

Central LHIN Health Links Case Study Report

Applied Health Research Question Series

Health System Performance Research Network

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Executive Summary

Context

In 2012, Ontario announced the creation of Health Links – an initiative to provide coordinated, efficient, and effective care to patients with complex health needs. This report is one of two companion reports that respond to an Applied Health Research Question (AHRQ) requested by the Central Local Health Integration Network (LHIN). This report seeks to assess the development and implementation of the Health Links in the Central LHIN while the companion report quantifies the impact of Central LHIN’s Health Links on patient care and outcomes.

The objective of this component of the evaluation was to examine provider and organizational leader experience with the implementation of Health Links and to assess the impact of organizational (i.e. partnering organizations) and inter-organizational (i.e. Health Link network) context and capabilities on the implementation of the Health Links (HLs). We addressed this objective by identifying key organizational characteristics or factors that affected implementation and success within each HL and across HLs within the Central LHIN.

Methods

The Health System Performance Research Network (HSPRN) conducted a multi-method case study evaluation of three Health Links (HLs) in the Central LHIN: South Simcoe and Northern York Region (SSNYR), South West York Region (SWYR), and North York Central Region (NYCR). The multi-method case study approach involved: semi-structured interviews with organizational leaders/managers and clinicians; long- and short-form surveys administered to interview participants and clinicians with at least one HL patient; and a review of key HLs process documents (e.g., business plans, HL websites). Data were collected between February 2016 and March 2017. Qualitative data collection and analysis were guided by the “Context and Capabilities of Integrated Care” framework.¹

Findings

Approaches to improving coordination of care in Health Links

Thirty leaders/managers and clinicians participated in the semi-structured interviews, 24 interview participants completed the long-form survey, and 71 additional clinicians completed the short-form survey. Interview findings suggest that **delivery of care, information technology, partnering & organizational/network design, and clinician engagement & stakeholder retention** are important considerations for integrated care across all three HLs.

- **Delivery of care** refers to the methods used by clinicians and care providers in coordinating and delivering care for HLs patients. Tension between the “idea of HLs” and the reality of implementation was frequently discussed. Planned HLs activities were philosophically well-received, but some participants perceived these as too resource-

and time-intensive to implement practically. Additional hindrances included the logistics of completing and sharing the care coordination plans (CCPs) and difficulty staying abreast of changing patient identification criteria.

- **Information technology (IT)** infrastructure was perceived as a much-needed requirement for effective partnering, particularly for completing and sharing CCPs. Current challenges include inconsistent updating of CCPs and, as a result, poor follow-up with HL patients. Lack of a shared IT platform was seen to particularly exclude community partners from collaboration. Those using a shared electronic platform identified this as an important success factor.
- **Clinician engagement & stakeholder retention** (and engagement of family physicians in particular) was a prominent challenge that emerged across all 3 HLs, despite the involvement of dedicated physician champions. Participants cited lack of time, geographic distance between partners, and resource constraints faced by solo practitioners as challenges. Clinicians also felt the HLs approach lacked value and failed to demonstrate a benefit to their patients.
- **Partnering and organizational/network design** were discussed by participants in terms of how they impacted the development of inter-organizational relationships. Having hospitals as the lead organizations for all three HLs was seen as beneficial to operations given their access to resources. However, this simultaneously resulted in a perceived focus on medical complexity, which made mental health and social service organizations question their role in the partnership. Using a hub-and-spoke design allows for effective HL processes.

Key Activities

We uncovered a number of activities undertaken by HL partners in the implementation of HL that impacted implementation of cooperation and collaboration. Both interview and surveys of key informants, and a survey distributed to all providers of HL-enrolled patients provided knowledge about how key these activities were undertaken to improve care coordination.

Patient Identification

Another emergent issue was the patient identification process. Many providers noted that they struggled to 'keep up' with the changing criteria used to identify HLs patients, particularly as HLs attempted to shift from strictly medically complex patients to those with combined physical and mental health complexities. Similarly, providers were confused about who could refer patients, and many partners (outside of the hospitals and CCAC) did not understand their role in the referral and patient identification process. *"There seemed to be a difference of what we kind of understood as referral criteria and what their frontline staff did."* -**Provider**

Case Conferences

Though leaders and many physicians considered case conferences a valuable activity, physicians were regularly unable to attend them. Both physicians and other care providers perceived case conferences as a resource-intensive strategy for patient care, even when they valued the idea of shared communication.

“I think there are real advantages to having the case conference. But I think if it becomes a barrier to becoming active in the program, then you have to move on... So where there’s been case conferences, they’ve been amazing and great.” -Leader

Coordinated Care Plans

CCPs were considered an essential part of the HLs approach, however, participants frequently claimed they were too lengthy to complete and as a result were used as one-time “static” documents rather than a frequently updated tool for tracking patient goals and progress. Providers were also asked to report on their experiences with CCPs, which yielded mixed results. Though the vast majority of clinicians have contributed to the creation of CCPs in some capacity, far fewer reported actually referring to the CCPs when providing care to patients, hinting at a perceived lack of utility of the CCPs beyond initial creation. *“The benefit of coordinated care tool would be if it worked. If it worked. In its current form, I don’t know if it does that.” –Leader and Provider*

HLs providers who completed both the long-form and short-form surveys were asked about their experiences in using the CCPs as well as their perceptions about the plans’ usefulness. In all, 19% of providers reported never *contributing* to the creation of CCPs, 45% rarely or sometimes contributed, and 36% often or always contributed. Interestingly, although the majority of HLs providers reported contributing to the CCPs in some way, far fewer reported actually *referring* to the CCPs when providing care to patients – only 25.3% of providers reported often or always referring to the CCPs. Moreover, 33% of providers rarely or sometimes referred to CCPs, while another 32% reported never referring to the CCPs when providing care to HLs patients.

Information Sharing

One of the most consistent findings within the interviews was the challenge posed by a lack of IT infrastructure across all HLs partners to enable information sharing. This lack of information sharing resulted in challenges in delivering and coordinating patient care and to effective partner collaboration. CCPs were inconsistently shared across partners, which led to poor follow-up with HL patients. Moreover, many partners – notably smaller community partners with limited resources or solo family physicians – were consequently left out of the planning process. As a result, these partners were unable to partake in the care coordination process, which in some instances hindered patient care (e.g., delayed processes, overlap in prescribing, etc.).

Information Technology (IT)

In order to overcome information sharing challenges, some partners developed workarounds to share information, including use of fax and manually scanning CCPs. Where IT infrastructure did exist in some organizations, it was often incompatible with the systems of partnering organizations, which ultimately resulted in the same failure to share CCPs in a timely manner. As one participant stated, *“It’s actually a very simple implementation that’s been made to be very complicated” –Leader.*

Privacy

Beyond logistical challenges with sharing CCPs, participants also relayed concerns about privacy and a need for clarity regarding those who are responsible for owning and safeguarding patient information. This issue was most prominent for physicians; leaders reported sometimes requiring additional assurances for patient privacy, which slowed the information sharing process even further: *“[Physicians] require a lot of hand holding... They have a lot of questions that there are not necessarily answers to with regards to the implementation. And those are things like legal questions around privacy and stuff.” - Leader*

Performance Measurement

One of the core goals of HLs consistently highlighted in Health Link business plans was the need to create CCPs and connect patients to primary care providers. In order to measure these goals, HLs leaders report CCP numbers to Local Health Integration Networks on a quarterly basis, as performance indicators for their HL. Yet, data from the interviews suggest that leaders and providers did not feel that these numbers reflect the quality of service delivered, nor the impact of HLs on patient outcomes. Participants felt this performance measure may rush HLs into completing CCPs without giving sufficient attention to the quality of the CCPs or the services delivered thereafter. Many leaders and providers highlighted the importance of finding performance indicators that better reflect the quality of care provided by the HLs: *“Because the number of CCPs created doesn’t speak to the quality of any of those CCPs... It’s a completely... totally erroneous thing. And does it improve anybody’s care? Who knows?” - Leader*

Implications

The Health Links that participated in this study had strong relationships among core partners and expressed a strong desire to collaborate with other providers to improve care for patients through Health Links. It was a challenge to continue engagement among providers, especially primary care physicians, some of whom did not see the incremental value offered by Health Links for their patients, particularly those in Family Health Teams. There was strong assent that information sharing is essential and was stymied by lack of technology to securely share patient information. The coordinated care plan seemed cumbersome to some and without connectivity remained a static document. Tracking the completion of CCPs was deemed unimportant by interviewees suggesting performance measures should advance to assess collaboration, communication and implementation of care plans. Health Links is an important initiative to improve care for people with complex health needs. Enabling providers to deliver on this promise requires provincial and local support. It is hoped that the findings from this report can enable improvements in Central LHIN and across Ontario Health Links.

