organizations including shelters, medical school programs, and public health. Consulting with communities and stakeholders	ID06: "... the partners committee is kind of the overarching like kind of vision setting, vision, supervision, you know, entity. And it does have like equal representation, sort of, I mean it's a little bit imbalanced in the sense that there's three legal partners and one or two health partners. So formally the family health team and the hospital are partners, so you could look at it as two health partners and four legal partners." ID09: "... I mean so like these programs built off years of relationship building beforehand. Right so, you know, you take an example of the health justice program for example. I mean, like I was involved in conversations with the legal aid sector because of advocacy and policy work that I'd been doing for quite a few years before we got the program going." ID07: "...we hosted a citizens' reference panel… we actually invited seven thousand citizens to be part of that. So we sent out letters also to people without addresses and things like that so shelters, other areas, to see who could participate and then identified – I think it was thirty five individuals, to meet with us for four weekends in the month of

	These groups included diverse stakeholders including organizations and agencies, patients, providers, and people with lived experience of inequity.	• Some initiatives organized public consultations through information sessions and focus groups to co-design the approach taken, often targeting these consultation opportunities towards demographics of focus for the initiative and prospective partner organizations.	May last year and really help us design our values and principles but also our strategy going forward. So that was a big, big foundational piece for us and it was good because it didn't – it put the focus not on organizations but on the community and what they wanted."
Financial arrangements	Shared or joint funding agreements • For the few initiatives with joint funding agreements, funding primarily went to support project management, administration, and evaluation. • There was rarely a sharing or pooling of financial resources from individual organizations' internal budgets across all initiatives.	Contributing in-kind resources • In response to a lack of sharing or pooling of financial resources, many participants reported that their organization was contributing significant staff time out of their own internal budgets to support development and implementation.	ID07: "... the Ministry provides implementation funding for the OHTs so that's what we've been using to get us started and we jointly set the priorities and decide how to divvy up those funds which are for non-clinical resources so it's for quality improvement, project management and then have been applying jointly for new funding that is more integrated." ID03: "From a question of have we taken our resources and allocated other places, no, however our leadership team and our management team have spent tons and tons of time working in the OHT. So the question that we're actually looking at, given where we're at now, is whether we continue to invest that amount of time, which costs us money."
	Short-term or pilot funding • For most initiatives, short-term and/or pilot funding often came through the Ministry of Health, research grants, donations, and other one-time grants.	Leveraging integrated partnerships for funding opportunities • For one participant, being an organizational partner in their OHT benefitted them when applying to new	ID09: "You know, we do get some specific project funding. We have some research funding that has supported especially the kind of start-up of some of these programs. Our department has flexible funding that it uses to

		funding proposals and mobilizing resources to supplement their existing short-term funding, especially during the COVID-19 pandemic.	support some of the initiatives so for example our anti-racism work, a lot of that has been funded by just kind of diverted funds from like academic money or things that the department has. We've had some donations… You know, I'm sort of constantly looking at ways to just kind of bring in bits and pieces." ID03: "I think it allows us also when we're applying to funding to leverage additional resources because you're like, "well we're part of the OHT, we're an active partner" so when you're writing funding proposals and making those connections it allows you to actually say. So we have a way to make this happen and make it happen quickly even in the context of COVID."
	Long-term or permanent funding ● A few initiatives were able to secure longer-term funding, particularly when funding for specific integrated care staff roles were integrated into existing family health team funding.	Remuneration for existing appointments or staff roles ● Most initiatives did not modify remuneration for existing staff appointments, except for two initiatives that obtained longer-term funding. For the Shelter Health Network, an alternative funding plan was provided to physicians co-located within the social service sector by the Ministry of Health. Additionally, for another initiative, stipends were provided by an academic department to support administrative support roles.	ID09: "The other co-chair, the community engagement specialist, is obviously funded through her salary through the family health team. And then the specific projects are funded in different ways so like the income security health promotion program is core family health team funding which pays for these two full-time specialists." ID06: "And I'll just add that the, you know, the family health team does support my role as the clinical champion with like a monthly stipend as well as a like designation, like administrative time that gets funded."

Delivery arrangements	Integrated services with a range of social service partners included ● Across initiatives, there were a diverse range of partnerships between primary care and employment centres, social assistance agencies including ODSP and Ontario Works, shelters including Salvation Army, legal aid services, food banks, housing, and newcomer services.	Reviewing Canadian and international initiatives ● To inform the approaches to integrated service delivery taken, some initiatives examined Canadian and international initiatives in Quebec, the United Kingdom, and the United States including the Vanier Social Pediatric Hub, Rx: Community Social Prescribing Pilot, the Health Justice Program, and the Reach Out and Read Literacy Program. Identifying target populations and their needs to inform the partnerships and services involved ● OHTs had priority populations of focus based on Ministry of Health funding requirements, often identified from emergency department and other hospital usage metrics. ● Other initiatives were generally focused on providing care for underserved populations who experience barriers in access to health and social care.	ID08: "So the local community legal clinic for sure. So we try to access them for like appeals for disability or landlord tenant issues. We do partner with local shelters as well so we get a lot of referrals or feedback from the YWMC Women's Shelters, South Ridge Shelter, Salvation Army. We do try and kind of partner with the social assistance agencies as well so the Ontario Works and ODSP so just trying to even communicate with workers on behalf of clients or being present for phone appointments with them." ID04: "And it really is focused on the underserved … I always describe our community as richly diverse and underserved rather than talking about high needs, marginalized. As far as the public health metrics go, you know, we've got all the violence and the break ins and the prostitution, and the low birth weights, the grade three grade six scores, the EDI, really on all population measures, we're the area. It's richly diverse, it's the minority francophone area, many refugees, francophone, anglophone, multilingual, Indigenous high-density, open Indigenous, and low-income poverty. So we're focused with this model looking at really the most in need, filling the gap."
	Care delivered by system navigators with support from project management staff	Re-purposing of staff	ID08: "So we've [system navigators] helped people fill out disability forms, apply for

