A Framework for Developing an Integrated Shelter Health Model in a Mid-Sized Community: The Windsor Shelter Health Experience

Karen Michael, Kathryn A. Pfaff, Kelly Goz and Jennifer N. Bondy

Abstract

Windsor Shelter Health is an integrated program that offers comprehensive on-site medical services at shelters and drop-in centres for people experiencing homelessness in Windsor, ON. Although homelessness exists in most Canadian communities, there is more understanding of homelessness responses in larger urban centres. Windsor is a mid-sized border city in southwestern Ontario. Here, we explore the structures and processes that have been used to build a shelter health model in a city of this size and some early outcomes. Examples of these include a thoughtful governance structure, a shared electronic medical record, co-location of services, embedded research and educational programs, sustainable funding sources and collaboration between partners. Using this model, we were able to divert patient visits from the emergency department to be better managed in an outpatient setting, increase patient attachment to primary care and create novel avenues for education for both learners and staff in Windsor. Therefore, we demonstrate why these are essential components of this new program, and how other mid- and smaller-sized cities might incorporate these elements into their own shelter health programs.

Introduction

Homelessness can be defined by many circumstances and lived experiences that result in people being vulnerably housed, including living on the street, in unsafe places, in emergency shelters or temporarily with friends or family (Homeless Hub 2024). Being vulnerably housed leads to various obstacles and challenges, including increased barriers to accessing healthcare (Liu and Hwang 2021). These barriers include having difficulty finding transportation to appointments, lack of access to a consistent telephone for relaying messages, as well as having competing demands, such as food and security, that may supersede the need or desire for healthcare (Liu and Hwang 2021).

Although homelessness is prevalent across Canada in large-, mid- and small-sized cities, larger cities (e.g., Toronto, Vancouver) tend to garner more research attention and have more established homelessness responses. Literature on homelessness responses and shelter health frameworks applicable to small- and mid-sized cities in Canada is not readily available. Windsor is a mid-sized city in Ontario with a population of approximately 229,660 individuals (Statistics Canada 2021). In 2022, 463 households were reported to be experiencing homelessness in Windsor-Essex according to the Windsor Essex By-Names Prioritized List (Goz and Kitchen 2022). By July 2024, this number increased to 864 households (City of Windsor 2024). In 2021, according to Windsor's Point in Time report, 73% of individuals surveyed said that they had stayed in emergency shelters over the past year while 27%

reported staying elsewhere (City of Windsor 2021). Chronic medical illnesses, mental health and substance use concerns are prevalent (City of Windsor 2021).

Traditional medical clinics tend to offer scheduled appointments and limited time with providers within distinct community care settings; therefore, they do not adequately meet the needs of people experiencing homelessness (PEH). Until recently, Windsor lacked the integrated care and research infrastructure that informs homelessness responses in other large Canadian cities. Windsor Shelter Health (WSH) was established to improve patient experiences and outcomes by enhancing access to care that addresses their needs and improves population health. Its creation leveraged the efforts of community partners already working in this space and added on-site healthcare services at its homeless shelters. In this paper, we discuss the work undertaken in Windsor to build a healthcare model that meets the needs of its vulnerably housed population. We document the structures, processes and outcomes and report them as an organizational framework that can be used by other comparable mid-sized or small-sized cities for developing an integrated shelter health model.

Community Context

The idea of building WSH began in 2020 after an article was published in the *Windsor Star* (Jarvis 2020). The article discussed the COVID-19 pandemic's negative impact on PEH and highlighted the need for on-site healthcare services at an isolation and recovery centre that was opened during the pandemic. The pandemic triggered leadership throughout the city in both the health and the social service sector to come together physically on site at local homelessness shelters to provide support. This on-site presence quickly illuminated the health disparities affecting PEH among the city's leaders.

In November 2020, a petition was made to the academic director of Postgraduate Family Medicine at the Schulich School of Medicine and Dentistry's Windsor Campus to consider offering a postgraduate elective in street health. Simultaneously, a proposal was made to the City of Windsor's commissioner of Human and Health Services to encourage the idea of a "shelter health" program. In December 2020, discussions with the Canadian Mental Health Association (CMHA) took place for support with advancing the initiative, and, in 2023, CMHA became the clinical organizational lead.