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1. Context

Ontario's Health Links program was announced by the Ministry of Health and Long Term Care (MOHLTC) in December 2012 as a provincial strategy to improve care coordination for patients with complex conditions and social needs. Each Health Link consists of multiple clinical and social service providers in a defined geography, and has the flexibility to create their own strategies to identify target populations and integrate care for these individuals. The first set of 22 Health Links were initiated in late August 2013 and are often referred to as the "early adopters". As of July 2016, there were 82 Health Links in operation across all 14 Local Health Integration Networks (LHINs).

The Health System Performance Research Network (HSPRN) has been at the forefront of understanding the development and implementation of Health Links in Ontario with a series of 5 reports to date, all of which have been commissioned as Applied Health Research Questions (AHRQs). In this work HSPRN has highlighted that the implementation of Health Links requires strong leadership and communication as well as other organizational and inter-organizational capacities. However, the specific achievements in implementation have not been explored empirically in any Health Links to date. Moreover, there is limited evidence regarding the impact of Health Links on the care trajectories of enrolled patients. This report is one of two reports that respond to an AHRQ requested by the Central LHIN to the HSPRN. This report seeks to assess the development and implementation of the Health Links in the Central LHIN, while the companion report quantifies the specific impact of Central LHIN's Health Links on patient care and outcomes.

The objective of this report was to examine the impact of organizational (i.e. partnering organizations) and inter-organizational (i.e. Health Link network) context and capabilities on the implementation of the Health Links (HLs). We addressed this objective by identifying key organizational characteristics or factors that affected implementation within each HL and across the Central LHIN, from the perspective of key stakeholders. This report presents the findings of a multi-method case study evaluation of three active Health Links in the Central LHIN: South West York Region (SWYR), South Simcoe and Northern York Region (SSNYR) and North York Central Region (NYCR) where the latter two are both "early adopter" Health Links.

1.1. Summary of the Central LHIN Health Link Cases

Southwest York Region

- Lead Organization: Mackenzie Health
- Geographical Catchment Area: urban & rural
- Number of CCPs completed (Fall 2016): 183
- Number of patients connected to primary care physicians (PCP) (Fall 2016): 171

North York Central Region

- Lead Organization: North York General Hospital
- Geographical Catchment Area: 120 square kilometers (urban)
- Number of CCPs completed (Fall 2016): 480
- Number of patients connected to PCP (Fall 2016): 535

South Simcoe and Northern York Region

- Lead Organization: Southlake Regional Health Centre
- Geographical Catchment Area: urban, rural as well as first nations
- Number of CCPs completed (Fall 2016): 448
- Number of patients connected to PCP (Fall 2016): 623

Table A1 (see Appendix A) provides a full list of partners for each respective HL, as identified through their business plans.

2. Methods

2.1. Data Collection

A multiple case study approach was used to enable in-depth exploration of each HL case while providing cross-case comparative data. A mix of qualitative and quantitative data collection methods were used (Table 1). Interviews and subsequent follow-up surveys with key informants were conducted between February and June 2016, while short-form survey data were collected from HL health care providers between June and September 2016. Key informants for interviews were identified through the project leads of each respective HL during initial consultations and preliminary meetings. Informants were selected based on their knowledge of and involvement with HLs either as organizational leaders/managers or HLs providers. “Provider” participants included front-line clinical and non-clinical providers delivering or coordinating care as part of a HL. Organizational leaders/ managers included individuals involved in administering, directing, or managing a HL. Once key informants were identified by HL leads and the research team was provided contact information, the qualitative study lead reached out to potential participants via email with a detailed invitation to participate in a one-hour telephone interview, to be scheduled at their convenience with the Research Assistant. Participants that did not respond to the request were followed up with 1 to 2 times via email. The interviews were primarily conducted by the Research Assistant, who was trained by the qualitative study lead via practice interviews based on the semi-structured interview guide as well as observation of initial interviews done by the lead; where scheduling conflicts arose, interviews were occasionally done by the qualitative study lead as well.

The aims of the interview guide are:

- To identify the organizational and inter-organizational factors that constitute success factors or challenges in the given integrated care initiative; and
- To identify the most and least important contextual factors in the given integrated care initiative.

The interview guide consists of two sections. The first section asks open-ended questions to understand the organizational and inter-organizational factors affecting HLs implementation, while the second section involves presenting the participant with the ‘Context and Capabilities of Integrated Care’ Framework (see section 2.2) and eliciting their feedback on how well the Framework reflects their experience with HLs.

Upon completion of the telephone interview, participants were invited to complete an online survey (long-form). Invitations for the long-form survey were sent within one week of the telephone interview, with up to 2 email reminders to those who had not yet filled out the online survey.

We also used document analysis for two reasons: 1) to understand the structure of each HL, including patient characteristics, full list of partners, and the approach taken by each HL to coordinate care for its patients; and 2) to compare implementation plans as described in pre-implementation documents with actual ‘operationalized’ activities of the HLs that emerged in the interviews.

Ethical approval for this research was obtained from the University of Toronto Research Ethics Board.

Table 1. Overview of the Research Methods

Data Collection Method	Participants	Recruitment/Document Identification
1. Interviews: One-hour semi-structured telephone or face-to-face interviews	Organizational leaders/managers, clinicians	Recommended by HL leads
2. Surveys (Long-Form): “Organizing for Integrated Care Questionnaire” (100 items) ¹	Interview participants	All interview participants were invited to complete long-form surveys
3. Surveys (Short-Form): “Organizing for Integrated Care Questionnaire” (50 items)	Clinicians linked to at least one HL patient	Identified through a database provided by HL leads
4. Document Review	Materials analyzed included: business plans, presentations, monthly reports, HL websites, care planning documents, and internal reports	Provided by HL leads or identified through research team’s independent search of publicly available websites/documentation

¹ Note that the scales used in the long-form surveys differed somewhat for organizational leaders compared with HLs providers. Copies of all versions of the administered surveys are available on request.

2.2. Data Analysis Strategy

Qualitative interview data was thematically analyzed using the “Context and Capabilities of Integrated Care” (CCIC) framework (Appendix B)^{1,2}. Relevant data were extracted from documents and thematically analyzed using the CCIC framework.

Both the leader and provider versions of the Organizing for Integrated Care Questionnaire were developed to capture contextual factors important to integrating care and which were reflected in the “Context and Capabilities of Integrated Care” framework. The questionnaire resulted from an extensive systematic review of integrated care measures and includes such validated measures as the Partnership Self-Assessment Tool (PSAT)³ and the Change Readiness Survey⁴.

The full survey consists of previously validated scales from existing instruments. The short-form survey is an abridged version of the Organizing for Integrated Care Questionnaire. Quantitative survey data were summarized with descriptive statistics and scales were calculated as per the original validated survey instruments.