	• Most initiatives that brought in new staff utilized a system navigator position and staff for project management. • Most commonly, the system navigator role was responsible for one-on-one meetings with clients to gain a deeper understanding of their social needs, identifying services and supports in their community, screening eligibility, and communicating with services on behalf of the client.	• In most cases, health promoters or social workers were repurposed to support the system navigation and social prescribing roles, typically as an expansion to their existing roles and responsibilities. Sharing of staff between organizations • Within OHTs, staff were shared between partners to support joint delivery initiatives and/or leadership and project management, often through secondment-type arrangements.	regional housing, specialized transit, any sort of government income or social assistance programs, we'll help them do that. Or we'll direct them to another organization that can assist so like we frequently refer to community legal supports, we'll refer out to different mental health supports and counselling services. So anything that we can't directly help with we'll refer or we will help the client through personally as well." ID02: "So some CHCs have these system navigator roles, but they generally are focused on navigating health care system or health related systems and making those connections. So for some of our centres who have those system navigators and they've broadened their role to include the social pieces, like they loved it they recognize it's a missing piece, but also the workload increases a lot. For centres that don't have this, often we re-purposed a health promoter to be in that role."
	Co-location of services • Almost every initiative was co-located at the point of primary care delivery, with two initiatives co-located within the social service sector.	Designating office space within primary care delivery • Most initiatives with a system navigator or income health promoter designated office space within the FHT or CHC where they could meet with clients or hold case coordination and planning meetings. Tailoring service location to client	ID09: "Right, so our income security health promoters are core health team members, they are, you know, they are fully – I mean fully funded by our team. They come to all our meetings, they chart within our same record I mean and have access to all our same records and all the information that we have access to. They're housed and situated physically within our sites, I mean all of the – and that was all very much by design."

		accessibility and needs ● Vanier Social Pediatric Hub co-located services within a community resource centre. ● The Shelter Health Network assigned their staff physicians to 16 different community partner sites including shelters, drop-in centres, and transitional housing programs. ● Other unique service delivery locations included home visiting with targeted mobile primary care and social services outreach.	ID04: "We meet the families over a kitchen table. It's not in a formal medical room although there's an examining table but we have a screen. But there's tea, coffee, and snacks on the table… We all sit round the table. The child can be playing with the toys. And it really is very informal. So I will be asking about social issues, the social worker might be asking about some health issues. In that way, it feels more like a conversation for the family rather than going through a history taking. And that's very comfortable for the families."
	Designated referral pathways to integrated services ● Within FHTs and CHCs, referrals to the initiative commonly came from across the interprofessional care team and not solely physicians. ● Some initiatives accepted referrals from community organizations, individual primary care offices, and self-referrals. ● In most initiatives, once a referral was received, a system navigator or link worker would connect clients with internal or external programs and services between their organizational partners and other supports in the community.	Utilizing a range of communication measures ● To support referral pathways within initiatives, methods of communication between health and social providers included fax, phone, and email. Tracking and follow-up of patients ● To strengthen referral pathways, patient tracking between partner organizations was primarily done through the electronic medical record used by FHTs and CHCs. ● Due to the lack of shared electronic records between health and social partners in most initiatives, follow-up of patients after referrals usually	ID02: "So what we were pushing for – and this is the gap – is using the clinical door as a doorway to other services. So we know that people come see their health providers we know that its sometimes not - often not - strictly medical related. So the clinician recognizes, identifies, within their appointment or otherwise that there is additional support that would be beneficial, refers the person to some sort of link worker. What actually – more often happens it that clients get caught in somewhere else. So they may be going to diabetes education or they might be going to mental health counseling, and then those people refer them to the link worker. So they tend to be referred more from allied health than from the clinical doorway."

		occurred through phone calls, faxing, and email.	ID12: Yeah, so we have many different agencies meeting biweekly now since the beginning of COVID… So we have three key foundational aspects of each of these [program name], you needed primary care on the table, you needed a community agency on the table, and then you also needed home and community care on the table, so the [name] on the table. Front-line staff are there but at the same time, you have some of the managers and leadership strategic roles that also sometimes participate to encourage the front-line staff for that change management that's needed. Right, cause we bring cases to the table every other week… you know, the typical patient that we would see is so complicated and in the old world what we would do is say, "oh yeah, fax five referrals to five different agencies, hope somebody will come back and really understand what's needed, maybe they have a waitlist maybe they don't, maybe they'll respond to me, maybe they won't." But in this situation, "well we're all in the meeting let me bring up this case. And I want you to tell me what you think we can do."
	Use of digital tools for identifying patients/ clients and coordinating care ● Most initiatives did not use formal or standardized screening tools to identify social needs.	Leveraging patient-provider relationships ● As most initiatives did not use formal social screening toolers, the initial identification of social needs primarily occurred informally through conversation and relationship building	ID02: "Yeah so there's no screening tool… There's two pieces of information when we do client intake, the intake actually includes a number of social demographic information. So it includes income, education, languages they speak, household composition, all of that. So

