Hannah Gibson, MBChB, Malcolm Evans, MPS, Kyler Woodmass, MPIA, Stephanie Laing, MSW, John R. Graham, PhD

Health care in supportive housing facilities

Many health needs are not being sufficiently addressed within supportive housing sites.

ABSTRACT

Background: We explored health care services in three supportive housing sites in Kelowna, British Columbia, to identify tenants' health needs and determine whether their needs were perceived as being met, and, if their needs were perceived as not being met, which health areas were being underserved.

Methods: We invited all tenants and staff at the supportive housing sites to provide information on their health needs and related support. In-depth interviews were conducted between 1 August and 2 September 2020, including both closed-ended and open-ended questions.

Results: In total, 42 tenants (38%) and 30 staff members (75%) were interviewed. Seventy-two percent of tenants interviewed had unmet health needs; those with developmental disabilities experienced the highest percentage of unmet needs. Long-term conditions such as diabetes, high blood pressure, heart disease, and liver disease were also associated with unmet needs. Tenants were often unaware of available health care services or were unwilling or unable to access them. Both tenants and staff emphasized that stigma and discrimination within health services are a barrier to receiving care. Existing health services were also seen as ill-equipped to deal with concurrent conditions, such as mental health issues, substance use, and/or physical disability.

Conclusions: We recommend that further research be conducted on the needs of other populations in supportive housing across BC and that additional funding be provided to create a wide range of housing options to address the diverse health, social, and other needs of tenants.

Dr Gibson is a resident physician with Kelowna Regional Family Medicine, University of British Columbia. Mr Evans is the systems planner for the Central Okanagan Journey Home Society. Mr Woodmass is the former associate research coordinator for the Kelowna Homelessness Research Collaborative, based out of UBC Okanagan. Mrs Laing is the director of operations for the Kelowna Homelessness Research Collaborative, based out of UBC Okanagan. Dr Graham is a professor with UBC Okanagan's School of Social Work and the primary investigator for the Kelowna Homelessness Research Collaborative, based out of UBC Okanagan.

This article has been peer reviewed.

Background

Experiencing homelessness can have a direct, adverse effect on an individual's health, which can include high levels of disease, mental health issues, and substance abuse disorders.[1-4] In a series of point-in-time counts conducted in British Columbia, high self-reported rates of addiction (67%), health concerns (66%), mental illness (51%), and physical disabilities (36%) were recorded among those experiencing homelessness.[5] People who are homeless also experience low levels of engagement with primary care, which reduces early treatment opportunities and increases the risk of disease progression to the point of hospitalization.[6-7]

The Wellesley Institute identifies housing as one of the most fundamental determinants of health due to its role in creating a stable living environment.[8] One prominent framework for housing interventions has been "Housing First," a proven approach adopted by the Government of Canada.[9] Canada's national At Home/Chez Soi study of Housing First presented an overview of a range of outcomes for more than 2000 participants across five cities, which included housing, service use and cost, and social and health outcomes;[10] the study resulted in greater housing stability and other positive effects, such as the reduced use of emergency health services. Subsequent analyses identified a Housing First model as cost-effective compared with treatment as usual[11] and showed that overall health care expenditures for people who had been homeless were significantly lower after they moved into supportive housing.[12] Wilkins provided a detailed review of the evidence supporting permanent supportive housing as "an effective intervention for people with complex health and social needs … particularly for those who experience chronic homelessness" (page 66).[13]

While housing is an important determinant of health, many people remain at risk for adverse health effects, even after they obtain stable housing. Goering and colleagues' 2014 At Home/Chez Soi report noted that the

intervention resulted in mental health and substance use outcomes that were similar to those of the control group.[10] While case studies of BC permanent supportive housing sites, including reports from government[14] and independent audits,[15] confirm that many residents do experience positive health outcomes, detailed information is limited, and improvement is not ubiquitous. Bitter and colleagues also commented that "the quality of life of service users of housing services needs improvement, as even persons in the best-recovered subgroup have a lower quality of life than the average population."[16] The literature demonstrates that housing alone can be insufficient in supporting individuals with complex health needs, and effective service delivery can benefit from an understanding of clients, their needs, and their experiences in engaging with services.