Document analysis was conducted to explore planned vs. operationalized views of each HL. The business plan and publicly available documents were analyzed for each HL.

3. Findings

3.1. Description of Participants and Documents

In total, 30 leaders and providers participated in the semi-structured interviews (21 leaders, 9 providers; see Table 2). Of the 30 participants, 24 completed the long-form surveys (14 leaders, 10 providers). Short-form surveys were completed by 71 clinicians.

Table 2. Participant Breakdown per Health Link

	SSNYR	SWYR	NYCR
Interviews and Long-Form Surveys			
Leaders/Managers	10	5	6
Providers	2	3	4
Short Form Surveys*			
Providers	36	13	10
Total	48	21	20

**Note: In addition to these responses, 7 providers responded that they “work equally for all 3 HLs” while 5 providers did not respond to this question.*

3.2. Qualitative Findings

This section presents the results of the qualitative interview data. Across the Central LHIN, four key factors emerged as critical to the implementation of HLs: 1) delivery of care; 2) information technology; 3) partnering & organizational/network design; and 4) clinician engagement & stakeholder retention. According to participants, each factor played an important role in either enabling or hindering the implementation process, though their impact differed between HLs. Additional themes relating to specific HL circumstances, but important to the implementation and sustainability of the HL, were also uncovered in the data analysis.

3.2.1. Delivery of Care

Delivery of care refers to the methods used by providers in coordinating and delivering care for HLs patients within organizations and across the HLs network. The primary finding from participants across all case studies was a strong disconnect between valuing the *idea* of HLs and confronting the *reality* of how it was implemented. Participating leaders and providers consistently lauded the HLs initiative as a critically important shift in how care should be provided to the most complex patients. In particular, interview participants valued the core activities of coordinated care in HLs, namely:

- Case conferences (where individual patient cases are discussed with the full HLs team and the patient);
- Community rounds (where a number of patient cases are anonymously discussed amongst multiple care providers across HLs community partners); and,
- Care coordination plans (CCPs).

However, issues emerged in terms of how some of these activities were executed, namely with regards to case conferences and CCPs. Challenges surrounding the patient identification processes are also discussed herein.

Case Conferences

Though leaders and many physicians considered case conferences a valuable activity, physicians were regularly unable to attend them. Both physicians and other care providers perceived case conferences as a resource-intensive strategy for patient care, even when they valued the idea of shared communication. One provider reflected this sentiment in the following statement:

“The physicians are happy to be involved, it’s just they don’t always have the time to sit down and, you know, moving forward to fill out these lengthy care tools and arrange case conferences and things like that. They’re happy to be involved but they don’t have the time to initiate it”. – Provider

Coordinated Care Plans

CCPs were considered an essential part of the HLs approach, however, participants frequently claimed they were too lengthy to complete and as a result were used as one-time “static” documents rather than a frequently updated tool for tracking patient goals and progress. As well, due to infrastructure issues (to be discussed in the “Information Technology” section), the CCPs were not consistently shared with all team members. Instead, they were either only shared with a limited group of partners or, more frequently, were housed within the organization that originally authored the tool.

The following quote by a leader and provider reflects this sentiment towards CCPs:

“Well, the benefit of the coordinated care tool in its revised form would be care coordination. It’s a benefit to the patient if the providers are talking to each other. That’s a benefit for patients. The patient imagines the doctors, the nurses, the nurse practitioners and physios and social workers are all talking to each other. But in fact, we all live in silos and we never talk to each other. The benefit of coordinated care tool would be if it worked. If it worked. In its current form, I don’t know if it does that.” –
Leader and Provider

Performance Measurement

In this vein, while CCPs were considered essential to the HLs process and to facilitating collaboration between partners, participants strongly questioned their current use as a performance measurement tool. That is, *number* of completed CCPs as a measure of HLs success was considered a hindrance to meaningful evaluation, compared with a more ‘valuable’ and accurate outcome, according to participants (e.g., patient outcomes as tracked by the CCP over time):

“Because the number of CCPs created doesn’t speak to the quality of any of those CCPs, it doesn’t talk about whether they’re being updated, it doesn’t talk about whether anybody is actually looking at them. It doesn’t mean anything. It’s a completely a totally erroneous thing. And does it improve anybody’s care? Who knows?” - **Leader**

The use of CCPs in relation to measuring the performance of HLs is further explored in our document analysis results (see section 3.4.3).

Patient Identification

Another emergent issue was the patient identification process. Many providers noted that they struggled to ‘keep up’ with the changing criteria used to identify HLs patients, particularly as HLs attempted to shift from strictly medically complex patients to those with combined physical and mental health complexities.

*“There seemed to be a difference of what we kind of understood as referral criteria and what their frontline staff did.” – **Provider***

Similarly, providers were confused about who could refer patients, and many partners (outside of the hospitals and Community Care Access Center [CCAC]) did not understand their role in the referral and patient identification process.

In all, the results that emerged within the theme of delivery of care highlight a commitment to and perceived value of the HLs approach among both leaders/managers and providers. However, challenges remain with the approach’s execution and implementation. These challenges can be in part addressed by considering the remaining four factors and how each of them impacted the implementation process.

3.2.2. Information Technology (IT)

Information Sharing

One of the most consistent findings within the interviews was the challenge posed by a lack of IT infrastructure across all HLs partners. This lack of infrastructure resulted in challenges in delivering and coordinating patient care and to effective partner collaboration. As mentioned in the previous section, CCPs were inconsistently shared across partners, which led to poor follow-up with HL patients. Moreover, many partners – notably smaller community partners with limited resources or solo family physicians – were consequently left out of the planning process. As a result, these partners were unable to partake in the care coordination process, which in some instances hindered patient care (e.g. through delayed processes, overlap in medication prescribing, etc.).

*“But again, we were told, for example, that one of our partnering agencies has already created coordinated care plans for people that were inpatients. And we were never informed. And my question was, well, how...what’s the process for them informing [us]? How do they know who to inform? And that couldn’t be answered... Particularly when we have the community crisis services. So someone is coming out of in-patient back into the community... We’re blind to that.”- **Leader***

In order to overcome these challenges, some partners developed workarounds to share information, including use of fax and manually scanning CCPs. Where IT infrastructure did exist in some organizations, it was often incompatible with the systems of partnering organizations, which ultimately resulted in the same failure to share CCPs in a timely manner. As one participant stated,

*“It’s actually a very simple implementation that’s been made to be very complicated” – **Leader***

Privacy

Beyond logistical challenges with sharing CCPs, participants also relayed concerns about privacy and a need for clarity regarding those who are responsible for owning and safeguarding patient information. This issue was most prominent for physicians, who, leaders reported, sometimes required additional assurances for patient privacy, which slowed the information sharing process even further:

*“[Family physicians] ...have a lot of questions that there are not necessarily answers to with regards to the implementation. And those are things like legal questions around privacy and stuff like that where the Ministry... [is] sort of leaving it up to the family health teams that are kind of more aware of this whole concept around health information custodianship. So I think that we could have done that much differently.” –
Leader*

Coordinated Care Tool Pilot

Another important component of IT in the implementation of HLs was via the “Coordinated Care Tool” (CCT) pilot project to share CCPs electronically across partner organizations. The CCP was seen as a potentially critical element for the overall success of HLs’ operations. One participant noted that:

*“I actually think that you can’t do Health Links... without an electronic tool that allows people to collaborate... it is an absolute necessity to doing Health Links. Because otherwise things move way too slowly, and you’re not going to be able to do the preventative work that needs to happen to achieve the Health Link goals. Which is keeping people out of the hospitals.” –**Leader***

At the time of data collection, the pilot CCT had only been implemented in SSNYR HL and had not been rolled out across all partnering organizations in the HL; participants noted that roll-out of the tool across all partners in the HL is crucial. For instance, a provider whose organization has already had the opportunity to participate in the CCT pilot reports the following:

*“...The good thing is we can see it now that it’s going into a shared tool. Because before it was... an exclusive club, it seemed like. If you can make that analogy... Yeah. I think whatever tool we use, it needs to be something that’s accessible to all the care team members and hopefully the patient in the future.” - **Provider***

Furthermore, privacy concerns and lack of organizational buy-in across key HL partners (e.g., CCAC) hindered the CCT pilot implementation. Participants described certain necessary (but currently not in place) features that would enhance the use of the CCT and facilitate collaborative delivery of care. These features include the need for a “live” electronic tool to capture real-time data (thus enhancing more proactive and preventative care delivery), as well as information custodianship to ensure the protection of patient privacy. In spite of these challenges, our results strongly support the use of an electronic tool for efficient sharing of patient information with all partners.