In January 2021, three different shelters/sites were identified with a potential fourth location earmarked for future expansion. Throughout 2021, multiple discussions occurred with program leads from other jurisdictions to better understand best practices for building a shelter health model. Simultaneously, local healthcare, social service leads and clinicians worked to socialize the idea among their community partners, and they began the work of developing its framework. As news spread, leaders and champions organically grew from the municipal, health, social service and postsecondary education sectors. Recognizing the importance of embedding research and quality improvement within the model, great strides were made through 2021 and 2022 to build an active volunteer research team, which resulted in the submission of two successful research grants. Funding was also received to implement a primary care model with physicians working on site alongside a dedicated allied health team.

Framework: Structures, Processes and Outcomes

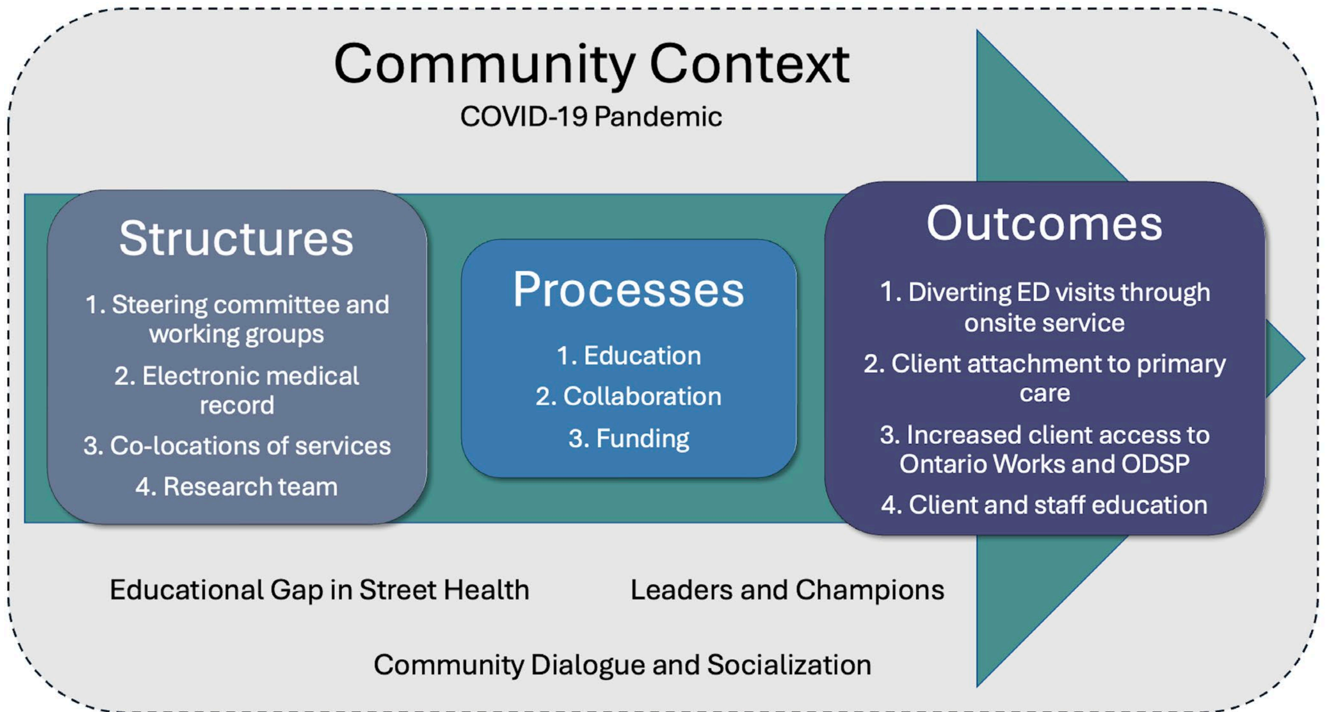
To better understand what we mean by structures, processes and outcomes, we define each term based on Donabedian's framework (Figure 1) (Donabedian 2005). The term "structures" encompasses the unique physical attributes embedded in the WSH organization. "Processes" entail the key elements and model of delivery of WSH, including education, collaboration and funding. Lastly, "outcomes" are the results and impact of our implemented structures and processes for both PEH and staff.