The use of permanent supportive housing is widely implemented across BC. BC Housing provides a full list of its funded facilities on its Housing Listings web page;[17] **Figure 1** shows the locations of those sites. Access to supportive housing programs requires self-referral by eligible individuals (low income, homeless or at risk of homelessness, and in need of supports to live independently or to maintain housing) to BC Housing via a Supportive Housing Registry Application Form.[18] Applicants must undergo an evaluation using a Vulnerability Assessment Tool before their file can be discussed at a local Coordinated Access Committee meeting to determine whether they can be considered for any local vacancies, including in Kelowna.[19] This Coordinated Access process is common across Canada and is mandated for "designated communities" that have received federal Reaching Home funding since 31 March 2022.[20] Investment in this form of housing is supported by a range of evidence on both the social and economic value of supporting individuals who are experiencing or at risk of experiencing homelessness.[21] Further inquiry can reinforce how these investments can more fully stabilize and support vulnerable community members—in this case, their health needs.

Objectives

Our goal was to identify and examine the health care needs of tenants in three supportive housing sites in Kelowna to (1) clarify the existing needs of tenants, including those that tenants and staff report as currently unmet; (2) ascertain, for each health category, whether tenants are aware of and have accessed services; (3) explore staff and tenants' opinions on available and desired services; and (4) detect any barriers that exist for tenants related to accessing health care services. This builds on prior research on the needs of those seeking supportive housing[22] to also gauge self-reported use of health services and a diverse range of perspectives.

Methods

We used a mixed method case study approach[23] that consisted of in-depth interviews, which were recorded, transcribed, and used to fully explore tenant and staff perspectives. Closed-ended questions were used to conduct a quantitative analysis, and open-ended questions were used to elicit perspectives that could be qualitatively analyzed and used to maximize the accuracy of our results in reflecting participants' opinions. Participation was extended to all supportive housing tenants and all permanent staff and case managers connected to three permanent supportive housing sites in the Kelowna area, all operated by the same agency. Interviews were conducted between 1 August and 2 September 2020 **[Table]**.

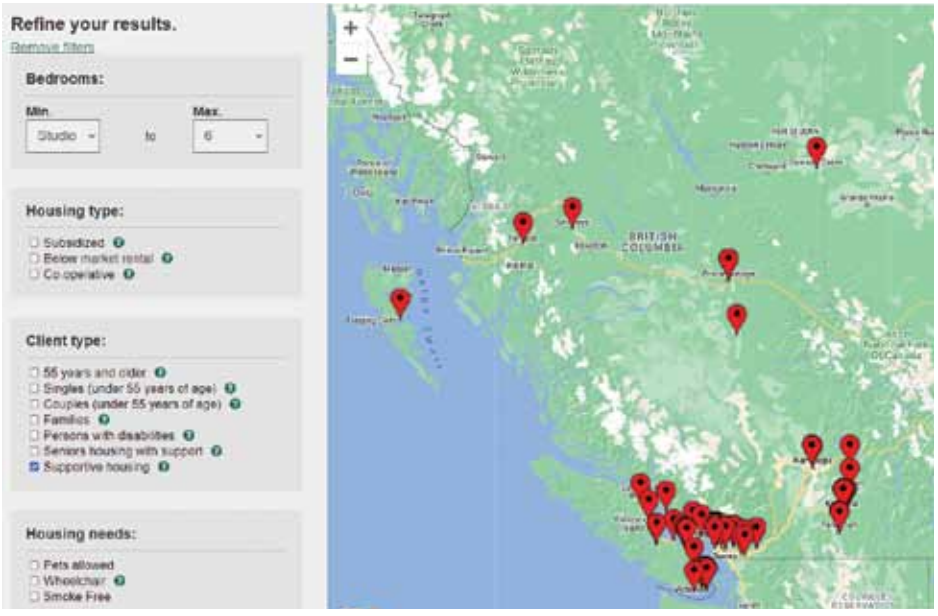

FIGURE 1. **BC Housing supportive housing listings (23 December 2022).**
Source: www.bchousing.org/housing-assistance/rental-housing/housing-listings

TABLE. **Participation across supportive housing sites in Kelowna, British Columbia.**

	Site 1	Site 2	Site 3	Case managers	Total	Response rate (%)
Tenants invited	35	32	44	—	111	—
Tenants interviewed	10	12	20	—	42	38
Staff invited	10	10	12	8	40	—
Staff interviewed	5	8	10	7	30	75

Note: Those not interviewed either declined or were unable to be engaged by 2 September 2020.