3.2.3. Partnering & Organizational/Network Design

All three Central LHIN HLs were led by hospitals. Participants largely considered this to be a strength because of hospitals' resource capacity compared to smaller, community organizations. However, participants were concerned that this network design limited meaningful engagement with community partners and shifted the focus too strongly toward medical over social complexity (discussed further in section 3.3). In particular, smaller community agencies often felt that with the hospital offering structural leadership and the CCAC facilitating coordination, their contribution as HLs partners was unclear and in some cases resulted in disengagement by these agencies from the HLs approach. Another example of the 'double-edged sword' of being a hospital-led HL was seen in NYCHL. There, the hospital's role as the lead agency rendered it central to the HL's operations, with a perception that the hospital was exceptionally central for several reasons: hospital leadership was seen as very strong, the hospital culture was amenable to adopting new practices, and the hospital itself was well-resourced. Despite this, there were some philosophical tensions described about whether the hospital should play such a central role:

"There's the general sense when we talk around the leadership table that the hospital shouldn't be necessarily the centre of a hub or the centre of a wheel because there's more going on in patient care than just acute care... On the other hand, I've got to be honest, in my way of thinking, the hospital really is a hub that is appropriately situated to bring its partners around the table... So in my mind, it does make sense." -

Provider

An additional benefit of having the hospital act as the HLs "hub" was the connection of primary care physicians to the hospital as a result of their appointments at the Department of Medicine, which enables more promising attempts at physician engagement in the community.

Furthermore, this network structure relies heavily on a select few key partners that may stop engaging in HLs for any number of reasons, which can have a detrimental effect on other partners' abilities to provide timely care to HLs patients (e.g. due to internal restructuring, the CCAC scaled back their involvement in HLs).

In some instances, geographic boundaries of the HLs were perceived as a barrier to effective partnership in the HLs, particularly as patients in rural regions were visiting service providers outside of the HL (e.g., in rural regions). For instance, because of their rural geography, patients would go to hospitals outside of the HL:

"And then we're also a very small rural community. We're very different from [City], which is where [the lead organization] is, and it's kind of the lead. The resources and services they have there, we just don't have available here. So we're all within one Health Link but we're very different from how they're able to operate." - **Provider**

In spite of potential network design issues, partnerships were apparent and highly valued at the governance level (e.g., through regular steering committee meetings, which included the organizational leaders of all HLs partner organizations). The positive perception of HLs

partnerships was facilitated by community rounds, which fostered a spirit of collaboration amongst partners and were valuable in building key relationships between new partners and expanding understanding of services available in the community.

3.2.4. Clinician Engagement & Stakeholder Retention

Engagement of family physicians in the HLs was a challenge across all three cases. A number of factors explained some of the challenges in clinician engagement, such as lack of time, geographic dispersion of family physicians' practices (i.e. physical distance from partners and lead organization), and resource constraints of solo practitioners (i.e. support staff, IT infrastructure) compared with physicians practicing within Family Health Teams.

Beyond these structural issues, some participants reported a more fundamental reason for physician non-engagement: a perceived lack of value of the HLs approach. The following quotes, both by care providers, demonstrate the need to better demonstrate the value of HLs:

*"I would have thought that within 3 years, Health Links would be well known by the primary care community because of the successes... And that I don't think has happened. Primary care physician feedback has been mixed. Some individual physicians had good results... Others have had involvement and keep asking... So where is there any difference? They don't see that it's made any difference in their patients." – **Provider***

*"I think Health Links needs to offer a better service... I mean there has to be, first of all, some dissemination or marketing of the service. But as I say, our office is already aware. It hasn't been a big gain when we recruit patients. So that limits then further referrals. If you're not seeing the gains, you don't necessarily continue to do that, right? So I think it speaks to the sort of maybe weakness of what Health Link is offering, that there's less engagement." - **Provider***

Though these challenges to physician engagement posed challenges to the implementation of HLs, it is important to note that there were also physicians across all three HLs who were extremely committed to the initiative and willing to offer time and support to case conferences and developing CCPs.

Stakeholder Retention

In a similar vein to the challenges associated with clinician engagement, participants also described an overall sense of loss of broader stakeholder engagement in the formative years of HLs implementation. For instance, in the SWYR HL, the relationship between the hospital and CCAC was the strongest, with both organizations clearly understanding their role in patient identification, referral, and coordination processes. Conversely, other partnering organizations had less clearly defined roles. Leaders from various organizations outside of the hospital and CCAC perceived the first year of HL operation in particular to be overwhelmingly bureaucratic, with a lessened focus on patient-centredness. These issues contributed to a lack of

engagement and buy-in over time. There was a concerning lack of clinician buy-in and engagement despite active attempts to engage physicians from the outset:

*“Our initial approach was to try to get referrals from primary care... [But] it’s very hard to engage with the diverse population of primary care providers in the community when you have a ‘product’ that you’re trying to sell to them and they don’t understand the concept and there’s no real net gain to them.” - **Provider***

This resulted in both reduced engagement and retention of physicians and other providers who could provide care to HLs patients, which in turn limited the perceived benefits of the HLs approach of care as the ‘product to be sold’. Opportunities do exist, however, to address this challenge to stakeholder retention and re-shifting the focus of the HL approach; in the case of SWYR HL, it has since refocused and restructured to emphasize patient-centredness. They have brought more community partners into the core HLs partnerships and have set up a patient and family committee for consultation. All of these changes were perceived by interview participants to be extremely positive.

3.3. Quantitative Findings

The quantitative results present a detailed assessment of the barriers and facilitators to implementation of HLs across the Central LHIN, while shedding light on opportunities for improvement in refinement of the approach. This section reports on the quantitative results of the evaluation, which capture an alternate and complementary perspective to the interviews. Namely, these results more concretely address issues such as frequency of activities being performed in the HLs (e.g., completion of CCPs) as well as broader perceptions around partnership. These results also capture perspectives from a broader sample of clinicians who have been engaged in providing care to HLs patients.

3.3.1. Demographics

The following section details the demographic information for participants who completed either the long- or short-form surveys (note that not all participants answered each question). Responses are broken down into the following groups: “leaders/managers” and “providers” who completed the long-form follow-up surveys, and “providers short form” for HLs care providers who completed the abridged version of the survey.

Table 3 describes the demographic information for all participants.