Structures

The WSH focuses on improving the health, social stability and quality of life of our local shelter populations by integrating current collaborative outreach activities happening at area shelters and expanding shelter services to include medical care on site. The WSH model offers equitable, culturally safe, coordinated healthcare on site at four clinics serving people considered marginalized, vulnerable, high risk and underserved.

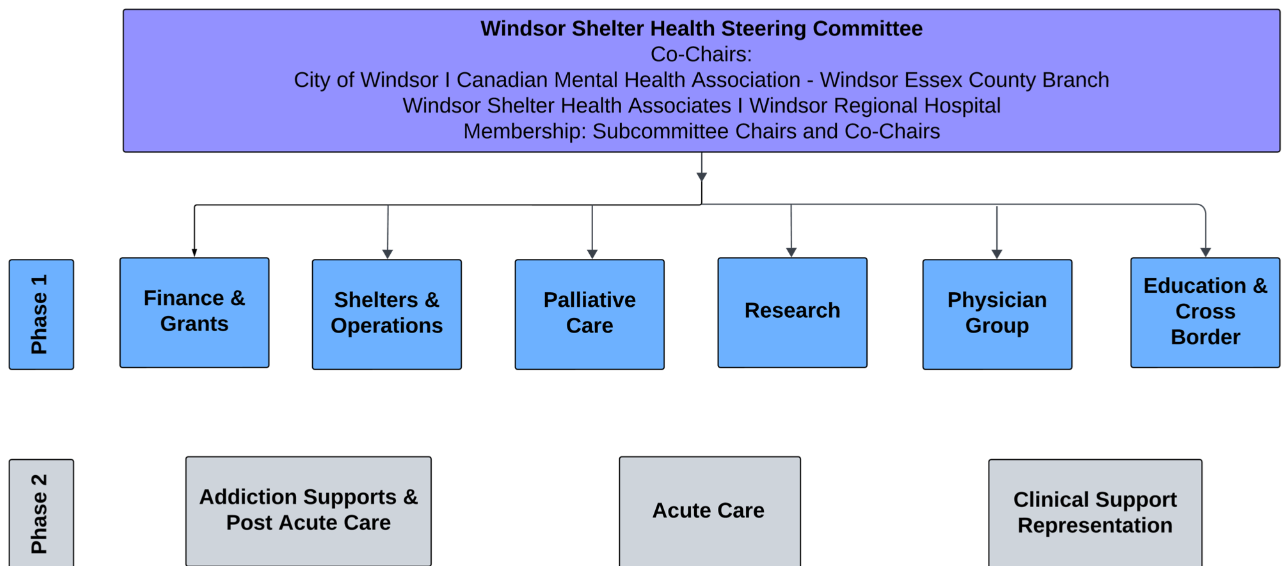
One essential structure included in our framework is WSH's steering committee (Figure 2). A family physician, who championed the development of WSH, is the medical director and co-chair of the steering committee. The committee leveraged Windsor's community interconnectedness to build capacity among various organizations who were working in this space to garner support for this integrated model. From these conversations, working groups formed in a somewhat organic manner. Specifically, community leaders with content expertise in their respective fields began contributing in one of several areas: education, physician/clinical, research, palliative care, shelters and operations, finance and grants, addiction supports, acute care and clinical support. Each of these working groups were then asked to identify co-leads who would represent the group at the steering committee level. Strong communication among and between members of the different working groups is maintained by co-leads coming together at one table for regular dialogue. The steering committee is co-chaired by individuals from the four partner organizations that form the backbone of WSH – the City of Windsor, WSH Associates (physician group), the CMHA Windsor-Essex County Branch and Windsor Regional Hospital (WRH).

FIGURE 1.
Structures, processes and outcomes of Windsor Shelter Health



ED = emergency department; ODSP = Ontario Disability Support Program.

FIGURE 2.
Steering committee organization and working groups



Source: Used with permission from Windsor Shelter Health.

The governance model enables collaboration on a large scale and leverages the capacity of Windsor's interconnected, tight-knit community. This collaboration across various sectors allows a multi-faceted and holistic approach wherein key individuals are sitting at the table, providing expertise and making shared decisions. This committee hosts regular meetings to work on and expand WSH operations.