Medical conditions were grouped into categories using the *International Statistical Classification of Diseases and Related Health Problems*, 10th revision.[24] Tenants were then asked to share their experience accessing services for identified conditions. Staff were asked about their experience accessing services on behalf of tenants and whether they felt the health care needs of their tenants were being met.

This study was submitted at an early stage to Research Ethics BC for an informal ethics review, and then to the UBC Okanagan Behavioural Research Ethics Board (certificate #H20-03383).

Data analysis

The interview questions were designed to allow for both quantitative and qualitative analysis. Once recorded, all answers were moved from the transcription software into a Microsoft Word document and were anonymized. A phenomenological approach was used to interpret the qualitative data to illuminate tenants' perceptions of health care access within permanent supportive housing environments. Thematic analysis followed an inductive approach as common experiences detailed by the participants informed the selection of overarching themes. Quotations were then arranged according to these themes. Health conditions were not treated as mutually exclusive due to nuances in those conditions (e.g., depression lasting more than 6 months was classified as both a psychiatric and chronic condition).

Results

Ninety-three percent of tenant respondents had a form of chronic disease **[Figure 2]**; 76% of them had two or more chronic diseases. Of the total number of tenant respondents, 72% felt that they had unmet health needs. Tenants with developmental disabilities experienced the highest percentage of unmet health needs. Other health conditions associated with self-identified unmet needs were long-term conditions such as diabetes, high blood pressure, heart disease, and liver disease.

Respondents stated that health was often not a primary focus for tenants, that pre-existing conditions deteriorated, and possible new concerns were not addressed as a result. For instance, one staff member described a tenant who was unable to manage his medications for chronic disease and did not know the extent of the issue until the nurse took his blood pressure. Other staff members described the need for qualified medical professionals to come in to check up on tenants one-on-one and to encourage healthy behavior.

Lack of awareness about services

Fifty-one percent of tenants said they were unaware of services that were available for treating chronic diseases, and only 36% accessed services for their disease. One participant described the situation as being comparable to being on the street again: "I don't know what the resources are, I don't know what my options are or accessibility or anything like that. I feel like I've been housed and that was it. I guess I appear to be high functioning so they think I can do it on my own, but I'm having a lot of trouble. I just don't even know how to start or where to start, what to do. It was a huge transition going from the shelter, where they pretty much wait on you hand and foot, … to independent living, where you just got to do it all by yourself. I'm just losing my mind here. It feels like I'm on the street again, doesn't feel like I got any help. I'm struggling, quite a bit."

Barriers to maintaining health care appointments

Physical mobility was a common challenge for tenants in attending health care appointments because their supportive housing site was not located within walking distance of health services:

"I don't mind biking around, but I mean I have COPD [chronic obstructive pulmonary disease] so I can't go too far, sometimes I need to be transported around." "The one thing I have been asking for years now is help, to get me from home to the doctor's, when my back is hurting, and I can't walk to the bus stop."

In addition to transportation barriers, respondents described anxiety about traveling to and accessing health services.

Consequences of missed appointments

One staff member expressed concerns that missed appointments and subsequent sanctions were having a detrimental effect on tenant health: "The system is still designed in a way that punishes people for not making appointments . . . so if [tenants] miss three dentist appointments, [they are] cut off with the free clinic, for example. That is not super realistic for the folks that we work with. So that's disappointing. I have had clients that have a regular GP, and if

