Navigation Center Program Evaluation Report - Part 2

Guest Satisfaction and Health-related Outcomes

Susan E. Collins, PhD Seema L. Clifasefi, PhD

Harm Reduction Research and Treatment (HaRRT) Center University of Washington – Harborview Medical Center

with important contributions from UW HaRRT Center staff, the Navigation Center Evaluation Advisory Board and others acknowledged on the back page.

Draft date: August 29, 2018

Executive Summary

Background: On June 9, 2016, former Mayor Ed Murray signed into effect an Executive Order creating Seattle's Navigation Center (hereafter "the Center"). Funded by the City of Seattle Human Services department and operated by the Downtown Emergency Service Center (DESC), the Center is a low-barrier, 24-hour, referral-only shelter for adults experiencing homelessness. The low-barrier, harm-reduction aspect of the Center means that shelter and services are offered without preconditions, such as abstinence from substances, mental health treatment attendance, and service participation requirements, and safer-use strategies are employed onsite. In contrast to existing shelters, guests are afforded more autonomy: There are no curfews or lock-out times, onsite substance use is allowed, and guests can bring pets, partners, and possessions with them. As outlined in the Executive Order, the goal of the Center is to "assist people who are unsheltered into housing as rapidly as possible, and to increase the capacity of providers to provide tailored services utilizing an intensive service model..."

The Harm Reduction Research and Treatment (HaRRT) Center at the University of Washington-Harborview Medical Center was contracted by the City of Seattle's Human Services Department to conduct a 13-month (July 2017-August 2018) program evaluation of the Center. The evaluation is divided into 2 parts:

- Part 1 (July 2017-February 2018) entailed qualitative interviews (n=40) and focus groups (n=4 groups, 36 participants) to document and analyze stakeholders' (i.e., Center guests; DESC, REACH and SPD onsite and outreach staff and management; and City partners) experiences with and perceptions of the Center as well as potential points for improvement of the Center's policies, procedures, amenities, services, and community-building efforts. This report was completed on March 21, 2018.
- Part 2 (November 2017-July 2018), which is the focus of the current report, entailed the assessment of changes in guests' (N=37) self-reported health outcomes prior and subsequent to their entry into the Center. Guest satisfaction and perspectives on housing were also assessed at the final time point.

Purpose: The purpose of Part 2 was to work with the Center guests to document their self-reported physical and mental health status, substance use and related problems, and quality of life over the first few months of their stay. Additionally, overall satisfaction with Center services and guests' perspectives on housing were assessed. By focusing on guests' self-reported health-related outcomes and perspectives on services, the UW HaRRT Center evaluation was meant to complement the City's parallel housing and service utilization report.

Methods: This evaluation comprised a single-arm, longitudinal, within-subjects design testing changes in selfreported substance use, mental health, physical health and quality-of-life outcomes during participants' transition into the Center (baseline), and at 30, 60 and 120-day intervals. Participants were 37 newly referred guests who were interviewed between November 2017 and July 2018, were at least 18 years of age, and agreed to participate in the evaluation component.

Primary Findings:

- Substance-use and related harm: Participants' were 23% less likely to report any alcohol or drug use for each month after their move-in date. Participants' experience of substance-related harm, including overdose, did not change in a statistically significant way.
- Safer-use strategies: For each month after move-in, participants were 22% more likely to report having access to naloxone, 12% more likely to use clean injection equipment, and 20% more likely to report giving clean equipment to someone they know. These findings are vital in supporting individual and community-level health because consistent and broad implementation of safer-use strategies, such as wide distribution of the overdose rescue drug (i.e., naloxone) and clean injection equipment (i.e., cookers, syringes, cottons), are scientifically effective ways to reduce risk of overdose and bloodborne illness transmission for the affected individual and the larger community.^a
- Mental health: There were no significant changes over time on participants' assessment of their emotional well-being, ability to fulfill their roles due to emotional problems, or feeling of being connected to others socially.
- Physical health: There were no significant changes over time on participants' assessment of their own day-to-day physical functioning, ability to fulfill their roles due to physical problems, changes in feeling fatigued versus energetic, or experience of pain. However, participants reported significantly better "general health" over time.
- Quality of life: There were no statistically significant improvements on participants' assessment of their general quality-of-life or on involvement in meaningful activities.
- Perspectives on housing next-steps: Participants were highly interested in housing, but were wary that they would need continued and tailored support (e.g., financial support, including rent assistance; case management; medical, psychiatry, substance-use treatment services; vocational rehabilitation; caregiving) to maintain their positive trajectories in housing. Guests also pointed to the necessity of financially sustainable permanent housing instead of time-limited models, such as rapid rehousing.