	● Other initiatives elicited social demographic data during regular client intake or used a curated screening tool that drew from other existing tools. ● Some initiatives utilized other digital tools to assist with patient tracking, care coordination, and follow up, including modified electronic health record forms, the Health Partners Gateway platform, and Google Documents.	between patients and their primary care provider. Additional social needs were also identified by the system navigator after the client was referred. Drawing on external integration support ● One FHT's partnership with Health Links enabled them to set up coordinated care plans through Health Partners Gateway and to develop new organizational partnerships. Developing alternative digital platforms ● To address the lack of shared records between health and social partners, one initiative created a shared Google Document to anonymously track patient referrals.	that gives a sense of risk factors. And then it is through physician conversation and relationship." ID11: "So they would receive a referral through a form that we've designed for social prescribing and within that form, it's asking all of the relevant questions that a navigator would want to know. You know, like what is the issue, what are the recommendations, what has the client indicated basically. And then when the client meets or talks with – sorry, when the prescriber talks with the client they're always filling out an electronic health record like a - an encounter is what they call it. And then within that encounter they have end codes. So, it might be, you know, financial troubles due to unemployment, it could be food insecurity, it could be stress, anxiety, there's thousands upon thousands of end codes that they could include in it. And just if you pop in the most relevant ones that you're trying to address with the client and then how're you doing so, that fires it back to the provider to let them know that there's been follow through. And then all of the work is just tracked in that electronic health record. ID08: "So, the coordinated care plans, or CCPs as we call them … So we basically use that especially for individuals that have more than one provider involved so say for example, you know, their family doctor and

			then myself is involved and maybe developmental services and you know, like a welfare service or a couple of other agencies. So it's used for the patient and for all the agencies involved just to see who is involved, what their responsibilities are, and what the roles of the patient are. So it's really a document that's focused around client centred care so really about what the client's goals are and then who's involved to meet those goals. That way they know who to contact for particular issues and then everyone else involved knows who's doing what essentially so that we're not duplicating services that aren't needed. And it is a live document that's updated on that Health Partners Gateway, so every time that a change is made, whoever is a partner that's linked to that document can see the change and that way they're kept up to date with what's going on."
Implementation supports	Information and education provided to enhance awareness, participation, and to engage new partners ● Information and educational initiatives were used for providers and organizations including workshops, training sessions, information sessions, and open discussion forums. ● Some initiatives also designated clinical champions to promote uptake among providers.	Developing forums for ongoing implementation support ● Some initiatives provided open and ongoing discussion forums to answer questions and provided educational sessions for providers on requested topics and issues of interest.	ID06: "... we've done different education – targeted different education audiences at different points of our program and what we've found is probably the best use of our time is the interprofessional education. So – and primarily in the past it's been focused on the healthcare team so educating doctors, nurses, our healthcare team on how to spot issues, what to do when you spot them, you know, how to engage with these issues in a more meaningful way. So, you know, we've done ad hoc sort of sessions depending on

	● To raise awareness of new or revised programs and processes for community members and prospective service users, some initiatives with self-referral processes utilized public advertisements.		what we think the team wants to know or what people have asked us to present on." ID02: "We had – like we brought in these UK kind of partners over, experts. And we actually had a two to three day in person workshops with these UK partners and our members who have indicated interest. So not necessarily that they were committed to participating that they were just interested in learning more. And so they came and we did like a 3 day workshop together on what are the different models, what does it look like, what does it look like in your context, and how can it work. So I think that helps out a lot of the baseline and then we also had them come back like 2 months later – these UK partners – to do training with each centre. So we sat down with each centre, had a conversation, we tried to work – there was quite a bit of work on trying to figure out the existing processes with each centre and what would work with them in terms of, you know, who is going to be the responsible staff, how will the pathway work, what it will look like."
Evaluation approaches	Formal and informal evaluation approaches ● OHTs were involved in formal evaluation processes related to healthcare utilization and care coordination. They utilized	Establishing outcomes of focus to inform evaluation approaches taken ● OHTs were focused on metrics related to coordinated care across the health and social system and quantitative outcomes related to health care utilization.	ID07: "It's also taking some time for us to develop those measures. We've focused on higher level system measures so what is, you know, things that would impact two plus sectors or organizations so, you know, if something like post discharge follow- up so that would be a proxy for us in terms of is

	approaches like collaborative quality improvement plans. ● Other initiatives like CHCs had undertaken surveys and focus groups to evaluate qualitative outcomes.	● Other initiatives were focused on qualitative outcomes related to patient experience and removing barriers in access to care for underserved groups. Some participants reported that their initiative had resulted in improved quality of life, reductions in social isolation, and improvements in social connectedness for participants.	there a good relationship between acute care, primary care, and home care. ID01: "Our original vision that we set out was to create a system without discharges, the idea being that if you are a resident of east Toronto and you are receiving any kind of care here, that you're just part of the network, so it's not just a hand off between one provider to another, you know you get discharged from hospital and then you're discharged and transitioned say to your primary care physician or home care or other community services. The idea being you know, that we're all one team. So you're not discharged from one to another you are actually receiving care from an integrated team. That's our vision, for what we're working towards right now." ID02: "The self-reported mental health, physical health, and sense of belonging. So it is very much we hoped to measure, what we hoped to be an outcome. From our qualitative studies, there was additional outcomes, like our interviews and focus groups, you did see the additional things around improvement of self-management of health, people saying like "now I feel like I can do it more." There was an increase in sense of purpose because we also encouraged people to co-create and to volunteer."