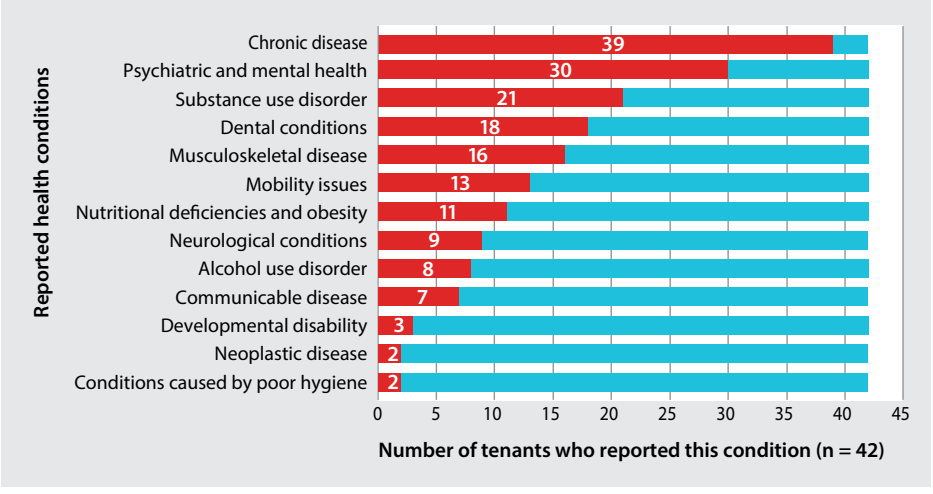

FIGURE 2. Tenants' self-reported health conditions.

they miss an appointment, they're charged. You can't charge an $80 cancellation fee to a person that's on a limited income and expect them to ever go back, but all their records are with you and they were comfortable with you, so that's problematic."

Stigma and discrimination

Many instances of stigma, discrimination, and mistreatment were mentioned during the interviews. Both tenants and staff emphasized that stigma and discrimination within health services are barriers to receiving care. Advocacy from staff was crucial in effectively supporting tenants: "I've been told by clients that their experience going into hospital is night and day whether I'm with them or not. So they're treated with not as much dignity or respect as, say, somebody else not struggling with substance use or not struggling with homelessness." Another staff member confirmed that having an advocate in the emergency room means residents are "more likely to get attention, much quicker, and be taken seriously." Both tenants and staff identified a need to educate medical staff on addiction and accommodating street-entrenched populations.

Lack of transparency between services

Confidentiality concerns also limit access to information for existing tenants, and staff expressed concerns that medical information that is relevant to supporting prospective tenants was not shared with the supportive housing site prior to tenancy.

Mental health and substance use and physical health needs

Mental health and substance use were identified as intricately linked to physical health. For example, a mental health issue may prevent a tenant from seeking medical attention for a physical ailment due to a lack of motivation or a lack of awareness about the physical issue. Existing health services were also seen as ill-equipped to deal with concurrent conditions. One staff member commented: "So, when people are experiencing a concurrent disorder, they are often turned away from one health service because of the other concern. So, if you are having a mental health issue that could be substance use related, then you're turned away from actual support around your mental health until your substance use clears. So that's a problem for most of our residents."

We found that there is a niche group of tenants who have mental health and substance use issues, in addition to physical needs such as incontinence or frequent falls. Typically, this group is elderly or physically disabled and is unable to access regular home support services due to their mental health and substance use. Multiple staff members highlighted this issue. One identified a perceived misunderstanding "that you grow out of mental health and substance abuse. . . . I've definitely worked with many people 60, 70, 80 years old that are still actively using." One staff member noted that several tenants already require panic buttons to trigger support and that half a dozen more will require that level of support in the near future. There is a gap in housing that provides support for seniors with substance use issues, but also with physical conditions such as incontinence and aspects of end-of-life care: "I think for me the biggest gap is definitely end-of-life care and palliative care in home. I've definitely had experience over the years where people want to die at home, which is completely reasonable and understandable. But the services available to help that transition are lacking, [as is] general elderly care. When it comes to personal care, home support, that sort of thing, I think there's a huge barrier, especially if you have substance use or mental health barriers."

Traditionally, patients who need physical help with their activities of daily living, such as washing and dressing, can access home health care. This service offers a range of support from care aides who can assist with personal hygiene, nurses who provide medication management, specialists for issues such as diabetes and chronic obstructive pulmonary disease. However, home health care has refused service to tenants for being intoxicated, smoking cigarettes on the premises, or having substance use paraphernalia in the unit: "There's been several situations where we've seen a tenant that has needed home health in their home and because of hard standards, they've refused to enter the home, or because of the multiple barriers that are put up, like the client being intoxicated or the client not having a regular schedule. I guess the biggest barrier and gap is just not having the right resources in town for individuals who suffer from mainly substance abuse. For me, the biggest one has been alcohol and incontinence, and really just not having a place to go, nor the resources to be able to support individuals in those situations."