Conclusions and recommendations: Participants evinced positive self-reported changes on various important health-related outcomes, including increased safer substance-use practices, decreased substance use, and improved general physical health. Thus, low-barrier, enhanced, harm-reduction shelter services may support positive, health-related changes for people experiencing homelessness and substance-related harm in the short term. Moving forward, we recommend a) centering guests' voices in Center quality improvement and decisionmaking, b) expanding and enhancing Center services (e.g., adding onsite medical services), and c) ensuring ongoing case management and support after guests move into housing. Finally, we recommend an ongoing, longer-term evaluation that expands outcomes to include changes in publicly funded service utilization (e.g., emergency healthcare and jail) and housing attainment and maintenance. Such ongoing and more comprehensive evaluation will build on these positive initial and short-term findings to determine the longerterm impact of low-barrier, enhanced, harm-reduction shelter on people who use substances and their communities.

^a For more information on safer use strategies and public health outcomes, please see compiled literature at the HaRRT Center website (https://depts.washington.edu/harrtlab/).

BACKGROUND

Efforts to end homelessness have precipitated a reduction in its prevalence nationwide. Based on 2017 estimates, 553,742 people in the US are homeless on any given night, which represents an 14% reduction from 2007.1 This overall decline was primarily driven by a decrease in people who are homeless in unsheltered locations. In contrast to these national figures, homelessness in King County, Washington has increased over the past few years. In fact, the point-in-time count conducted by the Seattle/King County Coalition on Homelessness indicated that the number of unsheltered homeless individuals in Seattle alone increased by 15% from 2017 to 2018. Those experiencing unsheltered homelessness are disproportionately affected by medical, psychiatric and substance-use issues, with an estimated average age of death between 47 and 52 years of age.²

In 2015, public awareness of this issue was raised as former Seattle Mayor Ed Murray and King County Executive Dow Constantine joined Portland, Oregon, California and Hawaii in declaring a state of emergency regarding homelessness. Together with Seattle City Councilmembers, the Mayor directed staff efforts to address the growing crisis of unsheltered homelessness in Seattle and, on June 9, 2016, signed into effect an Executive Order³ creating Seattle's Navigation Center (hereafter referred to as "the Center"), which is supported in part by private donations and City of Seattle general funds.

Navigation Center Overview

The Center opened its doors to its first guests on July 12, 2017. As it currently operates, the Center is a lowbarrier, 24-hour, referral-only shelter for adults experiencing homelessness. The low-barrier aspect of the Center means that shelter and services are offered without preconditions such as sobriety, mental health treatment, or service participation requirements, and safer-use strategies are employed onsite (e.g., access to clean injection equipment and naloxone). In contrast to existing shelters, guests are afforded more autonomy: There are no curfews or lock-out times, and guests can bring pets, partners, and possessions with them. The goal of the Center, as outlined in the Executive Order, is to assist unsheltered people into housing as rapidly as possible and to facilitate provision of tailored services for this population.

Center priority population and outreach. Outreach to potential guests is conducted by the City-designated outreach entity, the Navigation Team, which comprises staff from REACH and the Seattle Police Department. Unsheltered, single adults experiencing homelessness are referred based on the priority population criteria established by the City of Seattle's Human Services Department (HSD). This includes people with chronic medical, psychiatric, and substance-use disorders. Given the vast overrepresentation of People of Color in the homeless population, and the City's commitment to addressing racial disparities, the priority populations for the Center include American Indian/Alaska Native, Black/African American, and Multiracial individuals.

Center service provision. The Downtown Emergency Service Center (DESC) was awarded the contract to operate the Center and provides onsite case-management services. The Center is a part of the DESC Housing Program and is under the direction of the Director of Housing Programs and the Executive Director. During this evaluation period, DESC employed 17 full-time equivalent (FTE) onsite case managers and service coordinators, including a Project Manager (1.0 FTE) who oversees Center operations and staff. Additional clinical coverage

includes an onsite licensed mental health case manager (.5 FTE), substance-use case manager (.5 FTE), and oncall staff (approximately 2.05 FTE). DESC also employs janitorial staff (3.0 FTE), and maintenance staff (1.0 FTE) who are coordinated and supervised by the DESC facilities supervisor (1.0 FTE). In planning stages are an additional case manager (1 FTE) and service coordinator (1 FTE) as well as an increase of the mental health case manager's position to full-time to accommodate planned program expansion. These latter changes were not yet made during the time frame of the present evaluation.

