



*Collaboration to Address Homelessness:
Health, Housing, and Income (H²I)*

Final Report

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Collaboration to Address Homelessness: Health, Housing and Income (H²I)

Executive Summary

Homelessness is a growing problem affecting nations around the globe and Canada is no exception. Current estimates have up to 235 000 individuals in Canada per year experiencing homelessness for a period of time and approximately 35 000 on any given night (Employment and Social Development Canada, 2016), though these estimates are likely underestimated as the prevalence of hidden homelessness remains unknown (Schwan et al., 2020). In London, Ontario, the number of individuals sleeping rough has dramatically increased in the past two years, doubling from 966 to 1,868 individuals since October 2020 (City of London, 2022). The impact homelessness has on personal health, and consequently on the healthcare system, is significant. Individuals facing homelessness experience disproportionate burdens of illness (Mikkonen & Raphael, 2010). People who are homeless have a higher incidence of premature death, mental illness, and traumatic injury (Public Health Ontario & Berenbaum, 2019). They often rely on hospitals as their primary source of care (Tadros et al., 2016; Buccieri et al., 2019), and therefore spend more time in the hospital than the non-homeless population.

The Collaboration to Address Homelessness: Health, Housing, and Income (H²I) evaluation study was designed to test an intervention that prevents discharge from hospital to homelessness and that includes transitional supports in order to ensure that individuals remain housed and connected to tailored supports as needed following discharge. This intervention involved bringing community agency staff onto medical and psychiatric hospital units in London, Ontario, in order to support hospitalized clients with housing and financial support, with the addition of setting up a transitional support caseworker for individuals who require continual support once discharged to the community.

In addition to the transitional support caseworker, the H²I program looked more closely at addressing the unique needs of specific subpopulations. The program continued to serve the needs of individuals on both medical and psychiatric units. This time, however, it branched into two arms – one program to serve the needs of at-risk youth (ages 16-25) and another to serve the needs of adults (ages 18-85). As youth are the fastest growing subpopulation of homeless individuals in Canada (Karabanow & Kidd, 2014), and experience unique needs as compared to adults (i.e., employment, education, etc.), it was deemed useful to design and test a homeless-prevention program that serves the needs of youth in particular.

The H²I evaluation utilized a mixed methods design that included individual client interviews, focus groups with health care and community agency providers, as well as administrative data to assess the program's impact. This document reports on the main findings of the H²I program evaluation.

The evaluation sought to address four research questions:

1. What are the effects of offering income and housing supports to individuals at-risk of homelessness in different healthcare facilities?
2. How does transitional support post-discharge impact outcomes in the various groups?
3. What are the costs and other implementation issues related to transitional support for each subpopulation?

4. What are service-user and staff perceptions of the intervention within different healthcare facilities and in the community, for each subpopulation?

The results of this program evaluation have provided several insights about how individuals' experiences of homelessness can be improved through collaborative and coordinated efforts among different stakeholders.

The quantitative results revealed that 138 individuals were able to access the program supports and services, and all of these individuals were connected to long-term community supports and obtained housing. Administrative data on both adults and youth from the City of London showed 138 intakes, with numerous successful diversions and move-ins, indicating the utilization of alternative housing options beyond traditional shelter-based resources.

We compared youth and adults as well as those from psychiatric programs to those from medical programs. Results showed more than half of participants from both the adult (71.4%) and youth (60.0%) samples were housed by the end of time 2. The majority of housed participants in both samples (adults=86.7%, youth=100%) were referred from psychiatric units, with the remainder referred from medical units.

The implementation of transitional support services did not require additional costs, as existing staff were assigned to the role, who were able to utilize the City of London's Homeless Individuals and Families Information System (HIFIS). However, the COVID-19 pandemic posed challenges, as hospital units were frequently in outbreaks and community agency supports could not be provided in person, resulting in the reliance of virtual connections which were not as effective.

Through the course of its implementation, the results of the focus group discussions and individual interviews addressed perceptions of the intervention. These results indicated that the program helped connect individuals to long-term community support and provided an opportunity for individuals who were homeless to obtain housing. Through coordination and networking between hospital and community partnerships, the intervention was effective at reducing the number of individuals discharged to homelessness.

Further, collaboration, coordination, and effective communications with the different health care workers and partnering agencies were indicated as the main strengths of the H²I program to help individuals who were at risk of homelessness upon discharge from either acute medical or psychiatric care units. Overall, the results of the focus groups revealed that the H²I program contributed to and provided a system of intervention that fosters collaboration among the different stakeholder groups to prevent homelessness after psychiatric and medical hospitalization.

Collaboration to Address Homelessness: Health, Housing and Income (H²I) (Collaborer pour lutter contre l'itinérance :santé, logement et revenu)

Résumé

L'itinérance est un problème croissant qui touche des pays du monde entier, et le Canada ne fait pas exception. Selon les estimations actuelles, jusqu'à 235 000 personnes au Canada par année se retrouvent en situation d'itinérance à un moment ou un autre. On estime qu'environ 35 000 personnes sont en situation d'itinérance chaque nuit (Emploi et Développement social Canada, 2016). Ces chiffres sont probablement plus élevés en réalité, car la proportion de l'itinérance cachée demeure inconnue (Schwan et coll., 2020). À London, en Ontario, le nombre de personnes qui passent la nuit dehors a augmenté de façon spectaculaire au cours des deux dernières années. En effet, ce nombre est passé de 966 à 1 868 depuis octobre 2020 (Ville de London, 2022). L'itinérance a des répercussions importantes sur la santé et, par conséquent, sur le système de soins de santé. Les personnes en situation d'itinérance connaissent de manière disproportionnée le fardeau de la maladie (Mikkonen et Raphael, 2010). Elles présentent une fréquence plus élevée de décès prématurés, de maladie mentale et de blessures traumatiques que les personnes logées (Santé publique Ontario et Berenbaum, 2019). Les personnes en situation d'itinérance dépendent souvent des hôpitaux comme principale source de soins (Tadros et coll., 2016; Buccieri et coll., 2019). Elles passent donc plus de temps à l'hôpital que les personnes logées.

L'étude d'évaluation Collaboration to Address Homelessness: Health, Housing, and Income (H²I) a été conçue pour tester une intervention dont l'objet est d'empêcher que des personnes se retrouvent en situation d'itinérance à la sortie des hôpitaux. Les mesures de transition de cette intervention visent à s'assurer que les gens demeurent logés et liés aux soutiens adaptés nécessaires à leur sortie des hôpitaux. Dans cette intervention, des membres du personnel d'agences communautaires ont été intégrés à des hôpitaux médicaux et psychiatriques à London, en Ontario. Ils ont soutenu la clientèle hospitalisée en offrant du soutien financier et au logement. De plus, selon les besoins, des travailleurs sociaux ont offert un soutien en continu aux personnes s'appropriant à réintégrer leur collectivité comme mesure de transition.

En plus de la mesure de transition mise en œuvre par des travailleurs sociaux, dans le cadre du programme H²I, on a examiné de près les besoins uniques de certaines sous-populations. Le programme a permis de continuer de répondre aux besoins des personnes dans les hôpitaux médicaux et psychiatriques. Cette fois, cependant, on a établi deux programmes différents : le premier visait à répondre aux besoins des jeunes à risque (16 à 25 ans) et le second, aux besoins des adultes (18 à 85 ans). Les jeunes représentent la sous-population de personne en situation d'itinérance qui connaît la croissance la plus rapide au Canada (Karabanow et Kidd, 2014). Ils éprouvent des besoins uniques par rapport à ceux des adultes (emploi, études, etc.). Il a donc été jugé utile de concevoir et de tester un programme de prévention de l'itinérance qui répond précisément aux besoins des jeunes.

Dans l'évaluation du programme H²I, une conception à méthodes mixtes a été employée. On a notamment eu recours à des entrevues individuelles avec les clients, à des groupes de discussion avec des fournisseurs d'établissements de soins de santé et d'organismes communautaires, ainsi qu'à des données administratives pour évaluer l'incidence du programme. Le rapport final Collaboration to Address Homelessness: Health, Housing and Income (H²I) rend compte des principales constatations de l'évaluation du programme H²I.

L'évaluation visait à répondre à quatre questions de recherche :

1. Quels sont les effets de l'offre de soutien au revenu et au logement aux personnes susceptibles de se retrouver en situation d'itinérance dans différents établissements de soins de santé?
2. De quelle façon le soutien à la transition après les soins affecte-t-il les résultats dans les divers groupes?
3. Quels sont les coûts et autres problèmes de mise en œuvre liés au soutien à la transition pour chaque groupe de population?
4. Quelles sont les perceptions des utilisateurs de services et du personnel à l'égard de l'intervention dans les différents établissements de soins de santé et dans la collectivité pour chaque sous-population?