An example of the shortcomings in the current system are detailed in a statement from a staff member: "Then our seniors' care facilities, which are totally competent in meeting health care needs and doing the bathing and feeding without falling and all that stuff, have no tolerance for substance use. So there's this big gap where I have a client who has, since I've worked with her, been through a scattered site, a supportive housing placement, and to seniors' homes, and she's facing an eviction and will likely end up spending months again in hospital because they don't know where to take her or what to do with her. So, there's just . . . no overlap between the ability to tolerate substance use and to tolerate some of those behavioral issues and the ability to manage somebody's complex health needs."

Substance use initiation after being housed

While many tenants with substance use felt their needs were being met, some raised concerns about substance use at supportive housing sites. Many tenants reported starting substance use since being housed within supportive housing due to the close proximity to other users and open substance use: "In all honesty, I never smoked [meth] before I moved here. What's the saying, if you sit in the barbershop long enough, eventually you're going to get a haircut."

Both staff and tenants spoke of challenges in preventing individuals from initiating drug use and supporting those who

are trying to stay clean while in supportive housing: "Wet houses and harm reduction. I understand the need for it, but it frustrates me. What I see is a very narrow group of people that I know and have worked with, [and] I don't know anyone that comes out the other end clean or sober from that scenario. It's frustrating." "I think there needs to be more of a second stage house. I'm talking about alcoholism and recovery, mental health . . . to start off in the supportive housing units that we have. That's great. But it would be nice for people to be able to grow and move into a space where there's maybe more programming or assistance, maybe even working towards getting off of disability, which is also a huge problem. I mean, it's a tremendous service, it's needed, but once you're on it, there's no path off of disability. You kind of have to create that yourself, and I think everybody flounders in that space."

Dental care

Forty-three percent of tenants reported having dental issues, and 67% stated that their needs were not being met. This was due largely to tenants being unaware of available or affordable services or experiencing challenges and delays in scheduling appointments through what can be rotating staff. The issue of affordable dentures is having a significant effect on the health of some tenants: one participant said they do not eat healthily because everything has to be soft.

Discussion

Our interviews provided valuable insights into the challenges in meeting health care needs within supportive housing facilities. Experiences of stigma, discrimination, and mistreatment are clearly a contributing factor to perceptions about meeting health care needs. Potential solutions are multifaceted and will require changes at the societal level. Attitudes toward mental health and substance use need to shift before we can expect better treatment of the people we serve. We believe that the best way of addressing this issue is to provide service providers with education and training on mental health and substance use and on the unique challenges faced by street-entrenched populations. Tenants and staff suggested that solutions to this issue could include providing a mobile health care team, an on-site multidisciplinary team, or increased access (including evenings and weekends) to existing health care services.

Charges and penalties for missed appointments highlight issues with regular service providers who offer health care to a street-entrenched population. Although systems and infrastructure changes would help address these barriers, providing support in the current system is essential for ensuring that tenants are able to access health care and that their needs are assessed and managed appropriately. To address the lack of communication and transparency between housing and community health agencies, we recommend that supportive housing sites ask tenants for consent to release all information that is pertinent to their housing situation, including management plans, prognosis, and identified risks.

Local supportive housing facilities offer a range of services related to harm reduction. One facility has an overdose prevention site and provides harm reduction supplies, another facility provides harm reduction supplies but does not have an overdose prevention site, and another facility does not offer either service. In keeping with current best practice of the Housing First model, we believe that a range of support is appropriate. Although there is clear value in the harm reduction approach, we recommend that prospective tenants at Coordinated Access tables be matched to a housing site that is best suited to their needs, which will set them up for success in health and in their tenancy. Other supportive housing sites should have a lower tolerance for substance use and be able to offer "clean" units for clients who are returning from detox or are actively trying to abstain from substance use. The Kelowna Homelessness Research Collaborative found that housing itself can be a risk factor for homelessness when it comes with restrictive rules that limit freedom or where there is a mismatch between those seeking recovery and those actively engaged in substance use.[25]

Funding is needed for long-term care beds for individuals with substance use and mental health needs and concurrent physical needs, such as falls or incontinence, because the current system is ill-equipped to deal with this demographic. As the general population and the population at our supportive housing sites age, this issue will become increasingly prevalent. The concurrent experience of physical, mental, and/or substance use challenges supports the establishment of a dedicated long-term care facility for patients who have physical health needs in addition to mental health or substance use disorders. The Province has announced promising new investments in the form of complex care housing.[26] Ideally, this would expand beyond a focus on concurrent disorders to include complex challenges associated with aging and other factors.