Onsite staff are charged with helping guests fulfill basic needs for shelter, hygiene, nutrition, secure and accessible storage, as well as supportive services and case management. Additional services include onsite mental health and substance-use counseling. The ultimate goal of the Center is to connect guests to permanent housing or other appropriate, long-term placement (e.g., residential treatment setting). Thus, Center staff work to encourage, facilitate, and support guests' progress and activities toward permanent housing.

Onsite harm-reduction strategies comprise a key component of the Center services and aim to support both individual- and community-level health. All staff are trained on overdose rescue using naloxone, and naloxone is accessible by staff in 2, onsite locations. Staff provide sharps containers to individuals and maintain Centerwide sharps containers throughout the building. Staff return sharps to needle and syringe exchange facilities where they are exchanged for clean equipment. At the Center, staff provide up to 1 clean injection kit (i.e., cottons, cookers, water, syringe, tourniquet) per day, 1 glass bubble per month, and 1 glass stem per week. Literature and posters on safer use are posted onsite. Staff also take guests to the needle and syringe exchange to facilitate their own access to naloxone and clean injection equipment.

METHODS

Aim

The aim of Part 2 of the Center Evaluation was to document before-and-after changes in guests' substance use, mental health, physical health, and quality of life as well as guests' satisfaction with their stay and perspectives on housing at the 120-day time point.

Setting

The primary setting for the data collection was the Center, which is located at 606 12th Avenue S, Seattle, WA.

Evaluation Advisory Board (EAB)

Prior to launching the evaluation, the UW team assembled the EAB, which comprises members representing the perspectives of guests, onsite and outreach staff, management, City officials, and other community partners. The EAB assists in planning and overseeing the evaluation process, providing multiperspective context for the data collection, and interpreting and disseminating findings. The EAB met monthly during the evaluation period for a total of 13, 1.5 hour meetings between August 2017 and August 2018.

Participants

Participants were individuals with lived experience of homelessness who were living at the Center (n=37). The primary inclusion criterion was being a new referral to the Center (i.e., having moved in within 2 weeks of the baseline evaluation). Exclusion criteria included refusal or inability to consent to participation in the evaluation or constituting a risk to the safety or security of other guests or staff.

Measures

Sociodemographics. The Personal Information Questionnaire comprises single items that were created for use with a similar population. This measure assessed age, gender, birth sex, race, ethnicity, education level, housing history, employment status, military status, and current use of medical, psychiatric and substance-use treatment services.

Substance use and substance-related harm. The Alcohol and Other Drug Timeline Followback (TLFB) is a set of calendars that allows for psychometrically valid retrospective evaluation of daily alcohol and other drug use.⁴ The TLFB was used to aggregate self-reported alcohol and other drug use to create the 7-day abstinence outcome and descriptive outcomes for frequencies of specific substance use.

The Short Inventory of Problems (SIP-AD) is a validated 15-item, Likert-scale questionnaire that measures social, occupational and psychological substance-related problems over the past 30 days.⁵ It was used as a reflection of substance-related harm.

Safer-use strategies. The Safer-Use Strategies Questionnaire was designed together with the EAB to assess self-reported overdose, access to and use of naloxone, and access to and use of clean injection equipment.

Physical and mental health. The RAND 36-Item Short Form Health Survey Version 2 (SF-36)⁶ measures physical (i.e., physical functioning, role-physical, bodily pain, general health) and mental (i.e., vitality, social functioning, role-emotional, mental health) health domains. This measure is reliable and valid in diverse populations and applications.⁷

Quality of life. The Meaningful Activity Participation Assessment (MAPA)⁸ is a 28-item, psychometrically validated tool designed to measure level of engagement in general life activities that bring meaning to people's lives. Respondents are presented with a list of various activities they may encounter in their day-to-day lives (e.g., socializing, writing, physical exercise, reading, prayer/meditation, community organization, computer use). Each activity is then rated on 2, 4-point Likert scales assessing the frequency with which they engage in that activity and the level of meaningfulness ascribed to each. The 2 scores for each item are combined multiplicatively, and a summary score, which reflects the overall level of engagement in meaningful activities, is formed.