Appendix 1e: Lessons learned from implementation

Lessons learned from implementation	Key findings		Illustrative Quotes
Barriers	Lack of trust, transparency, and accountability	• Particularly in larger initiatives like OHTs, a lack of trust, transparency, and accountability within governance and decision-making structures were identified as challenges.	ID10: "Despite having this bit of a solid structure, we still as a cluster of CHCs don't really feel like there's a lot of transparency and a lot of information sharing because by the time it gets to the CEO level or the operational level it seems many of the decisions are being made and a certain percentage of things come to that people. So we're not all clear of what's happening at the OHT level, who's doing what, who's getting funded, why, what are the priorities."
	Insufficient and uncertain funding	• Most initiatives experienced funding insecurity, particularly for those that were funded through one-time grants and/or on a pilot basis. • As most of the funding obtained was earmarked for evaluation and project management support, organizations relied on out-of-pocket spending from their internal budgets since partners were unwilling to pool or share financial resources.	ID01: "Funding to do the work – you know, all this right now while we get a bit of funding from the Ministry, no one is actually funded to, from the partner perspective, to run their organization AND work with [the OHT] to deliver integrated models of care. For example, I can't tell you … how much time they spend, you know, trying to run their own organization and then create an integrated care model. So that's hard, it's off the side of peoples' desks. And of course respond to COVID at the same time. So that's an ongoing issue." ID02: "So in terms of governance structures, the majority of the grant was around evaluation. So the centres actually did not get a lot of resources. They got a minimal amount of funding to support some of the

			data tracking, but there was no – so that came out as a barrier, that came out as an issue because it was quite difficult to add the administrative burden in addition to the work that people were doing and we were asking people essentially to do culture change at their organization." ID05: "So right now it's – we'd like it to be rolled out as a program not just a pragmatic approach but a program. But we – it costs money. The navigator costs money. And so we're kind of at a standstill, how do we move forward from here? We have to find a, an OHT who would be willing to invest in it and we are in discussion with some but they're not there yet."
	Inability to share information and communicate	• The inability to have shared electronic records between health and social partners produced challenges for tracking, follow-up, and general communication between providers, specifically at the delivery level.	ID02: "Our system, like the electronic medical record system, is not set up really to track the nonclinical referrals. So it has worked for our pilot because a lot of the referrals were internal. So everyone is on the same EMR, within like, the majority of CHCs are on the same EMR system and we have a central business intelligence where we can pull the data. So we can track a person's journey from the physician, for example, or allied health to the link worker, to the internal programs they go referred to. You can even track what other programs they got referred to, but what happens after that is hard to track… once you leave the CHC system like if you're connecting someone to like, you know, the older adult centre down the street, we don't – yeah it's hard to know what happened to that."
	Lack of health human resources and staffing coordination	• In addition to a lack of staff to support delivery, initiatives also	ID03: "I think one of the challenges is how the work gets done. So we have different positions that are

	challenges	cited staffing structure and coordination as issues when bringing together staff from different organizations to deliver care.	accountable to different organizations… Nobody is accountable to the higher level coordination positions… and I think some of the staffing structure is problematic, because if you're working for me and someone else is working for someone else, if we don't have the same kind of end goals, how do you get to a common place? And so then expectations are not as clear as they need to be. Deliverables are not the same."
	Lack of organizational leadership and provider buy-in	• The amount of resources an organization had affected their level of buy-in and engagement in the initiative. This resulted in inequitable participation between health and social partners. • As participation in an initiative was not a precursor to physician remuneration, some participants cited provider buy-in as a challenge due to a lack of accountability.	ID07: "I would say also is like level of buy in so some partners extremely bought in others not. Financial, definitely you know you have your acute care partners who have more ability to finance things versus, you know, community-based partners." ID02: "The other thing is that it needs to be a part of their accountability. So for our centres it was really hard even in a centre that has health equity as the model, it was really hard to get clinicians to start doing this work because its not counted like in their accountability. So they're like, "why do I need to track this? Like I don't need to report this to anyone, it doesn't change my funding, like, there's no – why would I need to do this?" so it needs to be, like that equity lens and the kind of like addressing social determinants has to be part of accountability."
	Inability to showing equity-focused outcomes	• Qualitative outcomes related to patient experience and the removal of barriers were difficult to demonstrate, due to their misalignment with existing health system data collection	ID05: "But the challenge though is that the things that this person is doing, the benefits are going to be much further down the road. Whereas the clinical people, those who are in clinical roles, they're usually addressing a more critical situation where you are trying to avoid costs that are gonna happen in the more

		infrastructure. These outcomes were also not valued by existing funding structures in comparison to quantitative outcomes.	immediate future. So that's more appealing to regions because they could envisage the benefit in a shorter term." ID09: "One of the big challenges for us is that, we just don't have great kind of social demographic data. This is a problem throughout the healthcare system, right, that it's really hard to see equity focused outcomes without having that type of data available. Right, even on things like race or ethnicity or income level or housing status, you know, employment status, like it's just not there" ID11: "Capturing that whole qualitative data, you know, capturing the change and the times that we've been told, "you saved my life" you know, if you can't quantify that, it's not being captured… We cannot capture that qualitative data or as easily as what quantitative data in primary care is captured…So for example of that, when my team is – when their data comes up and it shows ok in this quarter you've had 250 clients. Well that's fantastic, but compared to primary care – and I'm not sure why we're always compared, and they have, you know, 1250 it kind of – you know, people start to wonder, right? That's more measurable. Whereas, with a community team that type of work – 250 people – it could have been some really really big issues, a lot of complexities, and we could have met with one of those 250 people maybe 12 to 15 times that one month. But did it see 19 000 in back taxes and ODSP being seen through? Yes it did. Do you know what I mean? Like that's an entire change for that individual's life, but how do you capture that in just one encounter versus a

