Enhancing Access to Physical Therapy Services for People Experiencing Poverty and Homelessness: The Lighthouse Pilot Project

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ABSTRACT

Purpose: Our aim was to reveal client and provider perspectives on the impact of enhancing access to physical therapy services in a primary health care community-based setting. **Method:** Clients of The Lighthouse Supported Living facility in Saskatoon, Saskatchewan, who accessed physical therapy services over a 4-month pilot period and health care providers (physical therapists and a nurse practitioner) provided qualitative data (through interviews and an online discussion board). Client demographics, health condition, perceived function, quality of life, and satisfaction were obtained through chart review and questionnaires. **Results:** Forty-seven clients ranging in age from 21 to 72 years (mean 47 y) participated in the pilot project. Most presented with a musculoskeletal issue (85.1%). Analysis of the qualitative data gathered from client and provider participants revealed the following four overarching themes: (1) complex health challenges, unmet needs; (2) overcoming access barriers and impact of physical therapy services; (3) respecting and responding to context and environment; and (4) moving forward to enhance access to physical therapy care. **Conclusions:** Individuals experiencing homelessness and poverty face diverse barriers to accessing physical therapy services, including transportation, cost, wait times, and geographical location. Clients who accessed physical therapy services at The Lighthouse perceived a positive impact on their overall health, function, and wellness.

Key Words: health care quality, access and evaluation; health equity; homeless persons; primary health care; social determinants of health; qualitative research.

RÉSUMÉ

Objectif : révéler les points de vue des clients et des dispensateurs de soins sur l'amélioration de l'accès aux services de physiothérapie dans un établissement communautaire de soins de première ligne. **Méthodologie :** Les clients de l'établissement Lighthouse Supported Living de Saskatoon, en Saskatchewan, qui ont eu accès à des services de physiothérapie dans le cadre d'un projet pilote de quatre mois et les dispensateurs de soins (des physiothérapeutes et une infirmière praticienne) ont fourni des données qualitatives (dans un contexte d'entrevues et de babillard en ligne). L'information sur la démographie, l'état de santé, la fonction perçue, la qualité de vie et la satisfaction était tirée des dossiers et des questionnaires. **Résultats :** quarante-sept clients de 21 à 72 ans (moyenne de 47 ans) ont participé au projet pilote. La plupart avaient un problème musculosquelettique (85,1 %). L'analyse des données qualitatives fournies par les clients et les dispensateurs participants a fait ressortir quatre thèmes dominants : 1) problèmes de santé complexes, besoins non satisfaits; 2) conquête des obstacles à l'accès et retombées des services de physiothérapie; 3) respect du contexte et de l'environnement et adaptation à ces caractéristiques; et 4) maintien pour améliorer l'accès aux soins physiothérapiques. **Conclusion :** les personnes en situation d'itinérance et de pauvreté affrontent divers obstacles pour accéder à des services de physiothérapie, y compris le transport, le coût, les temps d'attente et le lieu géographique. Les clients qui ont obtenu des services de physiothérapie au Lighthouse ont perçu un effet positif sur leur santé, leur fonctionnement et leur bien-être globaux.

Many communities, health professionals, and health authorities face the challenge of providing equitable health services to people living in a low socioeconomic status environment. Diminished access to health care services can influence health and is negatively compounded by the overwhelming impact of the social determinants of health.¹ Individuals living in poverty, particularly those who experience homelessness, are among the most vulnerable populations in society.²⁻⁴

Housing as a social determinant of health affects diverse aspects of an individual's development and ability to achieve optimal health.^{1,5,6} Approximately 235,000 Canadians (0.7%) are estimated to experience homelessness in a year.^{3,6} In Saskatoon, Saskatchewan, approximately 0.2% of the population (450 people) self-reported being homeless in 2015,^{7,8} 45% of whom identified as Indigenous.⁷ In Canada, the term *Aboriginal* has historically been used to describe three distinct

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groups of First Peoples, including First Nations, Inuit, and Métis, as recognized by the *Constitution Act of Canada*.⁹ Currently, *Indigenous* is the preferred collective term inclusive of Indigenous peoples globally and is broader than the constitutional and legal definitions in Canada. In this article, we use *Indigenous* when referring to any Aboriginal group in Canada and *Aboriginal* when referencing the literature. We use *Métis* and *First Nations* when referring to those populations specifically.