An additional single item was used to assess participants' own definition of quality of life and rate their current status on a Likert scale, where 1 = lowest quality of life possible and 10 = highest quality of life possible.

Guest satisfaction. We also assessed issues related to satisfaction with and perceived effectiveness of the Center at the 120-day assessment with a 23-item questionnaire developed collectively by the EAB. Primary components assessed included a) the Center's accommodations, amenities and staff, b) the Center's in-house mental health and substance-use services, c) the Center's connection of guests to outside mental health and substance-use services, d) the Center's connection of guests to housing, and e) level of concern regarding substance use, safer use, violence and theft in the Center.

Housing perspectives. This measure was created for the purpose of this evaluation using EAB input and comprises 18 dichotomous, fill-in-the-blank and open-ended items to assess participants' current and anticipated future housing status, their perspectives on housing, potential barriers to housing, and facilitating factors.

Procedures

All data collection for this phase of the report was conducted between November 2017 and July 2018. Potential participants were identified by Center staff according to the above inclusion/exclusion criteria and were told about the opportunity to participate in the UW HaRRT Center evaluation. Those individuals who were interested made an appointment with UW HaRRT Center staff where they were informed of the purpose and procedures of the assessment interviews as well as their rights and role as participants in the program evaluation. Participants were informed that their participation in the interviews would not affect their service provision at the Center, their information would be kept confidential, and their comments would be aggregated and shared without personally identifiable information. UW staff further explained that the evaluation was to take place over a 4-month period and participants would meet and be interviewed up to 4 times—at baseline and 30, 60 and 120 days—to assess before and after changes in substance use, physical and mental health, and quality-of-life outcomes. Additionally, satisfaction with the Center and perspectives on housing would be assessed at the 120-day assessment.

Interested participants provided written, informed consent and completed the baseline assessment with evaluation staff, which included all measures listed above, except the satisfaction and housing perspectives measures, which were only administered at the 120-day assessment.

At the end of each assessment appointment, UW HaRRT Center staff scheduled participants for their next assessment. Each assessment lasted between 40 to 60 minutes. Participants received a \$20 honorarium for each assessment session they participated in (for up to a total of \$80), and were assured prior to the interview that they would receive this incentive regardless of what they had to say.

Data Analysis Plan

Using SPSS 19 and Stata 13, descriptive analyses were conducted to a) characterize the sample and b) describe participants' satisfaction with the Center and its ability to connect guests with other clinical, treatment and social services.

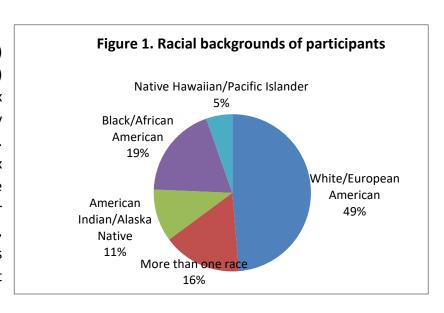
Generalized linear modeling was used to test whether guests reported statistically significant changes in their substance use, substance-related harm, incorporation of safer-use strategies, mental health, physical health, and quality of life. Time was the primary predictor in these models and was coded as follows: 0=baseline, 1=30-day follow-up, 2=60-day follow-up, 4=120-day follow-up. An additional predictor, days at the Center, was used as a measure of exposure to the intervention and thereby a representation of dose-response. This variable was not a consistent predictor of the outcomes and led to model instability (likely due to the lack of variability and low sample size). It was thus not included in the primary analyses reported on below.

When outcomes were normally distributed (i.e., quality-of-life, physical, emotional well-being, social functioning, energy vs fatigue, experience of pain, general health, meaningful activities, QoL), dichotomous (i.e., substance use, overdose, safer-use strategies), ordinal or nonnormally distributed (i.e., role limitations), or skewed and overdispersed counts and integers (i.e., substance-related harm, physical functioning), we used Gaussian, logistic, ordered logistic, and negative binomial regression models, respectively. 9 We addressed data nonindependence using the modified sandwich estimate of variance, which is robust to clustering resulting from repeated measures.⁹ To enhance interpretability of the effect sizes, exponentiated coefficients are presented for logistic, ordered logistic, and negative binomial models, where IRR/OR < 1 indicates an inverse association, IRR/OR = 1 indicates no association, and IRR/OR > 1 indicates a positive association. Alpha was set to p = .05. Confidence intervals were set to 95%.