			provider maybe seeing 1200 people, right? So that would be the frustration in this type of work."
Facilitators	Trust, transparency, and accountability	• Trust that had been established through long-standing relationships and partnerships promoted confidence in sharing and aligning resources under new and/or formalized integration initiatives.	ID07: "As things progress, people built more trust and were more willing to share resources and align resources so we have a few initiatives, obviously for COVID and mental health and other things where people really did a good job in aligning resources, positions and what not." ID09: "Yeah, and then building this into the strategic plan of the department has been really important. So we've now - you know we've had two strategic plans in which we've had very strong representation of this work, which again it really holds the leadership in the department accountable, right, and makes sure that they will keep a focus on this work. And also, you know, makes sure the rest of the department – we can always refer back to it right, and just be like, "look we are doing work that is absolutely core to what we do" and holds some accountability to the outside world as well."
	Communication	• Creating channels that facilitated and sustained communication between partners and staff at the governance and delivery level was viewed as a strength of some initiatives.	ID03: "I think the other thing though… our OHT has a communications team. The communication leads for the anchor leads meet regularly. We have consistent branding and an approach so that people are constantly getting information, right. So in the high points of COVID… we were having weekly information sessions. So they were being organized centrally, people would dial in to Zoom or phone in, they could ask questions, they could engage. So one of the key successes I would say of our OHT is the need to

			constantly have strong communication networks that are both ways."
	Leadership support and culture change	• Leadership support for the initiative promoted culture change towards integration and resulted in greater buy-in from primary care providers and staff.	ID11: "... our board of directors have been extremely supportive in implementing social prescribing… it was brought on, you know, to our centre as a huge important initiative and so we just kind of jumped into it with two feet…"
	Model of primary care delivery	• Participants viewed the CHC model as a facilitator of integrated care arrangements due to their funding model, organizational mandates, and community relationships and connections.	ID11: "I really think the model of health and wellbeing and the fact that we are a community health centre, a CHC, that's the approach that works best when dealing with social issues or when dealing with those social prescriptions." ID07: "And the other thing I'll just flag for you is that I think for me the model that does it the best in integrating health and social is obviously community health centres. And I think, you know, OHTs and others have so much to learn from, you know, how they do that. I think their funding model allows for a lot more flexibility."
	Location of service delivery	• Co-locating services had benefits for patients and providers, including maintaining trust and facilitating communication and convenience.	ID08: "The communication is a lot more open and effective just for a sense of convenience of me being onsite and the other health promoters here. So it's easier for us to run down and ask one of the doctors or providers here a question, or communicate through our EMR"
	Designated staff and support roles	• Adopting a system navigator, social prescriber, or link worker role was	ID06: "The fact that my family health team has invested and supported the clinical champion role is really important because like I understand our team, I

		viewed as an integral component of delivery in many initiatives. ● Designated project management and administrative support staff including clinical champions were also viewed as enablers.	understand the system, I understand how to like make things work for us. I'm somebody who can receive feedback from the healthcare team and pass it along to the legal team and, you know, kind of bridge these two worlds."
	Other unique facilitators	● One initiative's partnership with Health Links enabled them to establish infrastructure for coordinated care plans, which was viewed as an important facilitator early in the implementation of its system navigation program. This partnership also benefited them in connecting and partnering with other organizations through Health Link's network. ● One participant emphasized that having an organized primary care network as a partner in the initiative was integral to obtaining provider-buy in and engagement.	ID01: "So…having organized primary care has made a huge difference, so our family practice network - I don't know how we would have done this without them. Because they actually do provide leadership that represents family practice, family physicians in east Toronto, and there's a go-to place where you can say, "ok we want to do this with family physicians" and we can work with them to make it happen. It would have been impossible before I really don't know how we would have done that."

Appendix 2a: Study information and consent form

LETTER OF INFORMATION / CONSENT

Supporting the implementation of integrated primary care and social care services: A qualitative descriptive study

Investigators:

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Purpose of the Study

You are invited to take part in this study on the integration of primary and social care. We want to identify existing models, programs, and initiatives that integrate primary care and social care to address the nonmedical determinants of health such as housing, employment, food security, etc. We are hoping to learn what the key characteristics of these existing models as well as identify barriers and facilitators in their implementation. We hope these findings can be used to inform future implementation efforts of these types of integrated primary and social care programs.

I am doing this research for my master's level thesis under the supervision of Dr. Michael Wilson, who's contact information is included above.

This is a line of research that I hope to continue in the future and will use your data for this project as well as for future related studies.

Procedures involved in the Research

Once the informed consent form has been signed, you will have the opportunity to ask any clarification questions ahead of the interview via email or orally via telephone or video conferencing. The interview will be scheduled at your earliest availability and will take place either by telephone or video conferencing software such as Zoom or Skype, whichever you are most comfortable with. At the start of the interview, the interviewer will give an overview of the study aims and objectives and give you another opportunity to ask clarification questions. After this, the interviewer will administer a list of questions that will take roughly 45 minutes to administer. These questions are related to the key features of the integration initiative you are

involved in, and lessons learned regarding planning and implementation. You will also be asked for some background information on your role and responsibilities within your organization and within the integration initiative. Interview questions could include: "What nonmedical determinants of health does the program/ initiative aim to address? Can you describe any governance, financial, and/or delivery arrangements that have been adapted or implemented to facilitate the operation of this initiative? What works well in the implementation of integrated primary care and social care in the context of your program?" With your permission, your responses will be audio recorded and stored securely under password protection. The interviewer may also take hand-written notes during the interview.