Les résultats de l'évaluation du programme ont fourni de nombreux renseignements sur les manières d'améliorer l'expérience des personnes en situation d'itinérance grâce à la collaboration et à la coordination de différentes parties prenantes.

Les résultats quantitatifs ont révélé que 138 personnes ont pu accéder aux mesures de soutien et aux services du programme. Toutes ces personnes ont été mises en relation avec des services de soutien communautaire à long terme et ont obtenu un logement. Les données administratives de la ville de London sur les adultes et les jeunes indiquent qu'il y a eu 138 prises en charge. Plusieurs réorientations et emménagements ont aussi été réussis. Ces données indiquent que des options de logement autres que les ressources fondées sur les maisons d'hébergement ont été employées.

On a comparé les résultats des jeunes et des adultes, ainsi que ceux des programmes dans les hôpitaux psychiatriques et les hôpitaux médicaux. On a constaté que plus de la moitié des participants provenant des échantillons d'adultes (71,4 %) et de jeunes (60,0 %) avaient été logés à la fin de l'étape 2. La majorité des participants logés dans les deux échantillons (adultes=86,7 %, jeunes=100 %) provenaient d'hôpitaux psychiatriques. Le reste des participants provenaient d'hôpitaux médicaux.

La mise en œuvre des services de soutien à la transition n'a pas entraîné de coûts supplémentaires. En effet, les responsables de cette fonction étaient déjà en poste. Ils ont été en mesure d'utiliser le Système d'information sur les personnes et les familles sans abri de la Ville de London. Toutefois, la pandémie de COVID-19 a posé des défis, puisqu'il y avait des éclosions fréquentes dans les hôpitaux. Les organismes communautaires ne pouvaient pas offrir de soutien en personne. Cette situation a entraîné le recours à des rencontres virtuelles, ce qui était moins efficace.

Les perceptions sur l'intervention ont été abordées tout au long de sa mise en œuvre dans les entretiens des groupes de discussion et les entrevues individuelles. Il en est ressorti de ces discussions que le programme a aidé un certain nombre de personnes à accéder à un soutien communautaire à long terme. Il a également donné l'occasion à des personnes en situation d'itinérance d'obtenir un logement. La coordination et le réseautage entre les partenariats communautaires et hospitaliers a permis de réduire efficacement le nombre de personnes se retrouvant en situation d'itinérance à la sortie des hôpitaux.

De plus, on a relevé que la collaboration, la coordination et l'efficacité des communications avec les différents travailleurs de la santé et organismes partenaires étaient les principales forces du programme H2I. Ainsi, on a pu aider des personnes à risque de se retrouver en situation d'itinérance à leur sortie d'établissements de soins intensifs médicaux ou psychiatriques. Dans l'ensemble, les résultats des groupes de discussion ont révélé que le programme H2I a contribué à la création d'un système d'intervention qui favorise la collaboration entre les différents groupes de parties prenantes. Cette approche a permis la prévention de l'itinérance à la suite d'hospitalisations psychiatriques ou médicales.

The Collaboration to Address Homelessness: Health, Housing and Income (H²I)

Detailed Report

The H²I Program: Background/Rationale

Homelessness is a growing problem affecting nations around the globe and Canada is no exception. Current estimates have up to 235 000 individuals in Canada per year experiencing homelessness for a period of time and approximately 35 000 on any given night (Employment and Social Development Canada, 2016), though these estimates are likely underestimated as the prevalence of hidden homelessness remains unknown (Schwan et al., 2020). In London, Ontario, the number of individuals sleeping rough has dramatically increased in the past two years, doubling from 966 to 1,868 individuals since October 2020 (City of London, 2022). The impact homelessness has on personal health, and consequently on the healthcare system, is significant. Individuals facing homelessness experience disproportionate burdens of illness (Mikkonen & Raphael, 2010). People who are homeless have a higher incidence of premature death, mental illness, and traumatic injury (Public Health Ontario & Berenbaum, 2019). They often rely on hospitals as their primary source of care (Tadros et al., 2016; Buccieri et al., 2019), and therefore spend more time in the hospital than the non-homeless population. Highly and Proffitt (2008) reported that individuals experiencing homelessness spend approximately four more days in hospital per year. In addition, the 30-day readmission rate is almost four times higher in the homeless population due to being discharged to situations not conducive to recovery (Laliberte et al., 2019; Saab et al., 2016). In fact, patients without secure housing are 4 times more likely to be re-hospitalized in the 3 days following discharge (Ku, Scott, Kertesz, & Pitts, 2010). The result is expensive; admissions to hospital for individuals who are homeless cost on average \$2559 more than admissions for patients who are housed. To break this cycle of hospital admission-homelessness-readmission, there needs to be a validated and coordinated service model. Forchuk et al (2006, 2008, 2013) aimed to address this problem by developing and testing an intervention to prevent discharge to homelessness for psychiatric inpatients in London, Ontario. Housing and financial support staff were available on-site in order for individuals at risk of being discharged to homelessness to access supports prior to discharge. Housing support staff were able to access direct links to a housing database from the hospital units. The program was a resounding success. However, the program was unable to be sustained due to funding changes. In 2017, Forchuk et al received funding to re-implement the Preventing Discharge to No Fixed Address (NFA) Version 2 and 2X program in the London hospitals in both psychiatric and medical units. The program provided on-site support in both medical and psychiatric units at Parkwood Institute Mental Health Care as well as London Health Sciences Centre – Victoria and University Hospitals. The program was so successful that the City of London sustained the NFA program and adopted it into its regular programming. Results from focus groups with patient participants, community partners and health care staff revealed that the collaboration between hospitals and community agency partners was integral in addressing and preventing discharge from hospital to homelessness. However, results also revealed that there was a substantial missing link – transitional, wrap around supports for at-risk individuals once they were in the community. It was one thing to find housing for individuals; it was another challenge to maintain it. It was suggested that future iterations of this program would include transitional supports whereby individuals would be provided wrap around supports once in the community in order to ensure they have access to the services they need,

including mental health supports, financial resources, and other supports integral to maintaining tenancy.

The “Collaboration to Address Homelessness: Health, Housing, and Income” (H²I) strategy was an intervention that aimed to break the “revolving-door” cycle from hospital to homelessness by streamlining housing and income supports for individuals at risk of homelessness during a hospital admission. Previous work by Forchuk et al. (2006, 2008, 2013) found that bringing a housing worker and income support staff directly into the hospital reduced discharge to homelessness. A further evaluation conducted from 2017-2020 in acute and tertiary medical and psychiatric units revealed that although many individuals were provided housing post-discharge, many returned to hospital due to an inability to maintain housing obtained through the intervention (Forchuk et al., forthcoming). It was recommended that a future iteration of the program would do well to include a transitional support worker who could continue to assist individuals with housing, financial and mental health needs post-discharge, through conflict management between participants and landlords, financial aid, and mental health supports, for example. The H²I program sought to improve upon the previous models by including these transitional community supports and establishing a best-practices model that could successfully prevent homelessness from the healthcare setting, and that could serve as an implementation model for other communities in Canada.

The H²I program consisted of both the program (the intervention) as well as the evaluation (research) of the program. It is important to note that inpatients were eligible to participate in the program without having to participate in the evaluation (the research). Eligible participants included adults (aged 18-85) and youth (aged 16-25) admitted to inpatient medical or psychiatric units at London Health Sciences Centre (Victoria Hospital) or St. Joseph’s Healthcare London – Parkwood Institute Mental Health Care who self-identified as being homeless or at risk of becoming homeless upon discharge from hospital.

Homelessness in Canada



(Employment and Social Development Canada, 2016; referenced in infographic Gaetz et al., 2016)

The H²I Program/Intervention

The H²I intervention consisted of the following steps and procedures:

1. A Patient Admitted to Hospital is at Risk of Discharge to Homelessness

For patients identified as being at risk of being discharged into homelessness, a social worker referred the patient to the City of London Coordinated Access to Housing Services program. As patients may feel the stigma of being at risk of homelessness and may be hesitant to disclose this information to hospital staff, it was important to ensure that information about the program was accessible to hospital inpatients. Posters and brochures advertising the program were distributed throughout the hospital units and patients could reach the program supports independently by phoning or e-mailing the contact information as indicated. Access to program services was also provided to patients through drop-in hours in a program office on site on the hospital units. However, because of physical distancing requirements during the COVID-19 pandemic, these on-site services were initially unavailable and patient clients were able to access the program services by telephone/e-mail only. Near the end of the project, H²I program services were available to inpatients in person, on site.