RESULTS

Overall Sample Description

Participants in this evaluation (N = 37) had an average age of 45.92 (SD = 11.26) years, and 54.1% reported female sex assigned at birth (n = 20). The racial diversity of the overall sample is shown in Figure 1. Additionally, 5.4% reported Hispanic/Latinx heritage. Assessment session attendance reached 100%, 89%, 86% and 78% for assessments at 0, 30, 60, and 120 days, respectively. On average, participants attended 3.54 (SD=0.79)assessment sessions.



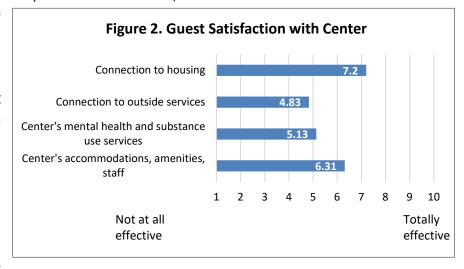
Guest Satisfaction with the Center and Use of Specific Services

Center's accommodations, amenities and staff. Toward the end of their stay at the 120-day assessment, participants rated their perceived effectiveness/satisfaction with the Navigation Center's accommodations, amenities and staff at a mean of 6.31 (SD = 2.57) on a scale of 1 to 10, where 1 is "not at all effective" and "10

is totally effective." Please see Figure 2 for the mean ratings for the guest satisfaction and effectiveness scales.

Center's in-house services addressing guests' mental health and substance-use needs. The Center's in-house mental health and substance-use treatment services were rated around the midpoint of the scale, averaging 5.13 (SD = 3.20; see Figure 2).

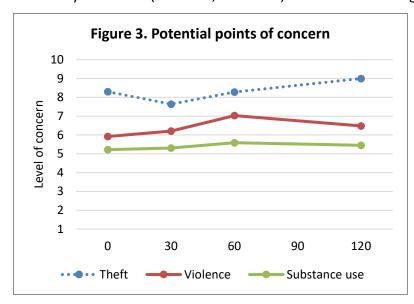
It should, however, be noted that these ratings were made based on relatively low



self-reported utilization of these services. For example, although 41% and 51% of participants reported receiving substance-use and mental health services, respectively, only 16% and 11% of the sample reported receiving these services at the Center.^b

^b It should be noted that the data collection for this evaluation occurred as these services were being ramped up in the Center and thus may not be reflective of current service utilization.

Connection to other services. The Center's effectiveness in connecting guests to outside mental health, medical and substance-use treatment services was rated around the midpoint between "not at all effective" and "totally effective" (M = 4.83, SD = 2.84). This is shown in Figure 2.



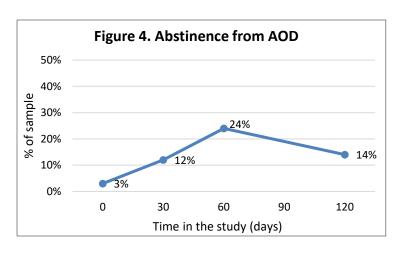
Satisfaction with connecting guests to housing was rated highest of these different services categories at 7.20 (SD = 2.38). This finding was key as it is the primary goal of the Center and as guests' perception of the importance of housing was rated consistently high—with an average of 9.45 (SD = 1.78) across the length of their stay.

Other issues facing guests. Guests also responded to prompts assessing their level of concern about themes raised in Part 1 of the evaluation: theft, violence, and substance use

in the Center. Findings indicated no significant changes in guests' concerns over the course of the evaluation (ps > .15), and these trajectories are shown in Figure 3.