The second essential structure is WSH's shared electronic medical record (EMR). It was recognized early on that many patients seen at the shelters were also regularly seen in the emergency department (ED) and in-patient units of the city's acute care hospital, WRH. Our patients often have multiple medical and psychosocial comorbidities, and may have difficulty relaying their medical histories when presenting to our clinics or the hospital. Therefore, discussions about selecting an EMR landed on the decision to make use of WRH's EMR, with the goal of improving the continuity of care of patients seeking care at the shelters and the hospital, and, in May 2022, a funding proposal was submitted and accepted by Ontario Health to enable the development of the Cerner outpatient platform for our shelter clinics. Now, when a patient is seen at one of the WSH clinics and is not able to provide the history from a recent trip to the ED, an outpatient specialty clinic at the hospital or even a visit with the city's nurse-police team, we are able to seamlessly access the relevant information from the patient's medical record. This allows us to re-order the antibiotics for cellulitis that may have been prescribed in the ED but then stolen from the patient, facilitate a referral to social work in the community that might have been recommended by the hospital's psychiatrist and ensure that diagnostic imaging that requires follow-up is dealt with for the patient in the community in a timely way. Furthermore, our hospital colleagues are also able to discern what medical interventions have taken place at our community clinics. Despite being increasingly common in other jurisdictions, the idea of having "one-patient, one-record" is not a current reality across much of Ontario; this is therefore an innovative approach to record keeping. We maintain that making use of a local hospital EMR, and employing shared record-keeping practices, could be an essential structure for improving continuity of care for PEH and for facilitating the process of sharing health data among various medical services and across clinical encounters. While many physicians know one another personally in smaller communities, the shared EMR system facilitates handovers across facilities and follow-up care in a thoughtful and less repetitive way.

The third structure is the co-location of services. To provide integrated and dedicated shelter health services for PEH, the co-location of interdisciplinary services, including healthcare and social services, is essential to our operations. Benefits include reducing transportation barriers, familiarity with service providers at the same location and reducing long wait times for follow-up. Moreover, co-location improves continuity of care as clients have seamless transitions between various services and are not as easily lost to follow-up. Our healthcare teams work physically alongside an array of social service providers, including social workers, addiction support workers, housing support workers, outreach workers, justice workers, peer support workers and Ontario Works (OW) case workers. We emphasize that communication and relationship building among care providers are made possible by being co-located, and it allows us to truly provide wraparound care.

Lastly, embedding research and quality improvement is an essential structure in the WSH model. To apply for funding, WSH required proof of concept. This was achieved by collecting and analyzing clinical and administrative data. In addition to formal research, the research team will engage in quality improvement projects to drive change and innovation. Research goals and activities to date include: (1) surveying client-facing staff to better understand their perceptions of current and future needs; (2) gathering ED usage data among individuals experiencing homelessness to identify alternative pathways for care that address individuals' needs; and (3) engaging with stakeholders, including clients, through interviews and focus groups to better understand and implement a values-based program.

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Processes

In terms of the processes involved in WSH, we continue to emphasize the collaborative efforts across and between various sectors and organizational bodies. These include the educational sector, existing healthcare organizations and government relations.

Education

The first essential process is including and expanding educational opportunities. WSH has partnered with the Schulich School of Medicine and Dentistry, Windsor Campus, as well as the Faculty of Nursing at the University of Windsor to provide opportunities for medical and nursing learners to rotate through our clinics. Communication began early in the development of this initiative with several key players at Schulich Medicine's Windsor Campus. Since offering a shelter health elective for postgraduate family medicine residents, clinical learning opportunities have expanded to include on-site teaching to undergraduate medical students and a

rotation for postgraduate internal medicine residents. We are also working to develop a rotation for postgraduate psychiatry residents. The Faculty of Nursing at the University of Windsor developed clinical rotations to include opportunities for nursing and nurse practitioner students at the shelter health sites. Thus far, we have had 17 undergraduate nursing students rotate on site since the launch of WSH, and there continues to be a high demand for medical learners requesting to complete a rotation of this nature. All learners who have had this experience have expressed positive feedback. Some nursing students were able to leverage these experiences into their work in the ED as undergraduate nurse employees, and others have completely changed their specialization trajectory as a result of this exposure. As this is a new program, we are working on building capacity to accept more student learners.