Table 3 Participant Demographics (Age, Gender, Education)

Measure	Interview participants (Leader & Provider) N=23	Providers (short-form) N=71
	%	%
Age		
20-35 years	8.7	5.6
36-50 years	30.4	47.9
51-65 years	52.2	35.2
Age 66 or older	4.3	8.5
Prefer not to disclose	4.3	2.8
Total	100	100
Gender		
Male	13.0	23.9
Female	82.6	71.8
Prefer not to disclose	4.3	4.2
Total	100	100
Highest level of education completed		
High school diploma	0	1.4
College certificate	9.1	9.9
Undergraduate degree	22.7	40.8
Graduate degree	68.2	47.9
Total	100	100
Current role (primary)		
Frontline health care provider	26.1	33.8
Clinical team leader	0.0	1.4
Administrative staff member	0.0	1.4
Manager/Director	34.8	0.0
Executive	17.4	0.0
Care Coordinator	8.7	63.4
Other	13.0	0.0
Total	100	100
Primary place of employment		
Primary health care practice	26.1	25.4
Acute care hospital	39.1	9.9
Rehabilitation hospital	4.3	0
Home and community support agency	13.0	39.4
Other	17.4	25.4
Total	100	100

Data on Coordinated Care Plans

HLs providers who completed both the long-form and short-form surveys were asked about their experiences in using the CCPs as well as their perceptions about the plans' usefulness. Figures

1 and 2 demonstrate the breakdown of provider responses to these questions. In all, 19.2% of providers reported never *contributing* to the creation of CCPs, 44.9% rarely or sometimes contributed, and 35.9% often or always contributed (Figure 1). Interestingly, although the majority of HLs providers reported contributing to the CCPs in some way, far fewer reported actually *referring* to the CCPs when providing care to patients – only 25.3% of providers reported often or always referring to the CCPs (Figure 1). Moreover, 43.1% of providers rarely or sometimes referred to CCPs, while, most notably, 31.6% of providers reported never referring to the CCPs when providing care to HLs patients. These results point to a perceived lack of utility of the CCPs beyond the initial creation of the document, and this is indeed supported by additional survey results. That is, 48.1% of providers reported that care plans were ‘a little’ or ‘not at all’ helpful as a tool to identify patient treatment goals, while 49.4% of providers reported those same levels of helpfulness of the CCPs as a tool to facilitate the achievement of patient treatment goals (Figure 2). In comparison, only 20.8% and 22.1% of providers found the tool ‘mostly’ or ‘extremely’ helpful for identifying and facilitating patient treatment goals, respectively.

Figure 1. Providers’ Involvement in and Use of CCPs

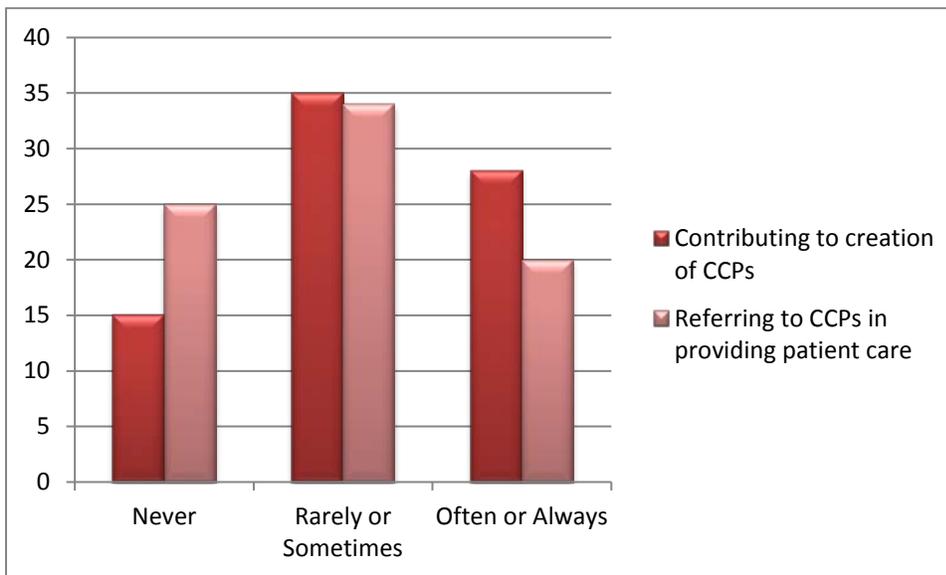
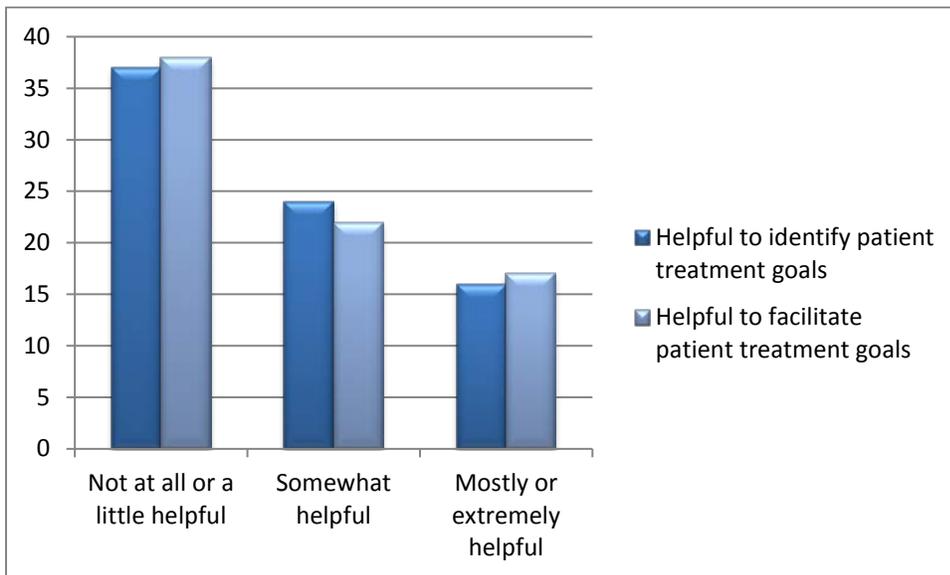


Figure 2. Perceived Helpfulness of CCPs



3.3.2. Survey Results by Scale

Results from the long- and short-form versions of the “Organizing for Integrated Care Questionnaire”, completed by both organizational leaders and HLs providers are discussed below. Though surveys administered six scales to participants, this report only presents results of two scales which most strongly related to our qualitative analysis: the Partnership Self-Assessment Tool (PSAT)³ and the Change Readiness Survey⁴.

The PSAT explores the functioning of a partnership by identifying key strengths and weaknesses between partners, such as access to resources and perceptions of leadership and synergy. The scale is comprised of 6 sub-scales scored on a 5-point Likert scale. Participants were asked questions about partnership such as:

“By working together, how well are these partners able to... 1) Develop goals that are widely understood and supported among partners? 2).Implement strategies that are most likely to work in the community?” [Synergy subscale]

The findings in Table 4 capture the sub-scale means and standard deviations (where applicable) of these two scales.

Table 4. Descriptive Statistics (PSAT and Change Readiness Survey)

Measure	Key Informants: Leaders & Providers (Long- form) N = 24		Providers (Short-form) N= 71		t- statistic	p-value
	Mean	SD	Mean	SD		
Partnership Self-Assessment Tool^a						
Synergy	3.93	0.55	3.53	0.69	-2.44	< .05
Leadership	4.24	0.66	3.29	0.76	-5.17	< .001
Administration and Management	3.74	0.58	2.79	0.62	-4.98	< .001
Non-Financial Resources	3.93	0.44	3.45	0.73	-2.21	< .05
Financial Resources	3.66	0.39	3.11	0.63	-2.78	< .01
Satisfaction with Participation	3.76	0.6	3.01	0.8	-4.06	< .001
Change Readiness Survey^b						
Appropriateness	5.21	1.21				
Change Efficacy	5.35	1.02				
Personally Beneficial	6.48	0.94				

^a Based on 5-point Likert scale (1-5)

^b Based on 7-point Likert scale (1-7)

Responses to survey results are grouped into long-form (those who completed the interview) and short-form (clinicians only). This was done to account for the similarities between interview respondents, having been identified as key informants who were actively involved in HLs whether as leaders or providers. Clinicians completing the short-form survey provided care to one or more HLs patient, though they may or may not have been actively involved in HLs. Indeed, this division between groups is further reflected in the results, as the mean scores for all six dimensions of the PSAT significantly differ (at minimum, $p < .05$) between long-form survey respondents who consistently scored higher than short-form respondents. Of note, the scale with the lowest score for HLs providers was administration and management, perhaps reflecting discordance in perception between management and clinicians.