Homeless individuals have poorer health outcomes than the general population, and they often experience a disproportionate burden of health challenges.^{2,3,10,11} Chronic health conditions such as diabetes, musculoskeletal disorders, hypertension, and chronic obstructive pulmonary disease are prevalent among homeless adults.^{2,3} Adults who experience prolonged homelessness have age- and sex-standardized mortality rates that are approximately three to five times higher than those of the general population.^{12–15} Given this high disease burden and the higher morbidity and mortality rates, providing enhanced access to primary and preventive services, including physical therapy, is therefore critical for this population.^{16–20}

Primary health care attempts to bring community-based health care services to a broader range of individuals across diverse socioeconomic levels. This approach is defined as a person's first point of contact with the health care system, and the goal is to provide improved access to health care in the community, focusing on health promotion and injury prevention.²¹ By focusing on improving patients' access to needed care and ensuring that their health needs are being met in timely, meaningful, and efficient ways, primary health care models often mitigate access challenges while attenuating downstream health care costs.^{22–24}

Physical therapists are primary health care professionals who can support health promotion interventions, as well as the treatment and prevention of injury and disease, at both the individual level and the community level.^{25,26} When people have timely access to community-based, primary health care physical therapy and rehabilitation services, it can result in positive health outcomes and cost effectiveness,²⁶ reduce the number of emergency visits,²⁷ reduce the length of hospital stay, and extend the length of time that an individual can remain independent with a high quality of life.^{26,28–32}

In Saskatchewan, unfortunately, physical therapists are not currently part of inter-professional primary health care teams; this situation leaves a gap in health care access for individuals experiencing homelessness and poverty. The Lighthouse Supported Living is a non-profit housing provider that offers emergency shelter, supportive living, and affordable housing in Saskatoon; it provides housing, food services, and employment in a supportive community for anyone in need.³³ In 2015, the

Saskatoon Health Region (SHR) recognized the complex health care needs and high rates of emergency department visits by residents of The Lighthouse, and it responded by providing temporary funding for a part-time, on-site nurse practitioner, a registered psychiatric nurse, a special care aid, and paramedics.³⁴

A great need for an on-site physical therapist was identified by the nurse practitioner and strongly supported by The Lighthouse's general manager and addictions councillor. The Canadian Physiotherapy Association (CPA) recognizes the value of providing a primary care physical therapist, but funding was not provided by the SHR to support this additional clinician. The nurse practitioner contacted the Saskatchewan Physiotherapy Association (SPA) in December 2015 about this need, and, in response, the SPA partnered with a local private clinic (CBI Health Group) to conduct a pilot project in which the clinic would "donate" four physical therapists to provide health care services to residents of The Lighthouse once a week for approximately 4 months.

The objective of this pilot project was to determine the value of providing enhanced access to physical therapy services in a community-based primary health care setting. This project aimed to explore (1) the perceptions of The Lighthouse residents of the influence of enhanced access to physical therapy on their overall function and health and (2) the perceptions of the health care providers (physical therapists and nurse practitioner) of the value of integrating physical therapy into the on-site health care services offered at The Lighthouse.

METHODS

SPA and project partnership

The SPA, a branch of the CPA, is the provincial professional association, and it represents more than 400 member physical therapists in Saskatchewan. Its mandate is to advance the delivery of physical therapy services among diverse populations in Saskatchewan. Its vision is to be the collective voice for physical therapy in Saskatchewan, with a commitment to promoting the profession; fostering excellence and innovation in practice, education, and research; and advocating for equitable access to physical therapy services for the population. SPA activities maintain strong relationships and communication among physical therapy members and clinics.

After it was approached by the nurse practitioner from The Lighthouse, the SPA sent out a request to members who might volunteer their services. CBI Health Centre responded to the request and donated physical therapists and hours to this initiative, thus commencing a partnership among the SPA, The Lighthouse, and CBI Health Centre.

Evaluation team

All four authors were involved in the evaluation of this pilot project, and all are physical therapists. Two authors (SO, BB) serve as board directors on the SPA Board and one author (GW) is a project manager with the SPA. Two of them (SO, BB) are also on the faculty of the School of Rehabilitation Science at the University of Saskatchewan, and they bring experience in Indigenous health, access to health care services, cultural humility, community engagement, and mixed-methods approaches to research and evaluation. One author (GW) is an independent consultant, and one (MO) is a graduate student who brings an international lens to the work. This diversity of perspectives and experience was a strength of this evaluation.