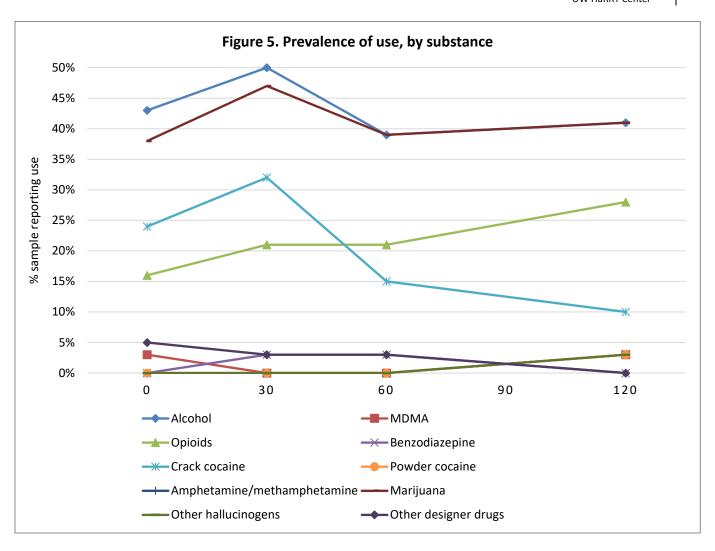
Substance-use Outcomes

Abstinence from alcohol and other drugs. Findings indicated changes in abstinence from substances significantly increased over time, Wald $\chi^2(1, N=133) = 8.50$, p = .004. Specifically, each passing month brought a 23% decrease in participants' likelihood of any substance use in the past 7 days (see Figure 4).



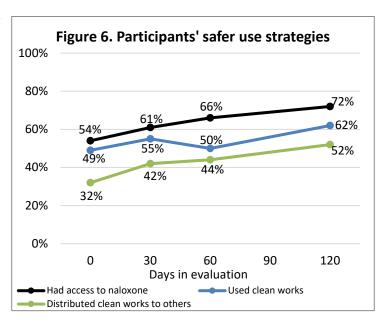
In breaking down prevalence of use by type of substance, participants reported no statistically significant change in alcohol, opioid, powder cocaine, cannabis, other hallucinogen, and other designer drug use (ps > .17). However, there were statistically significant decreases in participants' self-report of benzodiazepine, Wald $\chi^2(1, N=133) = 8.03$, p = .005, and crack cocaine, Wald $\chi^2(1, N=133) = 4.71$, p = .03. Figure 5 shows the prevalence of use across substances and time in the evaluation.

Substance-related harm. There were no significant changes on participants' self-report of substance-related harm in general, Wald $\chi^2(1, N=130) = 2.93$, p = .09, or on opioid overdose more specifically, Wald $\chi^2(1, N=131) = 2.91$, p = .09.



Safer Substance Use

Participants reported consistently high levels of staff support for safer substance use (M = 8.12, SD)= 2.8). This level of perceived support for safer substance use did not show statistically significant changes over the course of the evaluation, Wald $\chi^2(1, N=125) = 0.47, p = .49$. Participants also reported greater exposure to and implementation of safer-use strategies over the course of the evaluation. For each month that passed, participants were 22% more likely to report having access to naloxone, Wald $\chi^2(1, N=131) = 4.14$, p =.04. They did not, however, report being statistically significantly more likely over time to carry or use naloxone (ps > .09). For each month that passed in



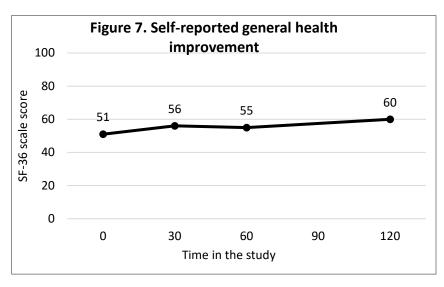
the evaluation, participants were 13% more likely to use clean injection equipment, Wald $\chi^2(1, N=131) = 3.91$, p

= .048, and 20% more likely to say they distributed clean injection equipment to someone they know, Wald $\chi^2(1, N=131)=3.99$, p=.046.

Physical Health Outcomes

There were no significant changes over time on people's assessment of their own day-to-day physical functioning, ability to fulfill their roles due to physical problems, changes in feeling fatigued versus energetic, or experience of pain (ps > .61).

On the other hand, participants did report better general physical health, F(1, 36) = 4.29, p = .046, such that each month that passed during the evaluation was associated with a 1.88 higher score on this scale, which ranged from 0-100 (see Figure 7 to the right).



Mental Health Outcomes

There were no significant changes over time on participants' assessment of their own emotional well-being, ability to fulfill their roles due to emotional problems, or feeling socially connected (ps > .19).