The literature on permanent supportive housing models continues to identify efficacy in reducing homelessness and achieving housing stability, though again, evidence of improvement in other facets of well-being remains mixed.[27] Additional inquiries point to the importance of undertaking supplementary actions such as embedding primary care services in permanent supportive housing facilities[28] and highlight other factors such as the design of the built environment.[29] We should consider all opportunities to ensure that a system of care such as permanent supportive housing can best stabilize individuals in need of support and move them to a level of independence based on their own self-determination and their individual needs. Permanent supportive housing is a critical resource but is still worthy of continued evaluation and evolution.

Study limitations

While the study had high levels of participation, all participants either worked or resided in supportive housing without health care integration, and all were associated with the same organization. Despite offering prospective participants telephone

interviews, it is possible that some may have declined due to fear of transmission of COVID-19, and the pandemic may have also affected participants' perception of health care access. COVID-19 was frequently mentioned as a barrier to accessing services due to some services being closed or having reduced hours. Transportation was also affected by COVID-19 and included restrictions on staff in transporting clients.

Conclusions

Many health needs are not being sufficiently addressed within supportive housing sites. Additional funding is required to provide a wide range of housing options in keeping with the diverse health, social, and other needs of tenants. Further research needs to be undertaken to assess the needs of the populations in other supportive housing sites across Kelowna and BC to implement and evaluate recommended changes. ■

Acknowledgments

This project received funding from the Kelowna Homelessness Research Collaborative (https://khrc.ok.ubc.ca) via the UBC Okanagan Eminence Program. The authors acknowledge the tenants and staff of local supportive housing facilities for contributing their perspectives to inform system improvements.

Competing interests

The first two authors were employees of the facility operator at the time of the interview but no longer have any affiliation. The authors report no other conflicts of interest.