The Lighthouse

The Lighthouse provides long-term supported housing, an emergency shelter for women and men, and individual emergency beds. The reasons why clients access emergency shelter include evictions, financial challenges, concurrent disorders, domestic challenges, and addictions. The Lighthouse offers a safe place for them to sleep and store their belongings, and it provides a range of supports for finding employment and securing safe long-term housing. It also offers affordable living suites, where individuals who can live independently, but who require some assistance, can have a safe and sustainable place to live and call home. Finally, it provides a Stabilization Unit – a supervised, secure place to sleep for those under the influence of drugs or alcohol. Clients of The Lighthouse have access to regular meals and an on-site counsellor, nurse practitioner, and support staff.

Participants

All The Lighthouse residents had access to the primary health care team located there. Residents self-referred to physical therapy services or were referred to physical therapy services by the on-site nurse practitioner. Posters were placed throughout the facility, and an information sheet about accessing physical therapy services was placed in the mailboxes of all residents. The nurse practitioner provided regular health care services to residents who self-referred or were referred by other staff, and she made regular visits to residents' apartments. She had been providing these services for several months before the project began, and she referred the highest priority residents to the physical therapy services. The residents who chose to access them were identified as client participants.

Provider and mentor physical therapists volunteered for this study. Four provider physical therapists were donated by a CBI Health Group, Saskatoon, clinic and provided hands-on services at The Lighthouse Supported Living facility. These provider physical therapists were new graduates in their first 3 years of practice. Two volunteer mentor physical therapists provided mentorship to the provider participants as a way to support them in

treating the more complex health conditions that were anticipated among the client participants. One mentor physical therapist had 20 years of private, orthopedic clinical experience, and the second mentor physical therapist had 10 years of public, primarily cardiorespiratory and neurology clinical experience. This second public practice mentor physical therapist had experience working with homeless individuals and those living in poverty through her experience working at a local inner-city hospital. The part-time, on-site nurse practitioner was involved with all aspects of this project, including coordination of physical therapy treatment sessions with the client participants and was also identified as a provider participant. Provider participants and mentor physical therapists shared their perspectives through an online focus group discussion (described later).

Study design

This study was designed as a pre-session–post-session (in this case, a physical therapy treatment session) single-group design in a programme evaluation context. It was reviewed by the Research Ethics Board at the University of Saskatchewan and met the requirements for ethics exemption because it focused on programme evaluation. It was conducted in compliance with the institutional ethics board's standards. Consent for participation in this project was obtained from all participants. The Lighthouse management approved the implementation and evaluation of this pilot project.

Data collection and measures

A total of 47 client participants volunteered for this pilot project. Quantitative data report on all 47 participants, whereas qualitative data were drawn from a subsample of these individuals.

Quantitative measures

For each client participant, demographic information, health condition, and number of visits were collected from a chart review (de-identified) completed by the on-site physical therapists. Pre- and post-session data were collected after each session using the EuroQOL Five-Dimension questionnaire (EQ-5D-5L),³⁵ the Patient-Specific Functional Scale (PSFS),³⁶ and a modified Visit-Specific Satisfaction Instrument (VSQ-9).³⁷ Responses to the pre-session questionnaires were obtained verbally from the client participants, with provider participants recording responses directly on the questionnaires. Responses to the post-session questionnaires were obtained verbally from the client participants by the nurse practitioner.

The EQ-5D-5L is a simple, self-administered instrument that assesses health-related quality of life in five socially relevant domains: mobility, self-care, usual activities, pain–discomfort, and anxiety–depression.^{35,38} The PSFS is a measure that allows clinicians and patients to focus on patient-specific activities that are difficult to

perform.³⁶ Participants identify personally important activities that are difficult to complete and rate their ability to complete them on a scale ranging from 0 to 10.³⁶ Patient satisfaction was measured using the VSQ-9,³⁹ modified for use in a physical therapy practice context.³⁷

Qualitative measures

Semi-structured interviews were conducted by a member of the research team in a private area. All client participants were invited to participate in a one-on-one semi-structured interview lasting 15–45 minutes, although only seven participants chose to do this. Each interview was conducted using itracks interview software (itracks, Saskatoon, SK), with questions presented on a computer screen and read aloud. Responses to closed-ended questions were recorded on the computer and open-ended questions were audio recorded using the software. Audio responses to each question could be replayed, deleted, and re-recorded if the participant chose. Audio recordings were downloaded from the software and transcribed. Participants were asked about their experience with the physical therapy service(s) they had received. (The interview questions are provided in Appendix 1 online.)