2. The Patient Connects to Coordinated Access to Housing Services

Once a patient was identified as requiring housing or financial aid, Coordinated Access staff completed an intake meeting with the patient (either on site or via telephone). Staff worked with the patient to complete the Vulnerability Index -Service Prioritization Decision Assistance Tool (VI-SPDAT) and input the data in the Homeless Individuals and Families Information System (HIFIS). This database ensures that individuals can remain connected to services and supports once discharged into the community. The patients were provided with homeless prevention and preventative eviction supports as soon as possible, including assistance finding employment and access to income supports such as Ontario Works (OW) or Ontario Disability Support Program (ODSP). Assistance to ensure paper-readiness (having the necessary ID) were provided. Due to the COVID-19 pandemic, most intake meetings were carried out through telephone interviews, rather than in person. Additionally, drop-in office hours on-site were restricted.

3. Patients Received Access to Housing and Community Supports

Patients who were paper-ready with ID and an income source were added to housing priority lists and matched to find housing, housing allowances, and housing stability supports. When stable housing could not be secured before discharge, patients were assisted in finding temporary shelter beds. Following this, the transitional case worker provided continued community support until a time where both the transitional case worker and the patient mutually agreed that the patient was capable to manage on their own.

4. Participation in the Evaluation (optional)

Patients who accessed the program services and supports were offered the opportunity to participate in the program evaluation. Participation in the program evaluation was not a prerequisite for accessing the program services. Approximately 44 individuals who accessed the program opted to participate in the program evaluation. The evaluation consisted of semi-structured interviews conducted at two time points: baseline (pre-discharge) and at six-months post-discharge. Focus groups with patient participants were planned to collect the perspectives and perception of the participants about the program. However, due to the COVID-19 pandemic and physical distancing requirements, it was not feasible to collect the data. Hence, data from patient participants was therefore obtained from the semi-structured individual interviews alone.

Program Subpopulations and Sites

The H²I program was implemented at multiple sites to assess its effectiveness for different subpopulations in London. One component of the program focused on adults aged 18-85, and another focused-on youth aged 16-25. Sites included an acute care psychiatric unit (Victoria Hospital, London Health Sciences Centre); a tertiary care psychiatry unit (Parkwood Institute Mental Health Care, St. Joseph's Health Care London); and acute care medical unit (Victoria Hospital, London Health Science Centre).

Program Partners

1. City of London Coordinated Access to Housing

The City of London's Coordinated Access Outreach team has working partnerships with landlords, property owners, and/or property management. The team assisted with securing appropriate housing units from varied geographic locations within the City of London including diverse building and unit types and a range in affordability, amenities and support levels. They also assisted participants to access resources for housing-related needs (e.g., furniture procurement, utility assistance, etc.). Importantly, Coordinated Access staff were able to coordinate connection with other services as needed, including assisting participants to navigate landlord-tenant disputes, supporting attendance at follow-up appointments, obtaining identification such as drivers' license and health cards, and assisted with community integration.

2. Youth Opportunities Unlimited (YOU)

Individuals identified as youth (aged 16-25) were provided additional supports and services tailored to the unique needs, including access to Youth Opportunities Unlimited (YOU) youth shelter, employment services, education-related assistance, referral to Children's Aid Society of London Middlesex (where appropriate), anti-sex trafficking support, and teen pregnancy support services.

3. Ontario Works (OW) and Ontario Disability Support Program (ODSP)

Ontario Works (OW) was involved with the provision of income and employment supports for people in financial need, including the provision of funds to cover costs associated with housing. OW staff supported the implementation of the H²I program by providing services on location in both hospital sites, and with the provision of data regarding expenses and other issues related to implementation. Individuals who qualified for Ontario Disability Support Program (ODSP) were assisted with paperwork for this income support service.

4. The Salvation Army's Housing Stability Bank

The Salvation Army's Housing Stability Bank was utilized to assist individuals to access needed financial resources to secure or maintain housing. The Housing Stability Bank also provided interest-free loans to individuals experiencing financial barriers to stable housing. Low-income Londoners were eligible for financial assistance for first and/or last month rent or rental arrears, and utilities, depending on their situation.

5. London Health Sciences Centre (LHSC) – Victoria Hospital, University Hospital

Participating units at LHSC included Adult Inpatient Psychiatry, Child and Adolescent Inpatient Psychiatry, and Adult Inpatient Medicine at both sites. These units provided office space for the H²I community partner program staff to meet with clients and assist them with their housing, financial, and mental health supports. Social workers, nurses, physicians and discharge planners were able to liaise with the H²I community partners to ensure wraparound supports were provided for inpatients who were at risk of becoming homeless upon discharge.

6. St. Joseph's Health Care London (SJHC)– Parkwood Institute Mental Health Care

Participating units at SJHC included Adult Inpatient Mental Health. Office space was provided on site for H²I community agency staff to meet with inpatients. Social workers, nurses, physicians and discharge planners were able to connect with program staff to ensure clients' needs were met to prevent discharge from hospital to homelessness or no fixed address.

H²I Program Evaluation

Inpatients accessing the H²I program services were offered the opportunity to participate in an evaluation of the program by social workers or community agency staff. If an individual was interested, a member of the research team would connect and go over the letter of information and consent and answer any questions the potential participant may have. Once informed consent was obtained, program participants were invited to participate in individual interviews at two time points: baseline (while in hospital), and six months post-discharge. Each research participant received a \$20 honorarium per interview. Focus groups with patient participants were planned; however, due to the lack of access to technology/data plans and social distancing requirements during the COVID-19 pandemic, these were unfeasible, and administrative data from community partners was used as a primary data point instead.

Initial (baseline) interviews were conducted in-person, or virtually, via Zoom, as set up by inpatient social work staff. Follow-up interviews were conducted in the community, over the telephone and in some cases, in person at cafes, community spaces including public libraries, and other public spaces.

The H²I program was designed using the principles of participatory action research (PAR), whereby research design and execution is co-created between members of the research team, community partners, and study participants. Several committees were formed, comprised of the principal investigator and co-investigators, as well as hospital staff and administration, community agency staff, research team staff, and individuals with lived experience. These included an Advisory Committee, an Implementation Committee, and subcommittees including a research and media subcommittee. Detail regarding these committee structures and memberships are described below.

H²I Program Committees and Roles

Advisory Committee

The purpose of the Advisory Committee was to provide ongoing collaborative input into decision-making for H²I-project related activities. The objective of this committee was to: (a) ensure the project remained on its projected timelines and deliverables; (b) help the project team overcome obstacles that arose; and (c) help align the technology with present and future opportunities for scaling. The Advisory Committee advised and contributed to the ongoing work of the implementation committee.

The Advisory Committee Contributed to:

- Planning, developing, and monitoring of all project-related activities and ensuring open channels of communication among all Advisory Committee members.
- Facilitating active involvement of key stakeholders in all aspects of the research process over the course of the project. Key stakeholders included researchers, representatives from the health programs of London Health Sciences Centre and St. Joseph's Health Care, and community partners, such as members from the City of London's Housing Coordinated Access team, Ontario Works (OW) and Ontario Disability Support Program (ODSP); Children's Aid Society of London Middlesex, The Salvation Army's Housing Stability Bank, and Youth Opportunities Unlimited (YOU).
- Ensuring principles of participatory action research are honoured and adhered to over the course of the project;
- Reviewing and advising on reports prepared for the funder and partners in this project as agreed to in the project plan;
- Assisting in identifying strategies for the dissemination and application of the project's findings at program and policy levels.

Committee Structure:

The Advisory Committee consisted of the principal investigator, the project coordinator, and representatives from key stakeholders including patient advocates as well as members of the co-investigative research team.

Subcommittees:

1. Research and Evaluation Subcommittee – overseeing focus groups and data collection.
2. Media subcommittee – Knowledge translation
3. Knowledge and Dissemination Committee

Meetings:

The Advisory Committee normally met once every two months by teleconference throughout the duration of the project. Summaries of all meeting discussions and decisions were recorded as minutes and submitted to all Advisory Committee members.

Implementation Committee:

The purpose of the Implementation Committee was to provide ongoing collaborative input into decision-making for H²I-project related activities across the lifespan of the project. The Implementation Committee discussed and strategized around practical matters relating to program implementation, including monitoring of phase planning, implementation of interventions, and collaboration with key stakeholders to create a permanent, sustainable system for inter-agency collaboration.

The Implementation Committee contributed to:

1. The planning, development, implementation, and evaluation of the H²I project
2. Fostering creation of a permanent, sustainable structure to promote and facilitate active involvement of key stakeholders in all aspects of the research process over the course of the project. Key stakeholders included researchers, representatives from the health programs of London Health Sciences Centre and St. Joseph's Health Care London, and community partners, such as members from the Canadian Mental Health Association, City of London Coordinated Access, the Salvation Army Housing Stability Bank, and Youth Opportunities Unlimited (YOU).