References

1. Hwang SW. Homelessness and health. CMAJ 2001; 164:229-233.
2. Hwang SW, Gogosis E, Chambers C, et al. Health status, quality of life, residential stability, substance use, and health care utilization among adults applying to a supportive housing program. J Urban Health 2011;88:1076-1090.
3. Fazel S, Geddes JR, Kushel M. The health of homeless people in high-income countries: Descriptive epidemiology, health consequences, and clinical and policy recommendations. Lancet 2014;384 (9953):1529-1540.
4. Liu M, Hwang SW. Health care for homeless people. Nat Rev Dis Primers 2021;7:5.
5. Homelessness Services Association of BC. 2020/21 report on homeless counts in BC. Burnaby, BC: BC Housing, 2021. Accessed 25 February 2023. www.bchousing.org/sites/default/files/media/documents/2020-21-BC-Homeless-Counts.pdf.
6. Chambers C, Chiu S, Katic M, et al. High utilizers of emergency health services in a population-based cohort of homeless adults. Am J Public Health 2013;103:S302-S310.
7. Stafford A, Wood L. Tackling health disparities for people who are homeless? Start with social determinants. Int J Environ Res Public Health 2017;14: 1535.
8. Wellesley Institute. Precarious housing in Canada. Accessed 15 December 2020. www.wellesleyinstitute.com/publications/new-report-precarious-housing-in-canada-2010.
9. Infrastructure Canada. Housing first. Last modified 10 May 2022. Accessed 25 February 2023. www.infrastructure.gc.ca/homelessness-sans-abri/resources-ressources/housing-first-logement-abord-eng.html.
10. Goering P, Veldhuizen S, Watson A, et al. National final report: Cross-site At Home/Chez Soi project. Calgary, AB: Mental Health Commission of Canada, 2014. Accessed 25 February 2023. www.mentalhealthcommission.ca/wp-content/uploads/drupal/mhcc_at_home_report_national_cross-site_eng_2_0.pdf.
11. Latimer EA, Rabouin D, Cao Z, et al. Cost-effectiveness of housing first intervention with intensive case management compared with treatment as usual for homeless adults with mental illness: Secondary analysis of a randomized clinical trial. JAMA Netw Open 2019;2:e199782.
12. Wright BJ, Vartanian KB, Li H-F, et al. Formerly homeless people had lower overall health care expenditures after moving into supportive housing. Health Aff (Millwood) 2016;35:20-27.
13. Wilkins C. Connecting permanent supportive housing to health care delivery and payment systems: Opportunities and challenges. Am J Psychiatr Rehabil 2015;18:65-86.
14. BC Housing. Modular supportive housing resident outcomes. Accessed 2 February 2023. www.bchousing.org/research-centre/library/transition-from-homelessness/modular-supportive-housing-resident-outcomes.
15. Harry Cummings and Associates Inc. Penticton supportive housing review: Summary report. BC Housing, 2022. Accessed 25 February 2023. www.bchousing.org/sites/default/files/rcg-documents/2022-05/Penticton-Supportive-Housing-Review-Summary-Report.pdf.
16. Bitter NA, Roeg DPK, van Nieuwenhuizen C, van Weeghel J. Identifying profiles of service users in housing services and exploring their quality of life and care needs. BMC Psychiatry 2015;16:419.
17. BC Housing. Housing listings. Accessed 2 February 2023. www.bchousing.org/housing-assistance/rental-housing/housing-listings.
18. BC Housing. Supportive housing. Accessed 2 February 2023. www.bchousing.org/housing-assistance/housing-with-support/supportive-housing.
19. Central Okanagan Foundation. Reaching home: City of Kelowna homelessness plan 2019–2024. Accessed 25 February 2023. www.homelesshub.ca/sites/default/files/attachments/Finalized%20Community%20Plan%20-%20Kelowna.pdf.
20. Infrastructure Canada. Reaching home: Canada's homelessness strategy directives. Last modified 1 November 2022. Accessed 25 February 2023. www.infrastructure.gc.ca/homelessness-sans-abri/directives-eng.html.
21. BC Housing. The social and economic value of dedicated-site supportive housing in BC. 2018. Accessed 25 February 2023. www.bchousing.org/sites/default/files/rcg-documents/2022-04/SROI-Analysis-Dedicated-Site-Supportive-Housing.pdf.
22. Sirotich F, Durbin A, Suttor G, et al. Seeking supportive housing: Characteristics, needs and outcomes of applicants to the access point. Toronto, ON: The Access Point, 2018. Accessed 25 February 2023. www.wellesleyinstitute.com/wp-content/uploads/2018/04/The-Access-Point-Waiting-List-Analysis-Full-Report.pdf.
23. Yin RK. Case study research: Design and methods. 4th ed. Thousand Oaks, CA: Sage Publications; 2009.
24. World Health Organization. International statistical classification of diseases and related health problems 10th revision – version: 2019. Accessed 25 February 2023. https://icd.who.int/browse10/2019/en#/.
25. Rempel K, Myrah K, Laing S, Woodmass K. Homelessness vulnerabilities and potential mitigating supports. Kelowna, BC: Kelowna Homelessness Research Collaborative, 2020. Accessed 25 February 2023. https://colinreid.sites.olt.ubc.ca/files/2020/08/Report-A-Homelessness-Vulnerabilities-and-Potential-Mitigating-Supports-KHRC-Aug-25-2020.pdf.
26. Ministry of Mental Health and Addictions. New housing model supports people with complex challenges. BC Gov News. 20 January 2022. Accessed 25 February 2023. https://news.gov.bc.ca/releases/2022MMHA0005-000083.
27. Aubry T, Bloch G, Brcic V, et al. Effectiveness of permanent supportive housing and income assistance interventions for homeless individuals in high-income countries: A systematic review. Lancet Public Health 2020;5:e342-e360.
28. MacKinnon L, Kerman N, Socías ME, et al. Primary care embedded within permanent supportive housing for people who use substances: A qualitative study examining healthcare access in Vancouver, Canada. Health Soc Care Community 2022;30:e5062-e5073.
29. Rollings KA, Bollo CS. Permanent supportive housing design characteristics associated with the mental health of formerly homeless adults in the US and Canada: An integrative review. Int J Environ Res Public Health 2021;18:9588.