The reasons for including education within our model are multifold. From a practical perspective, providing learners the opportunity to gain clinical experiences may encourage them to work and/or volunteer with WSH after completing their training, thus supporting an ongoing robust workforce. Learners who are not inclined to work in shelter health after graduating will acquire valuable skills working with PEH and have a better understanding of the stigma and other barriers faced by this population. The hope is that with this knowledge, they will be able to better care for this patient population, regardless of the environment in which they are working, and can pass on some of their learnings to others.

Collaboration

A second key process is collaboration with existing healthcare organizations. For example, the City of Windsor has provided opportunities to build relationships with shelters and has supported the implementation of shelter health operations. CMHA Windsor-Essex County Branch works as our clinical organizational lead and supports the allied health services provided on site and program planning. The physician group oversees the primary care model offered at the shelters and is integral to the delivery and coordination of care. WRH (acute care) acts as our health information custodian, aiding with decision support, supporting our efforts to set up our EMR across shelters and connecting us with acute care patients. Windsor also boasts a satellite residential palliative care program called Journey Home Hospice. This was established as a result of a collaboration between the St. Elizabeth Foundation, support from Assisted Living of Southwestern Ontario and the City of Windsor. This program opened in November 2022 and has three palliative care beds for PEH or those who are vulnerably housed. Other partners who collaborate with WSH include Schulich School of Medicine and Dentistry, University of Windsor's Faculty of Nursing, Hotel-Dieu Grace Hospital (specialty hospital), WE-Spark (research support), TransForm Shared Service Organization (SSO) (EMR support) and all our shelter partners.

These collaborations were largely made possible by leveraging the spirit of leadership and commitment among Windsor's healthcare leaders and champions. Leaders in the social service and healthcare sectors communicate to provide coordinated care, ultimately catching PEH who may have fallen through the cracks of our fragmented healthcare system.

Funding

A third key process for WSH is funding and support from municipal and provincial governments and other entities. From the outset, the City of Windsor has been a top supporter and partner of WSH. The city provides administrative support; acts as a liaison with key partners, including all the emergency shelters; collects and shares important data; and assists in the write-up of grant proposals. Windsor City Council approved the municipal funding in May 2024 to expand services, which included health and allied health professionals. Having a strong relationship with our municipal partners has been crucial to establishing and running WSH.

In terms of provincial support, WSH and its partners have been fortunate to receive several sources of funding. TransForm SSO applied to Ontario Health, on behalf of WSH, for a grant to help fund the development of our EMR, which we were successful in obtaining. In May 2022, the physician group, with the support of staff from Schulich Medicine's Windsor Campus and CMHA, submitted a proposal to the Ontario Ministry of Health to obtain an alternative payment plan so that physicians treating PEH in Windsor could be compensated for their services. If successful, the funding will allow us to expand services to allow for family physicians, palliative care and addiction medicine physicians, infectious disease specialists and psychiatrists to expand their service offerings.

In June 2023, the physician group and the City of Windsor developed a submission for funding to support allied health services. By recognizing that collaboration would continue to be essential to WSH's success, the submission was combined with CMHA's own proposal. We felt doing so would demonstrate that we are all willing to work together for the betterment of Windsor's PEH. In March 2024, we learned that CMHA received this funding. The funding has allowed us to hire staff, including nurses, social workers and a receptionist, with plans to expand.

Lastly, in-kind contributions have been provided by many individuals and organizations and were essential to the early success of the program. As there was no funding to support any of this work initially, many dedicated people volunteered their time to make this work happen. With that said, it is recognized that a program such as this cannot easily run solely

on volunteer hours and goodwill, and our finance working group will continue to seek out opportunities to fund our programs. For example, we are currently reviewing ways in which we may be able to collect donations to assist our patients with reliable transportation to and from medical appointments. In addition, a group of eager medical students will also start looking to collect donations of hygiene products for distribution at our clinics.