Committee Structure:

The Implementation Committee consisted of the principal investigator, the project coordinator, and representatives from key stakeholders including patient advocates as well as members of the co-investigative research team.

Meetings:

The Implementation Committee met weekly at the beginning of the project, moving to biweekly once the program was fully implemented on the hospital units. Meetings were held via teleconference throughout the duration of the project. Summaries of all meeting discussions and decisions were recorded as minutes and submitted to all Implementation Committee members.

The involvement of community partners in the design and application of the program was integral to the success of the program and is a cornerstone of participatory action research (PAR). Input from committee members was regularly integrated into the program development and processes, particularly during the COVID-19 pandemic. Promotional material such as the poster and brochures were developed by the City of London Coordinated Access to Housing Communications Team.

The H²I Evaluation: Research Design and Methodology

A mixed-methods program evaluation was conducted to allow individual participants, healthcare staff, and community agency partners to give feedback about the effectiveness of the program. Additionally, administrative data provided by community partners was obtained in order to track the total numbers of individuals served along with the duration/intensity of support.

Our initial goal was to recruit at least 106 participants to this program of research. However, the COVID-19 pandemic affected the involvement of individual research participants significantly. At the end of the study, 44 individual participants were recruited to complete individual interviews as part of the quantitative dataset. Focus groups with client/patient participants were unable to be conducted due to the COVID-19 pandemic and the unfeasibility of virtual interviews for this population with limited access to technology. Focus group discussions were held to collect qualitative data among healthcare staff, and community agency partners. This population had access to technology, so a shift to virtual focus groups was feasible.

The program started and lasted during the COVID-19 pandemic. This impacted the program in several ways. First, due to physical distancing restrictions, many community agency partners worked virtually/remotely, rather than on site. The reduced visibility of the community partner and program supports impacted individuals who may have utilised on-site supports such as drop-in hours to the community agency office.

Posters advertising the service were distributed on medical and psychiatric inpatient units at London Health Sciences Centre (Victoria and University Hospitals) and Parkwood Institute Mental Health Care. Brochures were also distributed to unit staff to share among other staff members and patients. Any individual identified as needing support was eligible to receive H²I services. Individuals accessing the program were also invited to participate in the evaluation component of the program. During the initial pilot of the NFA strategy (Forchuk et al., 2008), 100% of the participants who received the intervention maintained housing at 6 months follow-up, while 100% of the participants who did not receive the intervention had become homeless or entered the sex trade to avoid homelessness. It is for this reason that this project aims to provide the intervention to all participants at-risk of being discharged to homelessness.

Our initial research questions were:

1. What are the effects of offering income and housing supports to individuals at-risk of homelessness in different healthcare facilities?
2. How does transitional support post-discharge impact outcomes in the various groups?
3. What are the costs and other implementation issues related to transitional support for each subpopulation?
4. What are service-user and staff perceptions of the intervention within different healthcare facilities and in the community, for each subpopulation?

Quantitative Methods and Analysis

A two-point (i.e., at discharge, 6 month) longitudinal design was conducted with participants who received the intervention in order to capture data related to the main study outcome (i.e., participant remains ‘housed’ at follow-up). Participants were interviewed at both of these timepoints using the following instruments:

1. Demographics Questionnaire, a house-made tool for collecting demographic data such as age and sex;
2. Lehman Quality of Life Scale (Lehman et al., 1994), which measures both the objective quality of life (i.e., what people do and experience) and subjective quality of life (i.e., how people feel about these experiences);
3. Housing History Form (Forchuk et al., 2001), which collects data on previous residences, lengths of stay, and housing satisfaction.
4. Consumer Housing Preference Survey (Tanzman, 1990), which compares current living arrangements and mental health services with participants’ reported preferences.
5. Utilization of Hospital and Community Services (UHCS; modified from Browne et al., 1990), which collects data on participants’ contacts and visits with service, medical and/or health care providers; and
6. Service Prioritization Decision Assistance Tool (VI-SPDAT): which assesses the acuity of need for individuals experiencing homelessness (OrgCode Consulting, 2015). A youth version of the SPDAT (Y-SPDAT) was employed for participants aged 16-25.

In this report, while our original plan was to conduct 106 semi-structured individual interviews and an individual client focus group discussion, due to COVID-19, we were unable to access all the participants. A total of 44 participants completed an interview at time 1, and 21 participants completed an interview at time 2 for the quantitative study. As such, descriptive analyses (means, standard deviations, and frequencies) were sought to be meaningful, and only descriptive results are included in this report. The results should be interpreted cautiously due to these limitations.

Qualitative Methods and Analysis

Individual participant interviews included semi-structured open-ended questions related to their experience with the intervention. Focus groups conducted with individual client participants were unable to be conducted due to the physical distance and capacity limits of the COVID-19 pandemic. However, focus groups with healthcare staff and community agency staff were conducted, due to the accessibility of technology that allowed us to do the virtual focus group discussions. Virtual focus groups explored health care staff and community agency staff perceptions about the intervention, strengths of its implementation strategy, and suggestions for improvement. We used a thematic analysis to organize the qualitative data collected from interviews and focus groups. A matrix analysis method (Miles, Huberman, & Saldana, 2014, pp. 107-119) has also been employed to compare different stakeholder perspectives as well as compare feedback from the two program arms (medical and psychiatric). Through the analysis of this data, we identified key strengths of the discharge strategy as well as areas of improvement that can lead to scaling-up by other hospitals and communities.

Administrative Data

Administrative data from staff implementing the intervention was obtained and used to determine discharge rates from hospital to homelessness. The Coordinated Access Outreach staff tracked the total numbers of individuals served along with the duration/intensity of support required. The COVID-19 pandemic impacted the number of participant interviews. Individual interview numbers were low due to the shift towards virtual interviews during this time. Virtual interviews were not feasible for this population with limited technology so, administrative data was included.

Major Results

The Collaboration to Address Homelessness: Health, Housing, and Income (H²I) evaluation study aimed to test an intervention that prevented individuals from being discharged to homelessness following a hospital stay. This study utilized a mixed methods program evaluation that allowed individual participants and staff to give feedback as well as provide administrative data to look at the impact on the system. The intervention involved bringing community agency staff onto hospital units to support hospitalized clients with housing and financial support. It also involved setting up a caseworker for individuals who require continual support once discharged into the community.

Research Question 1: What are the effects of offering income and housing supports to individuals at-risk of homelessness in different healthcare facilities?

This question was primarily answered through the administrative data results. In addition, we had individual interviews with some participants.

Administrative Data Results

Administrative data from the City of London showed a total of 138 intakes, with 24 successful diversions, and 2 move-ins. Of the 138 intakes, 122 were adults, and 16 were youth. For adults, diversions refers to individuals who are not referred to shelter-based resources. That could be diversion to housing placement, safe space to couch surf, or any other situation that would result in not using shelter. For youth participants, successful diversions means that they were diverted away from streets, or they successfully obtained shelter or permanent housing. Move-ins refers to any form of transitional, independent, or supportive housing.

Individual Interview Results

A total of 44 adult individuals were referred and enrolled into the research for individual interviews. Individuals could access the program from psychiatric or medical units. A total of 34 (77.3%) participants were enrolled from psychiatric units and 10 (22.7%) were enrolled from medical units. Of the 34 individuals that were enrolled from the psychiatric unit, 20 (58.8%) were from a tertiary care psychiatry unit (Parkwood Institute Mental Health Care, St. Joseph's Health Care London) and 10 (41.2%) were from an acute care psychiatric unit (Victoria Hospital, London Health Sciences Centre). Of the 10 individuals who were enrolled from a medical unit 9 (90.0%) were from the acute

care medical unit at Victoria Hospital, London Health Science Centre and 1 (10.0%) was referred from the medical unit at Parkwood Main Building, St. Joseph's Health Care London.

A total of 25 youth individuals were referred and enrolled into the program. All 25 individuals were enrolled from the psychiatric unit. Three (12.0%) were enrolled from a tertiary care psychiatry unit (Parkwood Institute Mental Health Care, St. Joseph's Health Care London) and 22 (88.0%) were from an acute care psychiatric unit (Victoria Hospital, London Health Sciences Centre). London Health Sciences Center is an acute care facility, whereas St. Joseph's Health Care focuses on tertiary care, which deals with more chronic illness. Majority of adults who were enrolled from a psychiatric unit came from tertiary care, and majority who were enrolled from a medical unit came from acute care. In terms of the youth participants, majority of those who were enrolled from a psychiatric unit were enrolled from an acute care unit. In psychiatric youth participants, there is a higher need for income and housing supports in acute care than in tertiary care.