Potential Harms, Risks or Discomforts:

It is not likely that there will be any harms or discomforts from/associated with the interviews. You do not need to answer questions that you do not want to answer or that make you feel uncomfortable, and you can stop to take a break at any time. You can withdraw from the study at any time. I describe below the steps I am taking to protect your privacy.

Potential Benefits

Through your participation, we aim to identify existing barriers and facilitators to integration as well as underlying characteristics of integration initiatives. Through the sharing of best practices, future models of care may be implemented in a more efficient and cost-effective manner. Scaling up integrated health and social care models in Ontario will help to address underlying determinants of health and connect patients with the resources they need to prevent adverse health conditions and improve population health outcomes. This is the first Ontario study to investigate this area of inquiry and would be filling a gap in knowledge regarding the integration of primary care and social care services from a population health perspective.

Confidentiality

Every effort will be made to protect your confidentiality and privacy. I will not use your name or any information that would allow you to be identified. However, we are often identifiable through the stories we tell. The use of direct quotes may be used in the reporting and publication of the research findings. All personal identifiers will be removed from these direct quotes and pseudonyms will be used.

The information/data you provide will be kept in a locked desk/cabinet where only I will have access to it. Information kept on a computer will be protected by zip encryption and a password. Once the study is complete, an archive of the data, without identifying information, will be kept on a hard drive to aid in potential future research studies.

Participation and Withdrawal

Your participation in this study is voluntary. It is your choice to be part of the study or not. If you decide to be part of the study, you can decide to withdraw, at any time, even after signing the consent form or part-way through the study. If you decide to withdraw, there will be no

consequences to you. Information provided up to the point where you withdraw will be kept unless you request that it be removed. If you do not want to answer some of the questions you do not have to, but you can still participate in the study. Please email Jacqueline Rintjema at rintjemj@mcmaster.ca or by phone number at 416 454 7740 to notify of your withdrawal.

Information about the Study Results

I expect to have this study completed by approximately April 2022. If you would like a brief summary of the results, please let me know how you would like it sent to you.

Questions about the Study

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

Jacqueline Rintjema
rintjemj@mcmaster.ca

This study has been reviewed by the Hamilton Integrated Research Ethics Board (HiREB). The HiREB is responsible for ensuring that participants are informed of the risks associated with the research, and that participants are free to decide if participation is right for them. If you have any questions about your rights as a research participant, please call the Office of the Chair, HiREB, at 905.521.2100 x 42013.

CONSENT

I have read the information presented in the information letter about a study being conducted by ***Jacqueline Rintjema*** of McMaster University.

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

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

_____ _____ _____

Name of Participant (Printed) Signature Date

Consent form explained in person by:

_____ _____ _____

Name and Role (Printed) Signature Date

Appendix 2b: Interview guide

Theme	Questions/ Prompts
Background information on participant	1. What is your current role within the organization? 2. Can you describe the work of your organization? (Community health center, Ontario health team, etc.) a. Are there any distinct characteristics about the patient populations you serve (i.e.: greater proportion of elderly patients, patients with chronic conditions, etc.)
Key features of integrated care program	3. Can you provide details on the integrated primary care and social care program? i. How long has your organization been delivering integrated primary care and social care? ii. Is there a particular target demographic/ population of focus for the integration program/ initiative? iii. What social sectors are involved in the integration initiative? iv. What nonmedical determinants of health does the program/ initiative aim to address? v. What are the intended outcomes of the program/ initiative? How are these measured? vi. Can you describe any governance, financial, and/or delivery arrangements that have been adapted or implemented to facilitate the operation of this initiative?

Lessons learned from integrated primary and ocial care programs	*Planning* 4. Can you describe the stages of the planning process that were undertaken leading up to the implementation of the program/ initiative? a. Who was involved in the planning of the program/ initiative? How were relationships and partnerships garnered with the social sector? b. What, if any, co-design approaches were taken to create the program? Can you describe them? c. Did you draw on other models of integration within Canada or globally to inform your program/ initiative? *Implementation* 5. What works well in the implementation of integrated primary care and social care in the context of your program? a. In relation to governance, financial, and delivery arrangements, what do you view as facilitators/ enablers in the implementation of integrated primary care and social care more generally? 6. What does not work well in the implementation of your initiative/ program? a. In the context of governance, financial, and delivery arrangements, what do you view as barriers to the implementation of integrated primary care and social care more generally?