The Change Readiness Survey asks participants about their attitudes towards the changes that have (or will have) taken place in their organization, and further asks participants to reflect on how these changes affect their organization as well as themselves personally. For example, the survey asks questions like:

“To what extent do you agree that... 1) I don’t believe there is anything for me to gain from the implementation of this change 2) The time we are spending on this change should be spent on something else.” [Appropriateness subscale]

Both leaders/managers and providers (long-form only) scored highly on this survey, with mean scores for all three subscales ranging from 5.21 to 6.48 on a 7-point scale. A notable finding within this survey is that leaders/managers and providers collectively scored the “Personally Beneficial” sub-scale as the highest ranked, indicating that at an individual level, HLs is perceived as something that could not only benefit patients, but also facilitate providers/leaders’ work. It should, however, be noted that providers who completed the short-form survey were not asked to respond to these questions and as a result their perspectives are not captured herein.

3.4. Results from Document Analysis

We reviewed a total of 18 documents (10 for NYCR, 5 for SWYR, and 3 for SSNYR HLs). The types of documents reviewed were business plans, presentations, monthly reports, HL websites, care planning documents, and internal reports. Our analysis of the documents took a critical descriptive and comparative approach. The primary aim was to understand the characteristics and implementation plan of each HL as well as comparing these plans across the three HLs and with pertinent literature. Specifically, we assessed the structure of each HL, including patient characteristics, full list of partners, and the approach taken by each HL to coordinate care for its patients. A secondary goal for our document analysis was to compare the ‘planned’ implementation to that which was ‘operationalized’, that is, comparing the implementation strategy for each respective HL as laid out in relevant documents to the ‘follow through’ or outcomes of implementation, as described by leaders and providers during the interview process.

The characteristics of each HL were described in terms of the following attributes: geographical area covered, population served, services provided, number and type of partners, as well as any special interventions within each Health Links that were undertaken to better facilitate coordinating care for its targeted population.

Regarding the primary aim of the document analysis, we found that the documents across all three HLs shared many similarities regarding essential elements for successful implementation, in spite of the ‘low-rules’ philosophy upon which HLs was founded. These elements included partnering, information technology, patient-centeredness and engagement, clinician engagement and leadership, as well as coordinated delivery of care. It is also worth mentioning that these elements aligned with the descriptions of many integrated care initiatives globally, except in the areas of funding and accountability⁵⁻⁸. HLs documents did not provide any recognized accountability structure nor did they identify concrete funding mechanisms. Both

funding and accountability structures are highly important for the sustainability of such interdisciplinary initiatives, and their absence may hinder the success of the HLs initiative.

The following section of the report provides a more in-depth analysis of the essential elements for successful implementation using quoted text from HLs documents.

3.4.1. Clinician Engagement

The importance of clinician engagement in HLs design and implementation was strongly emphasized across all three cases. Of particular importance was engagement of primary care physicians, as described by one of the business plans:

“Active physician engagement in the design and implementationwill be critical to its success, particularly in the area of primary care. Comprehensive primary care will be at the core of [our HL] and we have a robust primary care foundation to build from. [We] will capitalize on a robust hospital and community network of primary care providers who provide innovative and comprehensive care and maintain strong community linkages. Our engagement strategy will utilize this network.” –Business Plan

Moreover, strategies for engagement of primary care providers were detailed in one of the business plans as follows:

“Primary Care Engagement: [We] will actively engage primary care leadership throughout its development and implementation and ensure primary care providers within [our HL] are introduced to and kept apprised of the HL. Initial engagement strategies include:

- 1. Fall 2012: The Department of Family and Community Medicine and the... Family Health Team have been actively involved in planning the...HL and both have communicated updates to their broader networks of primary care colleagues*
- 2. Winter 2013: A meeting will be held with primary care providers to brainstorm integrated care planning for high users and develop strategies*
- 3. Spring 2013: We will implement a comprehensive outreach strategy to reach out to physicians in the... HL catchment area whose patients/clients are identified as high users*

Individual meetings will be held with primary care providers identified with our initial patient/client group to discuss their patients/clients and patient/client specific strategies. Group meetings will be organized to introduce the [HL] to a more broad physician group” –Business Plan

An online document based on a sustainability forum at one of the Central LHIN HLs presented

the results of a survey of family physicians regarding their experience with this HL's activities. This survey is important for two reasons: 1) it reflects the importance of evaluating the experience of primary care providers with HL and 2) it highlights interesting results, as reflected by the following findings:

"1) Over 80% find Health Link is helpful in managing patient care; 2) The case conferences are rated as the most beneficial aspect of Health Links; 3) Most physicians use the CCP on an occasional basis or never; 4) Interest in an electronic CCP that is not integrated into their EMR is limited" –**HL Sustainability Forum**

3.4.2. Information Technology (IT)

Integrated care centers on connecting all the providers in a patient's circle of care. Consequently, sharing information in a timely manner has been identified as a cornerstone to the success of integrated care initiatives. The importance of IT was well observed across HLs documents. Some business plans described what their HL would need in order to share information electronically across partners. The following is a segment of one business plan identifying mechanisms for electronic information sharing:

"a. IT Solution to Connect Systems – A collaborative, client-centered streamlined IT solution is essential to the success of our Health Link and must be cost effective, and aligned with the eHealth blueprint and provincial solutions. Our solution must include the ability to connect all participants in the complex clients' circle of care, including the client and their family/caregiver. The system must provide... one client driven accessible coordinated care plan, additional alerts across sectors and an integrated record of the client's story.

b. Electronic Tools – To facilitate real time communication, data sharing and client education, electronic tool are required to move from the current paper-based, time delayed communication system. The ability of our Health Links teams to immediately share information, update care plans and communicate will support a proactive approach in caring for our complex clients and seniors." –**Business Plan**

3.4.3. Coordinated Delivery of Care

Coordinating the delivery of care of complex patients is the main activity through which HLs improves service delivery. The complexity of HLs patients was acknowledged in all documents. For instance, a publicly available online source explains as follows:

"...[The HL] recognizes the complexity of many of these patients/clients in terms of polymorbidities, polypharmacy and psychosocial challenges. An expectation that most, if not all, of these patients/ clients require long-term care management with a strong emphasis on consistent (e.g. same care manager) and intensive follow up on all aspects of the care plan." –**Online document**

Care planning and connecting the patient to all available resources in the community are the main pillars for providing the aforementioned coordinated care for HLs patients. A business plan describes HLs care planning as follows:

“These individuals require highly individualized integrated care planning and then sustained and intensive follow up to ensure the patient/client and their care givers have the ongoing coordination and supports to ensure the integrated care plan is being successfully executed.”

3.4.4. Patient-centeredness and Engagement

Patient-centeredness was recognized as a dominant philosophy in all HLs documents. Coordination of care was viewed as an individualized process of care that should be tailored according to the specific needs of each and every patient, as described by one of the business plans:

*“Our approach recognizes, first and foremost, the need for an individualized care strategy for each and every patient/client, one that takes the very specific needs of each patient/client into careful consideration.” – **Business Plan***

The importance of engagement of patients and their caregivers was apparent in HLs documents. Three stages were highlighted at which patient and caregivers’ engagement is crucial: 1) designing and planning, 2) execution, and 3) evaluation.

Designing and Planning

Patient and caregiver engagement in the design and planning of Health Links was best described in these excerpts from two business plans:

“With our client at the centre of all our design and planning, [We] and our partner organizations are committed to engaging together to change the client experience for seniors and people with complex conditions to truly reflect an integrated model of care that is inclusive of an inter-sectoral and inter-professional care team.”