More detailed differences between the different groups is included in the charts addressing research question 2.

Research Question 2: How does transitional support post-discharge impact outcomes in the various groups?

This research question was addressed by looking at the demographic results. We will present several tables comparing groups and provide a summary.

General Demographic Characteristics

The demographic data results of the adult participants indicated that majority (75%) identified as being of Caucasian or European origin. The remaining participants were identified as Indigenous (11.4%) and members of other visible minority groups (11.4%), respectively. A total of 9 (20.5%) participants had completed elementary school, 21 (47.7%) had completed high school, and 14 (31.8%) had completed community college or university. In terms of income sources, approximately 80% of the participants had at least one source of income, and 16.0% had multiple sources, with the most common sources being provincial disability support programs (63.6%) and provincial welfare/income support programs (13.6%). Other common reported sources of income included the Canada Pension Plan (CPP) (11.4%), employment (9.1%), and Employment Insurance (EI) (6.8%).

The demographic data results of the youth participants indicated that similarly to the adult sample, majority (64.0%) identified as being of Caucasian or European origin. The remaining participants were identified as Indigenous (12.0%) and members of other visible minority groups (20.0%). A total of 7 (28.0%) had completed elementary school, 15 (60.0%) had completed high school, and 2 (8.0%) completed community college or university. In terms of income sources, 68% had at least one income source, and 8% had multiple sources, with the most common sources being provincial disability programs (44.0%), provincial welfare and income support programs (24.0%) and employment (8.0%). **Tables 1 and 2** present the general characteristics of the adult and youth participants respectively.

Table 1: General Characteristics of Adult Participants

Demographics		Interview 1		Interview 2	
		Total Sample (n=44)		Total Sample (n=21)	
		N (%)	M (SD)	N (%)	M (SD)
Age			44.9 (13.3)		41.7 (12.1)
Gender	Male	28 (63.6)		13 (61.9)	
	Female	14 (31.8)		8 (38.1)	
Marital Status	Transgender	2 (4.5)		0 (0)	
	Single/Never Married	38 (86.4)		18 (85.7)	
	Separated/Divorced	6 (13.6)		3 (14.3)	
Highest Level of Education	Elementary School	9 (20.5)		2 (9.5)	
	High School	21 (47.7)		11 (52.4)	
	Community College/University	14 (31.8)		8 (38.1)	
Sources of Income	Has one Source of Income	35 (79.5)		17 (81.0)	
	Multiple Sources of Income	7 (16.0)		3 (14.3)	
	No Income	2 (4.5)		1 (4.8)	
Income Type	Provincial Welfare/ Income Support Program	6 (13.6)		4 (19.0)	
	Provincial Disability Program	28 (63.6)		14 (66.7)	
	CPP (Canada Pension Plan)	5 (11.4)		2 (9.5)	
	EI (Employment Insurance)	3 (6.8)		2 (9.5)	
	OAS (Old Age Security)	1 (2.3)		0 (0)	
	Employment	4 (9.1)		1 (4.8)	
Ethnicity	European Origins/Caucasian	33 (75.0)		17 (81.0)	
	Indigenous	5 (11.4)		1 (4.8)	
	Visible Minority	5 (11.4)		3 (14.3)	
	Other	1 (2.3)		0 (0)	

Table 2: General Characteristics of Youth Participants

Demographics		Interview 1		Interview 2		
		Total Sample (n=25)		Total Sample (n=15)		
		N (%)	M (SD)	N (%)	M (SD)	
Age			20.6 (2.9)		21.0 (3.2)	
Gender	Male	11 (44.0)		7 (46.7)		
	Female	13 (52.0)		7 (46.7)		
	Transgender	1 (4.0)		1 (6.7)		
Marital Status	Single/Never Married	22 (88.0)		14 (93.3)		
	Married/Common Law	3 (12.0)		1 (6.7)		
Highest Level of Education	Elementary School	7 (28.0)		2 (13.3)		
	High School	15 (60.0)		10 (66.7)		
	Community College/University	2 (8.0)		2 (13.3)		
	Other	1 (4.0)		1 (6.7)		
Sources of Income	Has one Source of Income	17 (68.0)		11 (73.3)		
	Multiple Sources of Income	2 (8.0)		2 (13.3)		
	No Income	6 (24.0)		2 (13.3)		
Income Type	Provincial Welfare/ Income Support Program	6 (24.0)		5 (33.3)		
	Provincial Disability Program	11 (44.0)		5 (33.3)		
	Employment	2 (8.0)		3 (20.0)		
	Other	3 (12.0)		2 (13.3)		
Ethnicity	European Origins/Caucasian	16 (64.0)		6 (40.0)		
	Indigenous	3 (12.0)		4 (26.7)		
	Visible Minority	5 (20.0)		4 (26.7)		
	Missing	1 (4.0)		1 (6.7)		

Psychiatric Diagnosis and Physical illnesses

Participants were asked to self-report whether they had a psychiatric diagnosis or physical illness. Over 95 percent of adult participants reported having a psychiatric diagnosis, with more than half of the participants (54.5%) have multiple psychiatric diagnoses, and 41% reported having a single diagnosis. The most common diagnoses included mood disorders (52.3%), schizophrenia (34.1%), anxiety disorders (34.1%), personality disorders (29.5%), and post-traumatic stress disorder (PTSD) (15.9%).

In terms of physical illnesses, the majority of the adult sample (43.2%) reported no chronic physical illness. However, 29.5% reported having at least one type, and 27.3% reported having multiple types. The most common types of chronic physical illnesses were heart conditions (15.9%), diabetes (13.6%), high blood pressure (13.6%), arthritis (9.1%), and respiratory illnesses (9.1%). Thirteen participants (29.5%) had a physical illness described as 'other'.

In the youth sample, all participants had a psychiatric diagnosis, with majority having multiple diagnoses (68.0%). The most common diagnoses included mood disorders (64.0%), anxiety disorders (44.0%), schizophrenia (36.0%), disorders of childhood/adolescence (20.0%), developmental disorder (20.0%) and post-traumatic stress disorder (PTSD) (16.0%).

In terms of physical illnesses, majority of the sample (52.0%) reported no chronic physical illness. However, 44% reported having at least one type, and 4% reported having multiple types. The most common types of chronic physical illnesses were heart conditions (8.0%), respiratory illnesses (8.0%), arthritis (4.0%), and epilepsy (4.0%). Seven participants (28.0%) had a physical illness described as other. **Tables 3 and 4** present the top self-identified psychiatric diagnoses and physical illnesses of adults and youth respectively.

Table 3: Self-Reported Psychiatric Diagnosis and Physical Illnesses for Adults

		Interview 1	Interview 2		
		Total Sample (n=44)	Total Sample (n=21)		
		N (%)	N (%)		
Top self-reported psychiatric diagnoses and physical illnesses at two interview timepoints	Psychiatric Diagnosis	Has One Diagnosis Type	18 (40.9)	9 (42.6)	
		Has Multiple Diagnosis	24 (54.5)	11 (52.4)	
		No Psychiatric Diagnosis	2 (4.5)	1 (4.8)	
		Type	Mood Disorder(s)	23 (52.3)	11 (52.4)
	Schizophrenia		15 (34.1)	7 (33.3)	
	Anxiety Disorder(s)		15 (34.1)	7 (33.3)	
	Personality Disorder(s)		13 (29.5)	5 (23.8)	
	PTSD		7 (15.9)	7 (33.3)	
	Disorder(s) of Childhood/Adolescence		5 (11.4)	4 (19.0)	
	Other		2 (4.5)	1 (4.8)	
	Physical Illness		One Type of Physical Illness	13 (29.5)	4 (19.0)
			Multiple Physical Illness	12 (27.3)	8 (38.1)
			No Physical Illness	19 (43.2)	9 (42.9)
	Type	Diabetes	6 (13.6)	3 (14.3)	
		Heart Condition	7 (15.9)	3 (14.3)	
		Arthritis	4 (9.1)	3 (14.3)	
		High Blood Pressure	6 (13.6)	4 (19.0)	
		Cancer	1 (2.3)	0 (0)	
		Respiratory Illness	4 (9.1)	3 (14.3)	
		Other	13 (29.5)	5 (23.8)	