Online focus group discussion with the provider participants ($n = 5$) and mentor physical therapists ($n = 2$) took place at the completion of the pilot study using itracks bulletin board focus group software (itracks, Saskatoon, SK). The discussion took place using an asynchronous online format over 3 days. An online discussion guide was drafted by all the authors and was facilitated by one of the authors (GW). (It can be found in Appendix 2 online.)

All provider and mentor participants were emailed an invitation to participate in the discussion; the email included a link to set up a secure password and access the discussion board. Questions were preprogrammed with specific post times using the itracks online forum software, with new questions available for participants to discuss each day. Participants were also given the ability to comment on the previous day's discussion. The participants submitted written responses using either computers running web browsers or mobile devices set up with the itracks mobile app. The asynchronous nature of the discussion allowed provider and mentor participants to actively participate at a time convenient to them.

The participants' responses to questions were not influenced by other participants as a result of the setup of the discussion. The participants were required to submit their responses to the questions before making other participants' responses visible. However, once a participant's response had been submitted, other responses were displayed; this allowed the participants to comment on them, thereby creating a threaded online discussion. Some of the participants chose to submit private responses, which were viewable only by the moderator. A

transcript of the discussion was downloaded from the itracks software for use in analysis.

Data analysis

Quantitative data were analyzed using IBM SPSS Statistics for Windows, version 22.0 (IBM Corporation, Armonk, NY) to develop a descriptive analysis of all the demographic and baseline measures. Available posttest measures included frequencies and valid percentages for categorical variables and means and standard deviations for continuous variables. The EQ-5D-5L scores were adjusted on the basis of utility weights available for a sample of the Canadian general population.³⁵

Qualitative data were analyzed using thematic analysis of the transcribed data. The thematic analysis was carried out iteratively by SO, MO, and BB. A preliminary categorization process was conducted using the strategy of detailed reading, selecting revealing statements, and identifying representative sentences. After individual analysis, common patterns and themes were identified through iterative discussion.

RESULTS

Quantitative results

A total of 47 client participants volunteered for this pilot project (see Table 1 for their characteristics). The majority were men (70.2%) with an average age of 47 years. The number of clinical visits per participant

Table 1 Demographic and Clinical Characteristics of Participants ($N = 47$)

Variable	No. (%) [*]
Gender	
Male	33 (70.2)
Female	14 (29.8)
Age	
Range, min–max, y	21–72
< 50	18 (38.3)
≥ 50	14 (29.8)
Missing	15 (31.9)
Total physical therapy sessions	
1	21 (44.7)
2	5 (10.6)
≥ 3	21 (44.7)
Condition categories [†]	
Orthopaedics	40 (85.1)
Neurology	2 (4.3)
Cardiorespiratory	1 (2.1)
Mobility and balance	2 (4.3)
Women's health	2 (4.3)
Other	3 (6.4)

^{*}Unless otherwise indicated.

[†]Categories are not mutually exclusive; participants could report more than one condition.

Figure 1 Pre- and post-session mean EQ-5D-5L values.

Note: Lower scores are associated with improved health dimensions.
EQ-5D-5L = EuroQOL Five-Dimension Questionnaire.

ranged from 1 to 11, and approximately 54% of participants had repeat visits (defined as >1 visit). Participants presented with diverse chronic conditions across numerous health systems; the majority (85.1%) presented with an orthopedic issue.

PSFS and EQ-5D-5L

Because of the volume of missing data (only two participants completed the post-test PSFS), only the pre-visit data are presented. The mean pre-session PSFS score was 50.72 (SD 33.44). Only 33 of the participants (70.2%) completed the pre-session EQ-5D-5L, and 17 (36.2%) completed the post-session test. Figure 1 shows the weighted mean pre- and post-session scores for each of the EQ-5D-5L domains. Mean pre-session EQ-5D-5L values in the pain-discomfort (3.05) and mobility (2.58) domains are higher than those in the other domains, indicating lower perceived functioning.