References

1. Bodenheimer, T., & Sinsky, C. (2014). From Triple to Quadruple Aim: Care of the Patient Requires Care of the Provider. *Annals of Family Medicine*, *12*(6), 573–576. https://doi.org/10.1370/afm.1713
2. Leatt, P., & Guerriere, G. H. P. and M. (2000). Towards a Canadian Model of Integrated Healthcare. *HealthcarePapers*, *1*(2). https://www.longwoods.com/content/17216/healthcarepapers/towards-a-canadian-model-of-integrated-healthcare
3. Fooks, C., Goldhar, J., Wodchis, W. P., & Coutts, G. R. B. and J. (2018). Effective Approaches to Integrating Care: A Three-Part Series. *Healthcare Quarterly*, *21*(2). https://www.longwoods.com/content/25627//effective-approaches-to-integrating-care-a-three-part-series
4. Stephenson, M. D., Lisy, K., Stern, C. J., Feyer, A.-M., Fisher, L., & Aromataris, E. C. (2019). The impact of integrated care for people with chronic conditions on hospital and emergency department utilization: A rapid review. *JBI Evidence Implementation*, *17*(1), 14–26. https://doi.org/10.1097/XEB.0000000000000151
5. Ontario Hospital Association. (n.d.). *Integrated Models of Care*. https://www.oha.com/Bulletins/Integrated%20Models%20of%20Care%20Snapshot.pdf
6. Public Health Agency of Canada. (2001, November 25). *What is the Population Health Approach?* https://www.canada.ca/en/public-health/services/health-promotion/population-health/population-health-approach.html
7. Waddell K, Reid R, Lavis JN. (2019) RISE brief 6: Population-health management. Hamilton, Canada: McMaster Health Forum.
8. Ontario Ministry of Health and Long-Term Care. (2020). *Primary Care Payment Models in Ontario*. https://www.health.gov.on.ca/en/pro/programs/pcpm/
9. Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly*, *83*(3), 457–502. https://doi.org/10.1111/j.1468-0009.2005.00409.x
10. Eissens van der Laan, M. R., van Offenbeek, M. A. G., Broekhuis, H., & Slaets, J. P. J. (2014). A person-centred segmentation study in elderly care: Towards efficient demand-driven care. *Social Science & Medicine*, *113*, 68–76. https://doi.org/10.1016/j.socscimed.2014.05.012
11. Collins, P., Resendes, S., & Dunn, J. (2014). The Untold Story: Examining Ontario's Community Health Centres' Initiatives to Address Upstream Determinants of Health. *Healthcare Policy*, *10*(1), 14–29. https://doi.org/10.12927/hcpol.2014.23977
12. Parkdale Queen West Community Health Centre. (2018). *CHC Model of Care*. https://pqwchc.org/about-us/who-we-are/chc-model-of-care/
13. Government of Ontario, Ministry of Health and Long-Term Care (2019). *Community Health Centres*. Government of Ontario, Ministry of Health and Long-Term Care. https://www.health.gov.on.ca/en/common/system/services/chc/
14. Grand River Community Health Centre. (2021). *Our Funders*. https://grandriverchc.ca/en/who-we-are/our-funders.aspx

15. Alliance for Healthier Communities. (n.d.). *Aboriginal Health Access Centres*. https://www.allianceon.org/aboriginal-health-access-centres
16. Rosser, W. W., Colwill, J. M., Kasperski, J., & Wilson, L. (2011). Progress of Ontario's Family Health Team Model: A Patient-Centered Medical Home. *Annals of Family Medicine*, *9*(2), 165–171. https://doi.org/10.1370/afm.1228
17. Association of Family Health Teams of Ontario. (n.d.). *Facts & Stats*. https://www.afhto.ca/why-team-based-care/facts-stats
18. Government of Ontario, Ontario Ministry of Health and Long-Term Care. (2021). *Family Health Teams*. Government of Ontario, Ministry of Health and Long-Term Care. https://www.health.gov.on.ca/en/pro/programs/fht/
19. Ontario Premier's Council on Improving Healthcare and Ending Hallway Medicine. (2019). *Hallway Health Care: A System Under Strain*. https://www.health.gov.on.ca/en/public/publications/premiers_council/docs/premiers_council_report.pdf
20. Ministry of Health and Long-Term Care. (2019). *Ontario Health Teams: Introduction and Overview*. https://health.gov.on.ca/en/pro/programs/connectedcare/oht/docs/oht_intro_webinar_en.pdf
21. Government of Ontario. (2021). *Ontario Announces Eight New Ontario Health Teams*. https://news.ontario.ca/en/release/1000822/ontario-announces-eight-new-ontario-health-teams
22. Kirst, M., Im, J., Burns, T., Baker, G. R., Goldhar, J., O'Campo, P., Wojtak, A., & Wodchis, W. P. (2017). What works in implementation of integrated care programs for older adults with complex needs? A realist review. *International Journal for Quality in Health Care*, *29*(5), 612–624. https://doi.org/10.1093/intqhc/mzx095
23. Murray, G. F., Rodriguez, H. P., & Lewis, V. A. (2020). Upstream With A Small Paddle: How ACOs Are Working Against The Current To Meet Patients' Social Needs. *Health Affairs*, *39*(2), 199–206. https://doi.org/10.1377/hlthaff.2019.01266
24. Briggs, A. D. M., Göpfert, A., Thorlby, R., Allwood, D., & Alderwick, H. (2020). Integrated health and care systems in England: Can they help prevent disease? *Integrated Healthcare Journal*, *2*(1), e000013. https://doi.org/10.1136/ihj-2019-000013
25. Lavis JN. (2017). Social Systems Evidence: Taxonomy of program and service areas, governance, financial and delivery arrangements, and implementation strategies within social systems. Hamilton, Canada: McMaster Health Forum.
26. Dalglish, S. L., Khalid, H., & McMahon, S. A. (2020). Document analysis in health policy research: The READ approach. *Health Policy and Planning*, *35*(10), 1424–1431. https://doi.org/10.1093/heapol/czaa064
27. Agency for Healthcare Research and Quality. (2021). *Defining the PCMH*. https://www.ahrq.gov/ncepcr/tools/pcmh/defining/index.html
28. Lukey, A., Johnston, S., Montesanti, S., Donnelly, C., Wankah, P., Breton, M., Gaboury, I., Parniak, S., Pritchard, C., Berg, S., Maiwald, K., Mallinson, S., Green, L. A., & Oelke, N. D. (2021). Facilitating Integration Through Team-Based Primary Healthcare: A Cross-Case Policy Analysis of Four Canadian Provinces. *International Journal of Integrated Care*, *21*(S2), 12. https://doi.org/10.5334/ijic.5680