Table 4: Self-Reported Psychiatric Diagnosis and Physical Illnesses for Youth

		Interview 1	Interview 2		
		Total Sample (n=25)	Total Sample (n=15)		
		N (%)	N (%)		
Top self-reported psychiatric diagnoses and physical illnesses at two interview timepoints	Psychiatric Diagnosis	Has One Diagnosis Type	8 (32.0)	4 (26.7)	
		Has Multiple Diagnosis	17 (68.0)	11 (73.3)	
		No Psychiatric Diagnosis	0 (0.0)	0 (0.0)	
		Type	Mood Disorder(s)	16 (64.0)	10 (66.7)
	Anxiety Disorder(s)		11 (44.0)	7 (46.7)	
	Schizophrenia		9 (36.0)	5 (33.3)	
	Disorder(s) of Childhood/Adolescence		5 (20.0)	4 (26.7)	
	Developmental Disorder		5 (20.0)	2 (13.3)	
	Post-Traumatic Stress Disorder		4 (16.0)	4 (26.7)	
	Other		2 (8.0)	2 (13.3)	
	Physical Illness		One Type of Physical Illness	11 (44.0)	4 (26.7)
			Multiple Physical Illness	1 (4.0)	2 (13.3)
			No Physical Illness	13 (52.0)	9 (60.0)
	Type	Heart Condition	2 (8.0)	0 (0.0)	
		Arthritis	1 (4.0)	0 (0.0)	
		Epilepsy	1 (4.0)	1 (6.7)	
		Respiratory Illness	2 (8.0)	2 (13.3)	
		Other	7 (28.0)	5 (33.3)	

Psychiatric and Physical Diagnoses for each Subpopulation (Adults and Youth)

In regards to psychiatric and physical diagnoses, of the 44 adult individuals who completed interview 1, 19 (43.2%) participants had a psychiatric diagnosis only, 2 (4.5%) had a physical diagnosis only, and 23 (52.3%) had both a psychiatric and physical diagnosis present at the time of the interview. A total of 15 individuals completed an interview at time 2, 6 months later. 9 (42.8%) had a psychiatric diagnosis only, 1 (4.8%) had a physical diagnosis only, and 11 (52.4%) had both a psychiatric and physical diagnosis.

Table 5: Psychiatric and Physical Diagnoses of Adults at Baseline and 6 Months

	Interview 1 (n=44)	Interview 2 (n=21)
	N (%)	N (%)
Psychiatric Diagnosis Only	19 (43.2)	9 (42.8)
Physical Diagnosis Only	2 (4.5)	1 (4.8)
Both Psychiatric and Physical Diagnosis	23 (52.3)	11 (52.4)

In regards to psychiatric and physical diagnoses, of the 25 youth individuals who completed interview 1, 13 (52.0%) had a psychiatric diagnosis only, and 12 (48.0%) had both a psychiatric and physical diagnosis. At the time of interview 2, 6 months later, a total of 9 (60.0%) participants had a psychiatric diagnosis and 6 (40.0%) had both a psychiatric and physical diagnosis. No participants had only physical diagnosis in either time points.

Table 6: Psychiatric and Physical Diagnoses of Youth at Baseline and 6 Months

	Interview 1 (n=25)	Interview 2 (n=15)
	N (%)	N (%)
Psychiatric Diagnosis Only	13 (52.0)	9 (60.0)
Physical Diagnosis Only	0 (0.0)	0 (0.0)
Both Psychiatric and Physical Diagnosis	12 (48.0)	6 (40.0)

History of Homelessness and Psychiatric Hospitalization

In the adult sample, the majority of the participants (81.8%) reported being homeless at least once in their lifetime. On average, participants have reported being homeless twice in their lives. Sixty-eight percent of the participants fell under the category of being "absolutely homeless" at the time of their interview. Absolute homelessness refers to an individual who does not have a place he or she considers to be home or a place where he or she regularly sleeps. On the other hand, "at risk of homelessness" refers to particular circumstances under which a person is at an elevated risk for homelessness, and a total of 20.5% of the sample met this definition at the time of their interview. However, the majority of the sample (79.5%) has reported being absolutely homeless at least once in their lifetime, and 59.1 % have been absolutely homeless in the last year.

In terms of mental health care hospitalizations, a total of 39 participants (88.6%) reported having a psychiatric hospitalization, and the average number of total psychiatric hospitalizations was 5.

The average age of first contact with the psychiatric health care was 27, and the average age of first psychiatric hospitalization was 34.

In the youth sample, majority of participants (88.0%) reported being homeless at least once in their lifetime, with the average number of times homeless being 2. Seventy-six percent of the participants fell under the category of “absolutely homeless” at the time of their initial interview, and 24% fell under the category of “at risk of homelessness”. However, majority of the sample (88.0%) reported being absolutely homeless at least once in their lifetime, and 68.0% have been absolutely homeless in the last year.

In regards to psychiatric hospitalizations, everyone in the youth sample has reported having a psychiatric hospitalization, and the average number of hospitalizations was 2. The average age of first contact with the psychiatric health care system was 14, and the average age of first psychiatric hospitalization was 17. **Tables 7 and 8** present adult and youth participants' histories of psychiatric hospitalization, frequency of hospitalization, and severity of being homeless in their lifetime and in the last year.

Table 7: Lifetime Homelessness, Absolute Homelessness, and Psychiatric Hospitalization for Adults

			Interview 1	Interview 2
			Total Sample (n=44)	Total Sample (n=21)
			N (%)	M (SD)
			N (%)	M (SD)
Lifetime Homeless & Age of First-Time Homelessness	Being homeless in their lifetime	Yes	36 (81.8)	15 (71.4)
		No	8 (18.2)	6 (28.6)
	Age of First Time Homelessness			34.5 (16.2)
Absolute Homelessness and Risk of Homelessness	How many times have you been homeless?			2.2 (2.4)
	Absolute homeless	Yes	30 (68.2)	6 (28.6)
		No	14 (31.8)	15 (71.4)
	Risk of homeless	Yes	9 (20.5)	8 (38.1)
		No	34 (77.3)	13 (61.9)
		Missing	1 (2.3)	0 (0)
Lifetime Absolute Homeless and Absolute Homeless in the Last Year	Absolutely homeless in lifetime	Yes	35 (79.5)	15 (71.4)
		No	9 (20.5)	6 (28.6)
	Absolutely homeless in the last year	Yes	26 (59.1)	12 (57.1)
		No	8 (18.2)	3 (14.3)
		Missing	10 (22.7)	6 (28.6)
	Slept on the streets the last year	Yes	16 (36.4)	6 (28.6)
		No	28 (63.6)	14 (66.7)
		Missing	0 (0)	1 (4.8)
		Age of First Contact with Psychiatric Health Care		
Psychiatric Hospitalization	Psychiatric Hospitalization	Yes	39 (88.6)	19 (90.5)
		No	4 (9.1)	2 (9.5)
		Missing	1 (2.3)	0 (0)
Number of Psychiatric Hospitalizations & Age of first Psychiatric Hospitalization	Age of First Psychiatric Hospitalization			33.9 (14.0)
	Number of Total Psychiatric Hospitalizations			4.7 (4.5)
				29.7 (11.7)
				5.9 (5.3)

*Absolute homelessness refers to an individual who does not have a place he/she considers to be home or a place where he/she regularly sleeps.

*Risk of homelessness refers to particular circumstances at which a person is at an elevated risk for homelessness

Table 8: Lifetime Homelessness, Absolute Homelessness, and Psychiatric Hospitalization for Youth.

			Interview 1	Interview 2
			Total Sample (n=25)	Total Sample (n=15)
			N (%)	M (SD)
Lifetime Homeless & Age of First-Time Homelessness	Being homeless in their lifetime	Yes	22 (88.0)	14 (93.3)
		No	3 (12.0)	1 (6.7)
	Age of First Time Homelessness			18.3 (3.7)
	How many times have you been homeless?			1.6 (0.9)
Absolute Homelessness and Risk of Homelessness	Absolute homeless	Yes	19 (76.0)	6 (40.0)
		No	6 (24.0)	9 (60.0)
	Risk of homeless	Yes	6 (24.0)	5 (33.3)
		No	19 (76.0)	10 (66.7)
Lifetime Absolute Homeless and Absolute Homeless in the Last Year	Absolutely homeless in lifetime	Yes	22 (88.0)	14 (93.3)
		No	3 (12.0)	1 (6.7)
	Absolutely homeless in the last year	Yes	17 (68.0)	14 (93.3)
		No	4 (16.0)	0 (0.0)
		Missing	4 (16.0)	1 (6.7)
	Slept on the streets the last year	Yes	9 (36.0)	6 (40.0)
		No	15 (60.0)	9 (60.0)
		Missing	1 (4.0)	
Psychiatric Hospitalization	Age of First Contact with Psychiatric Health Care			14.2 (6.5)
	Psychiatric Hospitalization	Yes	25 (100.0)	15 (100.0)
		No	0 (0.0)	0 (0.0)
Number of Psychiatric Hospitalizations & Age of first Psychiatric Hospitalization	Age of First Psychiatric Hospitalization			17.3 (4.5)
	Number of Total Psychiatric Hospitalizations			1.9 (2.0)
				1.9 (1.4)

***Absolute homelessness** refers to an individual who does not have a place he/she considers to be home or a place where he/she regularly sleeps.