Satisfaction

See Table 2 for the VSQ-9 results. Note that item 1 in the VSQ-9 (“Getting through to the clinic by phone”) did not apply to this population, thus it is not reported here. Only 16 (34.0%) participants completed the modified VSQ-9. The majority of them rated all areas as “very good” to “excellent”; the personal manner of providers ranked the highest (75.0% were rated as excellent) and explanation of assessment results ranked the lowest (31.3% rated as excellent).

Qualitative results

Analysis of the interviews (completed with 7 of the 47 client participants) and online asynchronous focus group discussion (completed with the four physical therapists,

one nurse practitioner, and two mentor physical therapists) revealed the following four overarching themes: (1) identifying complex health challenges and unmet needs, (2) overcoming access barriers and impact of physical therapy services, (3) respecting and responding to context and environment, and (4) moving forward to enhance access to physical therapy care.

Theme 1: Identifying complex health challenges and unmet needs

Client participants identified chronic pain, reduced mobility, urinary incontinence, and dizziness as conditions that affected their activities of daily living, function, and quality of life. Provider participants identified a range of unmet health care needs and gaps in the continuum of care:

I really began to realize how easily this population “slips through the cracks” and go [sic] without the care that they need. By not having access to certain health services, like physical therapy, most live with the pain or disability that comes with their condition and have little knowledge as to how they can control their pain and improve their day to day function. (Provider participant)

Theme 2: Overcoming access barriers and impact of physical therapy services

Client participants identified cost, transportation, and wait time as barriers to accessing physical therapy care. Having access to physical therapy services onsite and free of charge at The Lighthouse alleviated these barriers. One said,

That is why this physical therapy [at The Lighthouse] is great because I’m on a low income and there is no way I can afford private physio.

Table 2 Participants' Satisfaction (VSQ-9 Results; $N = 16$)

Satisfaction rating	No. (%) of participants							
	Waiting time after arriving	Time spent with care provider	Answers to questions*	Explanation of assessment results	Advice and information about exercise and activities	Technical skills of provider	Personal manner of providers	Overall visit
Excellent	10 (62.5)	9 (56.3)	7 (46.7)	5 (31.3)	7 (43.8)	9 (56.3)	12 (75.0)	10 (62.5)
Very good	5 (31.3)	3 (18.8)	5 (33.3)	7 (43.8)	5 (31.3)	4 (25.0)	2 (12.5)	3 (18.8)
Good	1 (6.3)	3 (18.8)	3 (20.0)	2 (12.5)	3 (18.8)	2 (12.5)	2 (12.5)	2 (12.5)
Fair	—	1 (6.3)	—	2 (12.5)	1 (6.3)	1 (6.3)	—	1 (6.3)
Poor	—	—	—	—	—	—	—	—

Note: Dashes indicate no responses in this category.

*For this item, $n = 15$.

Another added, "There is no way in the world that I can go out of the community . . . or [go to] a hospital . . . for physio. No, I cannot afford it, and therefore I have to go without it."

Even when alternative, publicly funded services were available, wait times were still a barrier. However, this pilot project addressed wait times. One provider participant stated,

An older lady who sustained a recent humeral fracture could not afford [private] physical therapy services and was awaiting treatment at [public clinic], but couldn't get in for several months so was being seen at The Lighthouse.

Client participants identified the multidimensional impacts of having enhanced access to physical therapy services, including enhanced knowledge and awareness of health-promoting activities to support function and independence. For example, one client participant noted,

Seeing a physiotherapist at The Lighthouse has affected me, it has taught me some different types of physio to do so I can start regaining my muscles and bending properly . . . [to] help me to get fit. I'm gonna keep working with the team as long as possible . . . [to] start to do things on my own.

Theme 3: Responding to context and environment

This theme has two distinct sub-themes: adapting care to respect context and environment and building on resiliency.

Adapting care to respect context and environment

Client participants repeatedly identified that having physical therapy services available at The Lighthouse was not just convenient but also enabled them to access care in an environment that was familiar and comfortable. Provider participants highlighted various adaptations they had made to physical therapy treatment to ensure that they were better meeting the diverse health needs of

the client participants. They noted that more traditional, or typical, outpatient physical therapy treatment plans did not always fit in this context. As one provider participant said, "The types of treatment I tended to focus on were different than a typical private practice caseload. . . . I tried to focus on education and self-management strategies and less on true biomechanical care."

Considering The Lighthouse as a facility outside the health care sector, it was necessary to adapt to the types of tools that could be used during physical therapy treatments. One provider participant identified "working with the bare essentials and having to improvise quickly. . . . Working outside of box in a different environment."