Outcomes

Diverting ED visits through on-site service

WSH began offering clinical services on a very limited basis three years ago and has grown to the point where we are now having hundreds of patient encounters each month. Prior to having received our primary care team funding, one physician and one nurse were seeing approximately 50–70 patients per month in early 2024. However, following receipt of the funding, that number climbed to a little over 100 visits in May, nearly 200 visits in July and nearly 500 visits in August, and over 675 visits were conducted by physicians, nurses and social workers in our shelter health clinics in September 2024. We expect these numbers to continue to climb as we continue to add more staff on site. Reasons for visits include acute issues (e.g., wound care, physical trauma, acute psychosis), chronic issues (diabetes, hypertension, congestive heart failure), paperwork (support for disability applications, housing support) and referrals to other community resources. We continue to provide an alternative healthcare venue to the ED for many patients when their concerns can be better managed in an outpatient setting.

Client attachment to primary care

By implementing WSH, we were also able to see increased patient connection to primary care. All four sites now offer allied health and physician services. In normalizing regular clinic follow-up and offering medical services on site, patients can have increased continuity of care without facing many of the barriers that were impeding their access to traditional primary care models. This will further allow for increased primary prevention and reduced severity of disease presentations. When patients reach a point where they can regularly connect with more traditional primary care models, we help facilitate that transition for them to ensure that we maintain capacity at our shelter health clinics for individuals most in need of the very specialized approach to care.

Increased client support by OW and Ontario Disability Support Program

Other established outcomes from this initiative can be seen with the number of PEH connected with OW and the Ontario Disability Support Program (ODSP). When WSH was first established, there were many patients presenting to the team who were not receiving support through OW or ODSP. A lack of financial support can lead to many health disparities, including lack of access to healthy food and other resources; however, it also means a lack of access to a prescription drug insurance plan. In Ontario, citizens who are eligible for OW and ODSP are able to make use of the Ontario Drug Benefit insurance plan. Fortunately, Windsor's drop-in centre hosts an OW worker on site, and this co-location of services has led to an increase in the number of eligible individuals applying for OW and subsequently making use of the program. Furthermore, for those individuals who are receiving OW support but may be suffering from a disability, it is now much easier for them to access a member of the healthcare team to discuss the ODSP application process, again leveraging the co-location of our services. The end result is that the patients we see are more likely to have some form of financial support, including insurance for medication, which means they will be more likely to treat their diabetes and skin infections. This in turn means less downstream medical complications, which can be costly to the individual patient, as well as the healthcare system as a whole.

Quality improvement: Education

Learners within our community now have opportunities to work with PEH on site at shelters, drop-in centres and other locations that serve people who are often marginalized. Many have diagnoses that might be considered "stigmatizing," such as schizophrenia, hepatitis C and substance use disorders. Learners come to truly understand the everyday health of and social barriers experienced by PEH within our community, and how these influence their health. Learners and staff are beginning to engage in quality improvement activities related to wound care and antibiotic resistance. Nursing students developed evidence-based education materials for shelter staff and clients on these topics.

Conclusion

We presented the key structures, processes and outcomes as a framework that may be adapted for small- to mid-sized communities that are interested in developing a similar shelter model. Rallying community champions and leadership promoted ownership of the project and made WSH a reality. We reemphasize the importance of collaboration as the core process for success of other jurisdictions. We encourage others to capitalize on their community's connectedness with various stakeholders to build capacity for working in spaces that serve PEH. HQ

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About the Authors

Karen Michael, BMSc, is a medical student in the Schulich School of Medicine and Dentistry at Western University in Windsor, ON. Her research interests include quality improvement projects and improving the quality of care for people experiencing homelessness as part of the Windsor Shelter Health (WSH) research team.

Kathryn A. Pfaff, PhD, RN, is an associate dean of nursing for graduate programs and research in the Faculty of Nursing at the University of Windsor in Windsor, ON. Kathryn has teaching and research interests in healthy aging and palliative care, and her research program is centred on evaluating the implementation and impacts of compassionate models of healthcare delivery.

Kelly Goz, BA, is the manager of homelessness and housing support for the City of Windsor's Housing and Children's Services division. In her role, she remains committed to fostering relationships by implementing collaborative homelessness programs that will contribute to improving the wellness of persons experiencing homelessness through best and emerging practices.

Jennifer N. Bondy, MD, MSc, CCFP, is a family physician practising in Windsor, ON, and the medical director of WSH and serves as one of the co-chairs on its steering committee. Jennifer is the founder of the WSH research team and is passionate about improving the quality of care for people experiencing homelessness by using evidence-informed decision making to help guide programming. Jennifer can be reached by e-mail at jbondy8@uwo.ca.