“Clients, their families, caregivers are involved at the outset of the Health Links implementation, (i.e. Client and Caregiver participation in Value Stream Mapping, Health provider role redesign and care plan development),”

*“Patient/clients and their family members will contribute to the development of our Health Link. We will actively seek patient/client and family member advice and input into all design elements through interviews and patient/client surveys.” – **Business Plan***

Execution

Engagement of patients in their own processes of care, including care planning and case conferencing, was an important goal for HLs across the reviewed documents:

Patients will be invited to the case conference....the care coordinator will ensure all services are engaged and coordinated and will work with the patient/client and their family to ensure they understand and are in agreement with the plan.

Core to our approach will be an individual and comprehensive integrated care plan for each patient/client. Led by the care coordinator and developed through close consultation with the patient, their family and the interdisciplinary care team, a detailed and specific care strategy to address all aspects of the patient/client's care will be developed. The integrated care plan is a 'live' document updated frequently and targeted at achieving stable and appropriate access to needed care and resources. The integrated care plan will be accessible to patient, family and all care givers, followed closely by the care coordinator and updated as needs changes and issues are resolved.

Evaluation

Focusing on measuring patient experience with Health Links and using this data to improve the design and processes of care was highlighted in the following lines from one of the business plans:

"The Health Links initiative presents a unique opportunity to engage our seniors, complex clients and families in an Experience-Based Co-Design Approach (EBCD). Using experience to design better healthcare is unique because it focuses so strongly on capturing and understanding clients/families and provider experiences of services. The process does not just incorporate their views of the process likes such as speed and efficiency at which they travel through the system. Instead, this approach deliberately draws out the subjective, personal feelings a client and provider experiences at crucial points in the transitions in care."

3.4.5. Partnering

Building good partnerships between all the partners within each Health Link, including patients, is a key enabler of its success. The importance of partnering was unanimously agreed upon across Health Links documents, as mentioned in one online document:

The primary focus will be on building a strong and virtual partnership across our Health Link that involves everyone, including the patients/clients and their families, in this learning process. -Online document

3.4.6. Comparisons and Discrepancies between 'Planned' and 'Operationalized' Implementation

The secondary aim of our analysis was achieved by comparing the planned view (according to documents) to the operationalization of this view (according to leader and provider interviews). This comparison highlights some discrepancies between planned and actual activities in three areas: patient-centeredness and engagement, clinician engagement, and performance measurement.

Discrepancies in Patient-Centeredness and Engagement between Documents and Interviews

Our results show that leaders and providers agreed with the HLs' planned view that patient-centeredness and engagement was the key philosophy behind HLs as a program. However, with regards to operationalization, participants identified a lack of clarity about the execution of these patient-centered principles, especially when working with such complex patients. Although the documents emphasized the importance of the role of patients in managing their own care, leaders and providers found many barriers to patient involvement, including low buy-in from some patients and lack of access to medical records. While the inclusion of patient voices on HLs committees was acknowledged in all HLs documents, leaders and providers highlighted that, more often than not, patients do not have a voice, and even when they do, a single patient will never represent all patients.

Discrepancies in Clinician Engagement between Documents and Interviews

A second discrepancy exists around clinician engagement. Clinicians were to be engaged in the HLs design and implementation in order to maximize their buy-in. However, in actuality, some clinicians were still not clear about how HLs works, nor why they should spend some of their limited time on activities such as case conferences or completing CCPs that are not compatible with their existing infrastructure and workflow. Additionally, despite the fact that document analysis reflected the importance of keeping clinicians abreast of their patients' status after joining HLs, clinician interviews revealed that many physicians doubted the value of HLs simply because they had no information about their patients after they became HLs patients.

These quotes from the HLs business plans reflect the planned view of physician engagement:

“Active physician engagement in the design and implementation of the [HL] will be critical to its success, particularly in the area of primary care. Comprehensive primary care will be at the core of the [HL] and we have a robust primary care foundation to build from. The [HL] will capitalize on a robust hospital and community network of primary care providers who provide innovative and comprehensive care and maintain strong community linkages. Our engagement strategy will utilize this network.” -

Business plan

*“I appreciate when the team meets, that we are able to see more fully what the possibilities are for the patient's care and that a coordinated approach is best all-around in ensuring the patient is getting the optimal treatment available.”- **Online publicly available document***

Based on the accounts of interview participants, these planned views appear to be unattained.

Discrepancies in Performance Measurement between Documents and Interviews

One of the core goals of HLs consistently highlighted in documents was the need to create CCPs and connect patients to primary care providers. In order to measure these goals, HLs leaders report CCP numbers to the LHIN on a quarterly basis as performance indicators for their HL. Yet, data from the interviews showed that leaders and providers did not feel that these numbers reflect the quality of service delivered nor the impact of HLs on patient outcomes. Participants felt this performance measure may rush HLs into completing CCPs without giving sufficient attention to the quality of the CCPs or the services delivered thereafter. Many leaders and providers highlighted the importance of finding performance indicators that better reflect the quality of care provided by the HLs.

4. Limitations

The results presented above must be considered within certain limitations inherent to our methodology as well as with our data collection strategy. First, we encountered challenges in recruiting providers to participate in the interviews, despite concerted efforts to target this population. Though this is indeed a limitation of our study, it may also be reflective of the broader results we have uncovered regarding the challenge of engaging clinician with HLs overall. Nevertheless, the disproportionate ratio of leader/manager respondents to provider respondents may impact our ability to clearly interpret our interview findings and understand the organizational barriers and facilitators for HL providers. This is an important consideration in the interpretation of our quantitative findings, which are limited not only by the small sample of providers, but also by the self-selected sample of providers who agreed to offer their perspective on HLs.

As well, our quantitative results were limited by a small sample size. However, it should be noted that the 'small' sample size for the long-form surveys was by design, allowing us to capture additional contextual information about the HL partnerships from participants who had already completed our interviews.

5. Conclusions and Recommendations

Findings from our multi-method case studies demonstrate a pronounced discordance between the more idealized planning and philosophy of HLs and the real-world implementation challenges of operationalizing care delivery processes and patient-centredness.

Leaders/managers tended to more positively perceive the benefits of the HLs approach, while providers – who were perhaps less exposed to conversations about the HLs philosophy but more attuned to its operational hurdles – perceived the approach more negatively. One of the key operational challenges described was the lack of integrated information technology platforms for creating and sharing CCPs, resulting in a lack of clinician involvement in CCP development and follow up. Clinician engagement in general was difficult, despite planning efforts to address this issue. Moreover, given that care planning was centred at the hospital, many community organizations felt disengaged from the care coordinating/case conferencing processes, resulting in stakeholder drop-off over time. Finally, selected indicators for HLs performance were not seen as ideally reflecting quality of care. However, survey findings

suggest that a positive outlook on potential benefits of HLs (i.e., continuing to “buy-in’ to the HLs philosophy) can be sustained despite implementation challenges. Though many of our results were largely consistent across the three Central LHIN HLs involved in these case studies, local variations did emerge which would affect the respective interpretation of the findings. For instance, patient identification was a fairly ubiquitous challenge reported across all cases, however this may be due to local variations in priorities. That is, in spite of the provincial standards for identification, some HLs prioritized mental health patients who may or may not meet the provincial criteria, and for whom referral processes may differ from traditional ED visits and hospitalizations.