Provider participants indicated the need to also adapt the focus of their treatments and prioritize complex health presentations in the context of the challenges faced by the client participants. For example, a provider participant said,

A primary concern for me were the obviously multifactorial, complex situations these clients found themselves in. Some days, clients were too preoccupied with not knowing if they were going to have a bed to sleep in that night to worry about their poor posture contributing to their low back or shoulder pain.

Provider participants described how they prepared themselves to treat individuals who had a significantly different lived experience than the providers themselves. One said,

[Demonstrating] compassion, empathy, and the true desire to go into a setting like The Lighthouse without prejudice and provide patients with the treatment that they deserve [was necessary]. No matter the experiences or life events that may have brought them to where they are, they deserve access to care.

Another added, "Coming from such a different background than most of the residents, there was a lot that I just couldn't even imagine let alone fully understand."

Building on resiliency

The strengths and resiliency of the client participants became clear to many of the providers. One remarked,

The resiliency of these clients was inspiring. The significant injuries that some residents had . . . and continued to work through were shocking. Despite everything that was happening to them, most of them were very positive individuals. The Lighthouse residents would generally rate themselves much healthier than I would have rated them.

These experiences stimulated the provider participants to reflect on the importance of social accountability, health equity, cultural safety, and cultural humility: “[We felt responsible] to truly believe and advocate for equal access for all, no matter the client’s socioeconomic status, ethnicity.”

Theme 4: Moving forward to enhance access to physical therapy care

The client participants offered insights into elements that would be critical to maintaining enhanced access to physical therapy care at The Lighthouse. Some noted that physical therapy sessions could be offered more regularly and more than just 1 day per week: “Lots of people work, too, so maybe have some [physical therapy services] like in the evenings, like programming nights.”

Provider participants expanded on these ideas, suggesting other enhancements that would support or allow clients to engage in augmented self-management activities: “Having a consistent team of service providers [including physical therapists] who could really build relationships with this community would be helpful.”

Several of the provider participants reflected on their role and position at The Lighthouse and concluded that being successful as a physical therapist in this unique setting required background knowledge and practical experiences in similar settings. One said, “In a lot of aspects I did not feel prepared going into that setting, especially emotionally and culturally. Going into The Lighthouse for my first day, I was nervous and had no idea what to expect.”

The provider participants also shared their challenges with collecting completed and detailed surveys and questionnaires from the client participants. One said, “I did find it difficult to complete all of the intake paperwork . . . the clients tended to get impatient with all of the questions.” Another added, “Some [clients] had difficulty reading or did not understand the questions and therefore required assistance.”

DISCUSSION

The challenges and stressors of daily living for homeless individuals are completely different from those of the general affluent population.^{6,40} Such challenges have a negative impact on overall health and health outcomes among the homeless and vulnerable populations.^{2–4}

Physical therapists can play a critical role in addressing many of these health inequities by providing timely, relevant, and meaningful treatment,¹⁹ working to narrow the gap in health disparities in vulnerable populations, particularly if they are working in a primary health care context.^{25,26} In Saskatchewan, the value and impact of having physical therapists as part of primary health care teams have not been fully realized. This study revealed the participants’ perspectives on the impact of enhancing access to physical therapy services in a primary health care context at The Lighthouse Supported Living facility in Saskatoon.

Client participants presented with diverse health conditions, including neurological, cardiorespiratory, orthopedic, and women’s health conditions as well as mobility and balance challenges. These conditions are consistent with previous findings linking homelessness to an increased risk of chronic pulmonary and musculoskeletal disorders^{2,41} and to disproportionately higher rates of inadequately controlled hypertension and diabetes.^{2,42,44} There is a great need to provide homeless individuals with increased access to rehabilitation specialists to address complex and chronic condition management.⁴⁴

Primary health care teams should include physical therapists as team members because they can mitigate the impact of chronic health challenges on overall function, mobility, and health among individuals experiencing homelessness and poverty. Integrating a primary health care team (nurse practitioner, registered psychiatric nurse, special care aid, paramedic, and physical therapist) at The Lighthouse was associated with a 24% reduction in emergency department visits in the SHR from Lighthouse residents.³⁴ Examples of physical therapy services that likely contributed to this reduction include providing proper walking aids, treating dizziness, and providing fall prevention strategies and respiratory rehabilitation exercises.