29. Maruthappu, M., Hasan, A., & Zeltner, T. (2015). Enablers and Barriers in Implementing Integrated Care. *Health Systems & Reform*, *1*(4), 250–256. https://doi.org/10.1080/23288604.2015.1077301
30. Evans C, Dion A, Waddell K, Bullock H, Lavis JN, Grimshaw J. (2020). Rapid synthesis: Lessons learned from integrated-care initiatives in Ontario to inform Ontario Health Teams. Hamilton: McMaster Health Forum.
31. Kirst, M., Im, J., Burns, T., Baker, G. R., Goldhar, J., O'Campo, P., Wojtak, A., & Wodchis, W. P. (2017). What works in implementation of integrated care programs for older adults with complex needs? A realist review. *International Journal for Quality in Health Care: Journal of the International Society for Quality in Health Care*, *29*(5), 612–624. https://doi.org/10.1093/intqhc/mzx095
32. Bloch, G., & Rozmovits, L. (2021). *Implementing social interventions in primary care*. https://doi.org/doi: 10.1503/cmaj.210229
33. Mason, A., Goddard, M., Weatherly, H., & Chalkley, M. (2015). Integrating funds for health and social care: An evidence review. *Journal of Health Services Research & Policy*, *20*(3), 177–188. https://doi.org/10.1177/1355819614566832
34. Wodchis, W. P., Shaw, J., Sinha, S., Bhattacharyya, O., Shahid, S., & Anderson, G. (2020). Innovative Policy Supports For Integrated Health And Social Care Programs In High-Income Countries. *Health Affairs*, *39*(4), 697–703. https://doi.org/10.1377/hlthaff.2019.01587
35. East Toronto Health Partners Ontario Health Team. (2019). *Ontario Health Teams Full Application Form*. https://static1.squarespace.com/static/5e9afba0451da93bc7d24d15/t/5f58f3c51978cd4996bcb54c/1599665095381/OHT-Full-Application-Form-2019-09-27-Fillable-For-Submission-REVISE.._.pdf
36. Anne Babcock. (2019). *Ontario Health Team Submission from the East Toronto Health Partners*. https://static1.squarespace.com/static/5e9afba0451da93bc7d24d15/t/5f58f4331736fe64cd8d7e92/1599665204074/ETHP+cover+letter+Oct+9.pdf
37. *East Toronto Health Partners Joint Venture Agreement*. (2019). https://static1.squarespace.com/static/5e9afba0451da93bc7d24d15/t/6193db48713e9a243a98e378/1637079886838/Fully+Executed+Copy+of+the+ETHP+Joint+Venture+Agreement.pdf
38. East Toronto Health Partners. (n.d.). *Primary and Community Care Response Teams in East Toronto*. East Toronto Health Partners. https://ethp.ca/pccresponseteams
39. East Toronto Health Partners. (2021). *Evaluation Primary & Community Care Response Teams Year-End Report*. https://drive.google.com/file/d/1dL_mKH3fXxDGJsUryUqzRcmEWcoPUQUB/view
40. Alliance for Healthier Communities. (n.d.). *Social Prescribing*. https://www.allianceon.org/Social-Prescribing
41. Alliance for Healthier Communities. (2020). *Rx: Community—Social Prescribing in Ontario, Final Report*. https://cdn.ymaws.com/aohc.site-ym.com/resource/group/e0802d2e-298a-4d86-8af5-21156f9c057f/rxcommunity_final_report_mar.pdf

42. Unity Health Toronto. (2021). *Health Justice Program*. Unity Health Toronto. https://unityhealth.to/health-justice-program/
43. Unity Health Toronto. (2021). *Social Determinants Of Health*. Unity Health Toronto. https://unityhealth.to/social-determinants-of-health/
44. St. Michael's Hospital Academic Family Health Team. (2020). *Practising equity focused health care*. https://unityhealth.to/wp-content/uploads/2021/06/SDOH-at-SMHAFHT.pdf
45. uOttawa. (n.d.). *Navigating Ottawa Resources to Improve Health (NORTH)*. UGME. https://med.uottawa.ca/undergraduate/education/social-accountability/navigating-ottawa-resources-improve-health-north
46. Somerset West Community Health Centre. (n.d.). *Income Tax Clinics*. Somerset West Community Health Centre. https://www.swchc.on.ca/programs/income-tax-clinics
47. Center de santé communautaire du Grand Sudbury. (n.d.). *Nouveaux arrivants francophones en Ontario*. Center de Santé Communautaire Du Grand Sudbury. https://santesudbury.ca/nouveaux-arrivants-francophones-en-ontario/
48. Association of Family Health Teams of Ontario. (2019). *E5-a—Improving Community Prosperity by Addressing Social Determinants of Health | AFHTO*. https://www.afhto.ca/e5-improving-community-prosperity-addressing-social-determinants-health
49. Shelter Health Network. (n.d.). *Who We Are*. https://shelterhealthnetwork.ca/?page_id=204
50. Inner City Health Associates. (2020). *Annual Report 2019-2020*. https://www.icha-toronto.ca/new-site/wp-content/uploads/ICHA-Annual-Report-2019-20.pdf
51. WoodGreen Community Services. (2021). *Resettling health and wellness: The value of integrated newcomer care*. https://6ku921wl579rzaku16mzhn7r-wpengine.netdna-ssl.com/wp-content/uploads/2021/11/FINAL-Value-of-Integrated-Care-Report.pdf