Recommendations stemming from these findings include:

- Continuing clinician engagement through effective knowledge translation efforts – in other words, developing tailored messages and targeted strategies for clinicians that highlight the benefits of a HLs approach, and demonstrating the relative advantage of HLs compared to how clinicians are currently addressing the needs of complex, high-cost users. This would also be supplemented by refocusing processes for providers to be less bureaucratic and more patient-centered (more focus on patient involvement rather than governance activities, of note for smaller community organizations and providers with limited resources)
- Concurrent to HL implementation, exploring more effective ways of creating, sharing and updating CCPs to improve uptake and use. Electronic tools were of prime importance to participants in our evaluation. Funding may be directed towards: a) developing LHIN-level data sharing platforms accessible to all agencies that tend to the medical and social needs of patients in the health system; and b) development and usability testing of a CCP tool that captures data reflecting the complexity of patients’ needs and the information requirements of the multiple agencies that may attend to those needs.
- Directing policy efforts towards offering better and timelier access to patient information for all partners involved in patient care as a method of improving patient identification and continuity of care, and addressing privacy concerns by providing clarity around data stewardship.
- Exploring performance measurement indicators that are more meaningful to providers and patients and more directly relate to the quality of care for the targeted patient populations. A qualitative exercise using a patient-oriented research lens to uncover what constitutes “good care” from the perspective of providers and patients may shed light on which indicators are suitable for measuring HLs performance.
- Encouraging the expanded role of the patient in HLs (i.e. beyond their presence at case conferences), by supporting: a) the formation of community/patient/family councils; b) increased education directed at patients and caregivers regarding

the HLs approach; and c) a shift in focus at the governance level from the bureaucracy of partnering to the benefits of partnering to address patient needs.

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Appendix A: Central LHIN Health Links' Partners

NYCHL	SSNYR	SWYR
<p>Founding Partners:</p> <ul style="list-style-type: none"> • North York General Hospital (NYCHL Coordinating Organization) • Department of Community and Family Medicine • North York Family Health Team • Central Community Care Access Centre (CCAC) • Toronto EMS <p>Collaborators Group:</p> <ul style="list-style-type: none"> • Canadian Mental Health Association (CMHA) • Access One/Cash • LOFT Community Services • Toronto North Support Services • The Applied Health Research Centre (AHRC) • St. Elizabeth's • Circle of Care • VHA Home HealthCare • Social Enterprise for Canada • Access Independent Living 	<p>Founding Partners:</p> <ul style="list-style-type: none"> • Seniors and complex clients, families and caregivers • Central Community Care Access Centre • Stevenson Memorial Hospital • Southlake Residential Care Village • Georgina Nurse Practitioner Led Clinic • Southlake Family Health Team • Alliston Family Health Team <p>Future Partners</p> <ul style="list-style-type: none"> • York Emergency Medical Services (EMS) • Community Home Assistance to Seniors (CHATS) • Alzheimer's Society • Aurora Family Health Team • Canadian Mental Health Association • York Support Services Network • Community Health Ontario • Hospice Palliative Care Program • Specialty Care • Homes for Special Care • LOFT Community Services. 	<p>Mackenzie Health (lead organization)</p> <p>Central Community Care Access Centre (CCAC)</p> <p>Primary Care Providers</p> <ul style="list-style-type: none"> • Vaughan Community Health Centre (VCHC) • Thornhill Medical Centre (FHO) • Woodbridge Medical Centre (FHT) • CareFirst (FHT) • Health 1st Medical Care (FHG) <p>Specialists</p> <ul style="list-style-type: none"> • Mackenzie Health • CareFirst <p>Community Support Services</p> <ul style="list-style-type: none"> • Canadian Mental Health Association (CMHA) • CareFirst Seniors Community Services Association • Behavioural Supports Ontario (BSO) for Central LHIN • District Stroke Centre (Central LHIN lead)

<ul style="list-style-type: none"> • Senior's Health Centre (Specialty Care) 		<ul style="list-style-type: none"> • CHATS, Community & Home Assistance to Seniors • York Support Services Network (YSSN) • Alzheimer Society of York Region • LOFT Community Support • Circle of Care • Hospice Thornhill <p>Long Term Care - UniversalCare</p> <p>EMS</p>
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Appendix B: Context and Capabilities of Integrated Care Framework

Context for Integrating Care

The structures, people and values, and processes within your organization and across your network create a unique context and set of capabilities that influence the performance and outcomes of your integrated care efforts

Basic Structures

Physical Features

ex: organization/practice size and age, urban/rural location, facilities, geographic proximity of network members

Resources

ex: staffing, funding, knowledge, time, project management support, administrative support, brand/reputation

Governance

ex: board/committee composition, types of sub-committees, frequency of meetings, types of decisions made (extent of centralized planning and standardization)

Accountability

ex: regulations enforced by an authority, formal agreements between organizations, organizational mandates, professional scope of practice

Information Technology

ex: electronic medical records, email communication, video conferencing, data access & mining, tele-healthcare

Organizational/Network Design

ex: job descriptions, organizational chart, types of departments/programs, communication & decision-making channels

People & Values

Leadership Approach

ex: vision for the organization/practice, strategies used to empower staff, leadership style & competencies

Clinician Engagement & Leadership

ex: clinician champions, clinical directors, active involvement of clinicians in planning and supporting new initiatives, networks led by primary care practices

Patient-Centeredness & Engagement

ex: collection & use of patient feedback, consideration for patient needs and preferences, patient input and representation on committees as a standard practice, patient involvement in co-designing services

Commitment to Learning

ex: experimentation encouraged and rewarded, forums for meeting with and learning from external experts, time and resources to reflect on past performance

Organizational/Network Culture

ex: perceptions regarding what is important and what is appropriate behavior

Work Environment

ex: opportunity for input, job satisfaction, burnout

Readiness for Change

ex: attitudes toward change and new or innovative ideas, extent of fit between current vision/strategy and the change

Processes

Measuring Performance

ex: shared performance measurement framework, regular measurement & reporting, data access and mining

Delivering Care

ex: inter-professional teamwork and joint care planning, use of standardized decision support tools, medical model vs. holistic model of care, shared patient-provider decision-making

Improving Quality

ex: providing QI training to staff, systematic use of QI methods (e.g., process mapping, control charts), application of best practices

Partnering

ex: sharing information, sharing staff, engaging in collaborative problem-solving, building a common understanding & vision, exchanging knowledge, implementing referral & discharge/transfer agreements

Context for Integrating Care: Definitions

Basic Structures

Physical Features – structural and geographic characteristics of the organization/practice and network

Resources – availability of tangible and intangible assets for ongoing operations at the organization/practice & for network activities

Governance – how the board or steering committee is organized & its activities to direct, manage, & monitor the affairs of the organization/practice & network

Accountability – the mechanisms in place to ensure that people & organizations meet formal expectations in the organization/practice and network

Information Technology – the availability and ease of use of technology-based communication and information storage mechanisms in the organization/practice and across the network

Organizational/Network Design – the arrangement of units & roles & how they interact to accomplish tasks in the organization/practice & network

People & Values

Leadership Approach – the methods and behaviours used by formal leaders in the organization/practice or network (i.e., individual leaders, leadership teams, or lead organizations)

Clinician Engagement & Leadership – the formal & informal roles held by clinicians in the organization/practice & network, particularly physicians, that enable them to buy-in to & steer change, & influence others

Focus on Patient-Centeredness & Engagement – commitment to placing patients at the center of clinical, organizational and network decision-making

Commitment to Learning – the existence of a set of values & practices that support ongoing development of new knowledge and insights within the organization/practice & network

Organizational /Network Culture – widely shared values and habits in the organization/practice or network

Work Environment – how employees perceive their job and their workplace in the organization/practice & network

Readiness for Change – the extent to which organizations and individuals are willing and able to implement change in the organization/practice and network

Processes

Measuring Performance – the systematic collection of data about how well the organization/practice & network is meeting its goals

Delivery of Care – the methods used by providers in caring for patients in the organization/practice & network

Improving Quality – the use of practices and processes that continuously enhance patient care in the organization/practice & network

Partnerships – the development of formal and informal connections between different organizations/practices