***Risk of homelessness** refers to particular circumstances at which a person is at an elevated risk for homelessness

Summary Related to Differences Between Groups

We compared youth and adults as well as those from psychiatric programs to those from medical programs. Participants were asked a series of questions related to homelessness in the previous year and their lifetime. Two research assistants used information gathered from each study instrument to code whether every participant was housed or homeless at timepoints 1 and 2 in both the adult and youth samples. To assess whether participants were housed or homeless, a test of inter-rater reliability was conducted for each of the samples two timepoints using Cohen's κ . This was used to determine if there was agreement between the two research assistant's codes on whether or not participants were housed or homeless. In the adult sample, there was substantial agreement between the two research assistant's codes at Time 1, $\kappa = 0.78$, $p < 0.001$, and almost perfect agreement at Time 2 $\kappa = 0.88$, $p < 0.001$. Any discrepancies in codes between the research assistants in both timepoints were discussed until a consensus was reached. Upon consensus, it was indicated that 34/44 (77.3%) and 5/21 (24.0%) were homeless at Times 1 and 2 respectively. A total of 15/21 (71.4%) of adult participants were housed at the end of time 2. Of these 15 participants, 12 (80.0%) were referred from the tertiary care psychiatric unit at Parkwood Institute Mental Health Care, St. Joseph's Health Care London, 1 (6.7%) was referred from the acute care psychiatric unit at Victoria Hospital, London Health Sciences Center, and 2 (13.3%) were referred from the acute care medical unit at Victoria Hospital.

In regard to the youth sample, there was substantial agreement between the two researcher's codes at Time 1, $\kappa = 0.78$, $p < 0.001$, and almost perfect agreement at Time 2 $\kappa = 0.86$, $p < 0.001$. Upon consensus, it was indicated that 18/25 (72.0%) and 5/15 (33.3%) were homeless at Times 1 and 2 respectively. A total of 9/15 (60.0%) of youth participants were housed at the end of time 2. All of these 9 (100.0%) participants were referred from the acute care psychiatric unit at Victoria Hospital, London Health Sciences Center.

Research Question 3: What are the costs and other implementation issues related to transitional support for each subpopulation?

The cost component of this question was answered by identifying any additional costs related to implementing the model. The implementation issues are broadly identified through the qualitative results that addressed areas for further improvement. There was no additional cost to implementing transitional support services, as existing staff were assigned to this role who were able to link in to the City of London's Homeless Individuals and Families Information System (HIFIS) in order to ensure transitional supports post-discharge. The main barriers to implementation were related to the COVID-19 pandemic. Hospital units were frequently in outbreaks so community agency supports and services could not be provided in person. This required a reliance on virtual connections which was not as effective. Both health care staff and client/patient participants preferred on-site presence and connection to complete intakes and assist with housing and financial aid.

Research Question 4: What are service-user and staff perceptions of the intervention within different healthcare facilities and in the community, for each subpopulation?

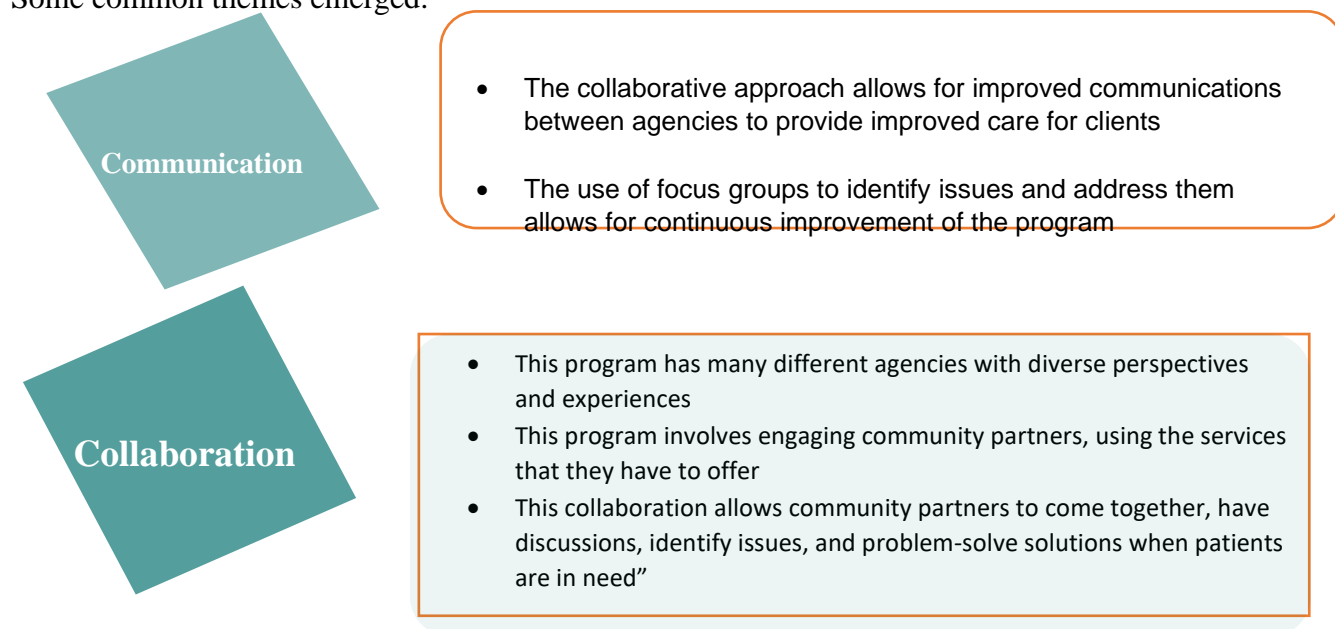
This research question was addressed through the qualitative data on perceptions. To understand the impact of the intervention, service users and staff were asked to share views and perceptions about the H²I Intervention. The pandemic made it difficult to gather comprehensive data as planned and conduct follow-up assessments and interviews on the long-term effects of the H²I intervention. In particular, the qualitative focus group discussions with patient participants that were planned to explore the perspectives of the participants about the intervention were not carried out because of the pandemic and the unfeasibility of virtual interviews for this population with limited access to technology. The lack of qualitative data from the focus group discussions among the individual participants is a limitation in assessing the program's impact beyond housing stability. Therefore, in this section, we present only the results of the focus group discussions with healthcare providers whose clients were involved in the program and the perspectives of community agency staff who implemented the program. Major qualitative results from healthcare and community agency staff are presented below:

Perspectives of Health Care Providers and Community Partners

During the H²I project, a research team conducted a total of five focus groups with hospital staff and community partner representatives to learn more about the perceived strengths of the program. The following common themes emerged:

Program Strengths

During the H²I project, a research team conducted a total of five focus groups with hospital staff and community partner representatives to learn more about the perceived strengths the program. Some common themes emerged:



Coordination

- Having a single, primary point of contact to network between the participating agencies and streamline access to housing
- “It was easy to get access to them, and they brought a lot of different options. We were able to do things individually for the patient that a lot of places might not.”

Outcomes

- 138 unique individuals accessed the program supports and services
- Almost all individuals were connected to long-term community supports and obtained housing

Program Improvements

- Focus groups also highlighted several areas in which this program could be improved. Common themes are described below:
- Ideally, supports for clients should in-person. Provincial guidelines in response to the COVID-19 pandemic have reduced the ability for assisting clients face-to-face, which has made it more challenging to develop trusting relationships with clients.
- The housing-first program in London requires participants to have valid identification. Improved collaboration with community partners for stream-lined access to IDs would be beneficial in this program. Ideally, there should be an on-site ID clinic in hospitals
- While the collaboration between community agencies benefits clients, it was noted that collaboration between hospital and community partners could be more integrated.
- Housing supports can be provided only when housing is available. This program could benefit from the ongoing establishment of positive relationships with private landlords so that more individuals can benefit from this program.

Recommendations for other Communities

The following recommendations came from Focus Group participants when asked, “What tips would you give to others thinking of implementing a similar program in their communities?”

1. Coordinated Access being in-hospital is crucial for success.

- Face-to-face conversations with patients build trust and engagement
- Face-to-face intake meetings make the process of obtaining VI-SPDAT data more smooth

- When hospital staff know the face and name of Coordinated Access workers, it becomes easier to call for support for a patient
- Being on-site allows for clients to drop-in to receive supports. Scheduling appointments is more challenging, for example, if these clients do not have access to a telephone.