If the time allotted to the project had been longer, more progress could have been made mitigating the impact of chronic health challenges. Providing enhanced access to physical therapy services for homeless individuals may enhance their quality of life while at the same time curbing the high number of emergency department visits and associated costs.

Client participants strongly valued having access to physical therapy services at The Lighthouse. Approximately 19% ($n = 3$) and 63% ($n = 10$) rated satisfaction with physical therapy services overall as very good or excellent, respectively. Our results confirmed that such access alleviated the physical barriers (e.g., cost, transportation, geographical location, wait times)^{44,45} to accessing services faced by people living in poverty. Providing physical therapy services in a primary health care setting at The Lighthouse also increased access for individuals who were not homeless but who were living at a lower socioeconomic

level. At least one client participant who could not afford to pay for physical therapy services in a private clinic setting, who was not a resident at The Lighthouse, sought physical therapy services there because of the long wait times at regular publicly funded clinics.

Individuals living in socially disadvantaged contexts also face the competing challenges of meeting their daily, basic human needs. They are more likely to place the basic human needs of food and shelter above any health issues of mobility, pain, strength, or function.⁴⁶ The client participants in this study articulated the challenge of focusing on physical therapy treatment in a food insecure, impoverished, or homeless context. Providing physical therapy services directly at The Lighthouse enabled them to access services opportunistically and in a way that matched their lifestyle. In fact, during this study, 45% of the client participants accessed physical therapy services more than three times.

Bringing physical therapy services to the people, where people live, work, and play, is foundational to primary health care and an important consideration for addressing health inequities and disparities among the homeless and vulnerable populations. The interdisciplinary interactions were an important aspect of the delivery of services. For example, during the referral process, the nurse practitioner would discuss with a provider participant background information about a client participant and past health care interactions, thereby enabling the provider to deliver care with greater consideration for the client's social determinants of health and health history.

After the physical therapy assessment and treatment, the provider participant sometimes shared treatment recommendations with the nurse practitioner; this facilitated further care and follow-up during interactions between a client and the nurse practitioner, who was present at the facility more consistently. One client participant was visiting from a northern community and saw a provider participant at The Lighthouse during that time. Later, a nurse practitioner from the home community contacted the nurse practitioner at The Lighthouse to obtain a copy of the rehabilitation exercises provided by the provider participant to support the client's rehabilitation.

The satisfaction ratings of the physical therapy services in this study were slightly lower in the categories of communication and education; 43.8% and 31.3% of the client participants rated "explanation of assessment results" as very good or excellent, respectively. We attribute these relatively low scores to the limited time that providers had to develop relationships with the client participants. Relationship and rapport building is well known to positively influence client perceptions of quality of care, ensuring that clients feel heard and supported as they navigate their health challenges.^{47–49}

Interestingly, the provider participants reported that the more time they spent at The Lighthouse, the more

comfortable they became. We suggest that more consistent and regular interaction between providers and clients be encouraged to build trust and optimize patient satisfaction in this community-based environment.

The provider participants noted that enhanced training in primary health care settings and about homeless individuals would have been beneficial to their professional and clinical practice in this study. Several Lighthouse clients self-identified as Indigenous, and this led the provider participants to emphasize that augmented cultural safety and cultural humility was an area in which they were in need of further professional development. It is well documented that individuals who are homeless, who live in poverty, or who identify as Indigenous have had negative experiences with hospitals and health care providers in the past.^{50–52} The sense of distrust that these experiences have built up could be at least partially alleviated if health care providers were to receive training to critically acknowledge and purposefully address their underlying attitudes and beliefs and to build a culturally safety health environment.^{52–54}

It is interesting that although the provider participants did not necessarily receive enhanced training in primary health care contexts, they realized the importance of modifying or adapting their usual physical therapy practice to account for the complexities and particular characteristics of their client participants. Providing comprehensive, consistent, and progressive levels of physical therapy care to the client participants was not always possible; those who were homeless were transient and thus not always able to be on site when the physical therapists were. This was not a surprise to our team because the challenge of providing consistent, continuous care to homeless individuals has been reported in other cities in Canada.^{55,56} In fact, Aldridge and colleagues suggested that Canada's health care system must coordinate a cross-sectoral response, in conjunction with providing enhanced services, to address the health inequities that exist among homeless individuals.⁵⁷

In our study, a single treatment and only baseline measures were often all that could be provided and obtained. The provider participants were challenged to adapt their usual care practices to holistically address the complex health challenges of the client participants. For example, they prescribed functional exercises but had limited time for instruction and progression, and offering physical therapy services once per week (a provision in this study) did not align with the transient lifestyle of the client participants. The client participants' ability to remember the exercises and keep the exercise documents or equipment while being homeless or living in poverty was another challenge. Further research is required to determine whether a more flexible interdisciplinary and cross-sectoral approach to providing physical therapy services (e.g., drop-in or walk-in health care centres,

evening hours) would increase the ability of Lighthouse residents to access care in a more consistent, relevant and appropriate way.

Although drawing general conclusions from this study may not be possible, our findings meaningfully clarify the important role of physical therapy in a primary health care setting (outside a health facility) and among individuals who are homeless or living in poverty. We anticipate that the findings can be used to advocate for the critical role of physical therapists on inter-professional health care teams, in places that are easily accessed by individuals experiencing homelessness. Our team, in partnership with the SPA, plans to use the data from this study to lobby provincial and local governments to increase the physical therapy positions in these community contexts. We anticipate that our findings will be used by health care administrators when planning the location and type of community-based care offered to homeless individuals. Moreover, our results highlight the importance of providing appropriate and necessary educational and professional development support for physical therapists working in primary health care settings and with individuals who are homeless and living in poverty.

This study has some important limitations to highlight. First, the transient lifestyle of The Lighthouse residents, language barriers, and respect for patient time led to inconsistent and infrequent physical therapy treatment sessions; this made it a challenge to obtain adequate and consistent quantitative measures. Second, this study was limited to a 4-month time frame because of the availability of the donated physical therapy services. Third, the sample size was small because we relied solely on The Lighthouse residents who self-selected to see the physical therapist. Fourth, many of the questionnaires were administered by the provider participants and the nurse practitioner verbally by asking the questions and recording the responses; this was a result of the client participants' low literacy rates and limited comprehension of the questions. This may have resulted in a social desirability bias, whereby responses were influenced by the patient-provider relationship. Ideally, the questionnaires would have been administered by the research personnel, but resources for the study were limited and locating participants presented challenges.

Finally, analyzing the provider and client participant perceptions data together might be viewed as a limitation because of the mixed sources. However, we saw this as a strength because we were looking for similarities and differences within and between the two groups' (client and provider) perceptions of their experiences together. These types of data strengthen the analysis and provide diverse perspectives that inform the analysis and the conclusions that can be drawn. This may in turn enhance the transferability and relevance of this work to others.

CONCLUSION

This study confirmed that individuals experiencing homelessness and poverty in Saskatoon face diverse barriers to accessing physical therapy services. Client participants who accessed physical therapy services at The Lighthouse perceived that it improved their overall health, function, and wellness. Our findings suggest that providing physical therapy services in the community, where people live, access food, and socialize, may be an effective way of enhancing access to care among individuals who are homeless or poor. The transient nature of individuals living in contexts of homelessness and poverty is often unpredictable and uncertain and makes the appointment-based approach to delivering services a barrier to care. Finally, as physical therapists expand their role into primary health care settings in low socioeconomic contexts, enhanced professional development and support should be provided to ensure that these clinicians provide meaningful care that effectively addresses the health needs of underserved populations.

KEY MESSAGES

What is already known on this topic

Homelessness is a social determinant of health that has a negatively impact on overall health and function. Individuals experiencing homelessness face unique barriers to accessing relevant, timely, and appropriate health care (including physical therapy), which perpetuates health disparities. Different models of primary health care have been created to reduce the strain on downstream health care use and costs, improve access to health care, and reduce wait times. However, little is known about the role of physical therapy in such primary health care teams and its impact on the health and function for the homeless and poor.

What this study adds

Physical therapists are well equipped to optimize function, mobility, and overall health in primary health care contexts, and they have a strong role to play in this area. Our results reveal that the client participants were satisfied overall with having access to physical therapy services at The Lighthouse Supported Living facility, and they believed that it had a positive impact on their general health and well-being. There is a need for health care services to be delivered in non-traditional ways to better meet the opportunistic lifestyles and unmet health needs of individuals experiencing homelessness and poverty. Moreover, physical therapists should have access to better support and more professional development opportunities as they expand their practice into primary health care contexts and when working with underserved populations.

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