2. Different subsections of the community population may have different needs and having separate streams for these subsections is beneficial. *In the H²I program, there was a separate stream for adults and youth.*

3. The use of Homeless Individuals and Families Information System (HIFIS) was encouraged. HIFIS allows the conversation with a client to continue beyond a single encounter and is particularly helpful in tracking down more transient individuals.

4. Healthcare providers can be the champions in the hospital wanting to see this program be successful. Considering staff turnover within hospitals and community agencies, it is also important to have appropriate information easily accessible to staff to allow continual growth over time.

5. Each community agency comes to the table with different experiences and perspectives, and this diversity bolsters the strength of the program. Additionally, there is value in having persons with lived experience on advisory committees, to offer insight into their experiences and how to help support other people in similar situations while they're in-hospital.

Discussion

The outcomes of this program of research have provided several insights about how individuals' experiences of homelessness and mental health issues can be improved through collaborative and coordinated efforts among different stakeholders. Particularly, the qualitative research findings from health care providers and community partners indicated that the H²I programme was effective in addressing the housing needs of homeless people in London, Ontario, and helping individuals by creating access to community support and services. This section discusses the potential interpretations of qualitative and quantitative results and concludes with some recommendations.

Through the course of its implementation, the results of the focus group discussion indicated that the programme has helped connect individuals to long-term community support and provided an opportunity for homeless and vulnerable individuals to obtain housing. Researchers recognise stable housing as an essential component of discharge planning for recovery and long-term outcomes (Forchuk et al., 2006, 2015; Hamilton et al., 2015; Saab et al., 2016). Key findings of this qualitative evaluative study indicated that, collaboration, coordination, and effective communications among the different health care workers and partnering agencies were the strengths of the H²I programme to help the homeless populations with housing needs who access acute medical or psychiatric treatment. Through coordination and networking, the evaluation results indicated that the intervention was effective at reducing the number of participants discharged to homelessness. As a result, the qualitative result indicated that 138 individuals were able to access the programme supports and services, and all of these individuals were connected to long-term community supports and obtained housing.

Further, focus groups with health care providers and partnering agencies highlighted several key areas in which the H²I programme could be improved. Two key recommendations stand out: 1) While the collaboration between community agencies benefits clients, it was noted that collaboration between hospitals and community partners should be more integrated to get the desired results. They further suggested having a common database, similar to the Homeless Individuals and Families Information System, to enhance system-wide collaboration; and 2) the participants stressed that housing supports can be provided only when housing is available. So, this programme could benefit from the ongoing establishment of positive relationships with private landlords so that more individuals can benefit from it.

Overall, the results of the focus group discussions with healthcare and community agency staff show that the H²I program contributed to and provided a collaborative solution to chronic homelessness among people suffering from different mental illnesses and who have been frequently hospitalised in tertiary psychiatric facilities.

Although descriptive results were drawn from a very limited sample, the quantitative analysis has also yielded important findings regarding general demographic characteristics, self-reported psychiatric diagnoses, severity of homelessness, and frequency of psychiatric hospitalization. Research has often shown that individuals facing homelessness experience disproportionate burdens of illness (Mikkonen & Raphael, 2010). They also have a higher incidence of premature death, mental illness, and traumatic injury (Public Health Ontario & Berenbaum, 2019). Similarly, the descriptive statistics results of this study indicated that over 95% of adult participants and 100% of youth participants have a psychiatric diagnosis, with 54.5% and 68.0% having multiple diagnoses respectively. In terms of the types of diagnoses, mood disorders were the most common diagnosis in both adult (52.3%) and youth (64.0%) participants. Other common self-reported psychiatric diagnoses in adult participants included schizophrenia (34.1%), anxiety disorders (34.1%), personality disorders (29.5%), post-traumatic stress disorder (PTSD) (15.9%), and childhood and adolescent disorders (11.4%). Common self-reported psychiatric diagnoses in youth participants included anxiety disorders (44.0%), schizophrenia (36.0%), disorders of childhood/adolescence (20.0%), developmental disorder (20.0%) and post-traumatic stress disorder (PTSD) (16.0%).

In addition, individuals who are homeless often rely on hospitals as their primary source of care (Tadros et al., 2016; Buccieri et al., 2019) and therefore spend more time in the hospital than the non-homeless population. Our quantitative study also found that 88.6% of adult participants and 100% of youth participants reported having a psychiatric hospitalization, and the average number of total psychiatric hospitalisations was five times and two times in the last year respectively. These findings add to existing evidence that patients without secure housing are four times more likely to be readmitted to the hospital within three days of discharge (Ku, Scott, Kertesz, & Pitts, 2010).

Further, the findings indicated that the majority of both the adult participants (81.8%) and the youth participants (88.0%) reported being homeless at least once in their lifetime, while 68.2% and 76% fell under the category of being "absolutely homeless", respectively at the time of the interview. Absolute homelessness refers to an individual who does not have a place he or she considers to be home or a place where he or she regularly sleeps. The majority of the adult

sample (79.5%), and majority of the youth sample (88.0%) have reported being absolutely homeless at least once in their lifetime, and 59.1%, and 68.0% have been absolutely homeless in the last year respectively.

Major Take Aways

Focus group data with stakeholders reported that the intervention prevented homelessness for most of the individuals who accessed the program.

- ❖ All of the individuals who accessed the program supports and services were connected to long-term community supports.
- ❖ Healthcare provider and community stakeholder participants stated that the program is effective in preventing discharge of clients from the hospital to homelessness.
- ❖ Evaluating community resources, client needs, and communication channels were highlighted as important technique to prevent discharge of clients to homelessness.
- ❖ The coordinated and collaborative aspects of H²I is indicated as the main strengths of the program and it was crucial for its success.
- ❖ Over the course of H²I intervention program, 138 individuals accessed the program supports and services and all individuals were connected to long-term community supports and obtained housing.
- ❖ There is great diversity within the homeless population in terms of age, sex, ethnicity, mental health status, mental illness and use of health services.
- ❖ Most of the adult sample (80%), and majority of the youth sample (71.4%) have reported being absolutely homeless at least once in their lifetime,
- ❖ 89% of adult participants and 100% of youth participants reported have a psychiatric hospitalization, and the average number of total psychiatric hospitalizations was five times and two times in the last year respectively.

Limitations and Challenges

Although the H²I intervention has been able to prevent homelessness and housing for our sample of youth and adults from both medical and psychiatric hospital units through this intervention, the research was highly affected by COVID-19. The pandemic made it difficult to gather comprehensive data as planned and conduct follow-up assessments and interviews on the long-term effects of the H²I intervention. In particular, the qualitative focus group discussions with clients or patient participants that were planned to explore the perspectives of the participants about the intervention were not carried out because of the COVID-19 pandemic and the unfeasibility of virtual interviews for this population with limited access to technology. The lack of qualitative data from the focus group discussions is a limitation in assessing the programme's impact beyond housing stability. Further, our initial goal was to recruit at least 106 participants to the research programme for the survey. However, the COVID-19 pandemic affected the numbers of individual research participants. At the end of the study, only 44 individual participants had been recruited to complete individual interviews as part of the quantitative

dataset. As such, the following are the main limitations or challenges to for the proper execution the study or implementation of the program:

- Patient connection to coordinated access to housing services was highly affected due to the COVID-19 pandemic. As a result, intake meetings were carried out through telephone interviews, rather than in person. In addition, drop-in office hours on-site were restricted which affects to invite more participants and implement the program.
- Most importantly, focus groups with patient participants who was part of the program was not carried out as planned due to the COVID-19 pandemic and physical distancing requirements. The findings of the report are, therefore only from data from health care providers and community agency staff perspectives and semi-structured interviews (bassline surveys) with patient participants.

Future Directions

The overarching aim of the Collaboration to Address Homelessness: Health, Housing, and Income (H²I) study aimed to test an intervention that prevented individuals from being discharged to homelessness following a hospital stay by:

- Reducing the risk of hospital discharge to homelessness through preventative measures
- Increasing the number of on-site housing advocates on both medical and psychiatric units.
- Providing different programs for youth and adults since youth have different needs such as employment and education, and have frequent CAS involvement, fewer experience with tenancy, and other services that are uniquely geared towards youth.

It is important to highlight that the main shift to end both youth and adult homelessness refocuses on the efforts on prevention as opposed to emergency supports. As such, this report highlights a new way of thinking to address homelessness prevention, which may challenge the prevailing norm in a community. Rather than managing homelessness through emergency services, we are proposing a concerted focus on prevention. A strong prevention approach requires a coordinated and strategic systems approach and as a consequence, must engage, include and mandate action from mainstream systems and departments of government as well as the homeless-serving sector. No solution to end homelessness can or should depend wholly on the efforts of those in the homeless-serving sector.

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