General Quality-of-life Outcomes

There were no significant changes over time on participants' self-reported involvement in meaningful life activities and self-defined QoL (ps > .51).

Perspectives on Housing After Center Stay

At the 120-day assessment (n = 29), 22 participants were still staying at the Center, among whom 3 had concrete plans for subsequent housing. A few participants (n = 7) had left the Center: 1 to medical respite, 4 to permanent supportive housing, and 2 to unsheltered homelessness ("tent," "tent city"). Among the 4 who were housed, there were mixed reviews. While 2 participants reported being "happy and relieved" and that housing "would make a big difference in [their] life," the 2 others felt "uncomfortable" and "were still processing things," trying to get their bearings in housing. Despite some doubts, the 4 participants with housing at 120 days felt that their future housing outlook would be "better than it is right now," reflecting hope about the future.

Surveying the full sample to understand potential barriers to attaining and maintaining housing, participants' concerns were myriad. They included, for example, a need to coordinate with others to attain housing (e.g., "My CM was too busy before"); struggling with "myself. [It's] hard to stay focused [when having] emotional issues..."; trying to manage and accommodate pets, people and possessions in a new living situation; and having a criminal record. Reflecting on support that people felt they would need in housing, participants commonly suggested financial support, vocational rehabilitation, mental health counseling, substance use treatment, and case

management. A key point made by members of the EAB was that time-limited supportive models, such as rapid rehousing, are not sustainable over the longer-term. Instead, continuous case management and financial support is needed in the form of either a) ongoing case management and rent assistance in independent housing or b) permanent, supportive housing.

DISCUSSION

The present evaluation served to document guests' self-reported physical and mental health status, substance use and related harm, and quality of life during their stay at the Center. At the final, 120-day assessment, overall satisfaction with the Center and perspectives on housing were documented as well.

Connection with Housing

Findings from this evaluation echoed those of the Part 1 analysis, such that connection to housing was a priority. Participants consistently rated the importance of housing highly, and also rated connection to housing as the most effective of the Center's amenities and services. That said, at the 120-day assessment, only 4 of the 29 participants we were able to interview had moved into housing, and none of those move-ins had occurred by the originally intended 60-day lenth-of-stay limit at the Center. Fortunately, the current extension policy has enabled guests to stay at the Center until they are housed: 22 people were continuing their stay at the Center when they completed their 120-day assessment for this evaluation. The City's report, which will be released shortly, will provide more comprehensive and longer-term data on the Center's success in connecting guests to housing versus returning to homelessness. However, to date, no individuals have been returned to homelessness due to length of stay (Personal communication, C. Schrag, August 21, 2018).

Connection with Other Services

Satisfaction ratings and utilization of other Center services, including mental health, substance-use and medical services, landed on the midpoint of the one-to-ten satisfaction and effectiveness scale. It should be noted, however, that these onsite services were slowly ramping up over the course of the evaluation period. Thus, ratings of this first wave of residents may not be indicative of current practices that are now more firmly in place. Nonetheless, the results from part 1 of this evaluation have been and may continue to be used to guide future efforts to improve services. Ongoing evaluation is recommended to monitor changes in outcomes as the Center's amenities, staffing and services are modified over time.

Safer Substance Use

For people who are not yet ready, willing or able to stop using substances, employing safer-use strategies, such as carrying naloxone and using clean injection equipment (i.e., cookers, syringes, cottons), are key to reducing risk of overdose, bloodborne illness transmission and other medical sequelae both for the affected individual and the larger community. 10-14 In the current evaluation, we noted strong evidence that safer substance use was increasingly embraced by staff and guests. Key to the effectiveness of these strategies is high coverage of and access to comprehensive harm-reduction interventions, 14 including medication assisted treatment, clean injection equipment, and naloxone.

Fortunately, the Center has incorporated some of these strategies to increase safer use and decrease individual- and community-level harm. Center management reported that they are exchanging between 1,500 and 2,000 syringes a week, which removes these biohazards from circulation and thereby reduces risk of bloodborne illness and inadvertent injury for substance users and the larger community.

In our evaluation, the Center's implementation of safer-use strategies has been noted by guests and incorporated into their use patterns. For example, participants reported strong staff support for safer use at the Center as well as significant self-reported increases in access to naloxone as well as use and distribution of clean equipment. Additionally, participants reported decreased substance use over the course of the evaluation, showing a 23% reduction in prevalence of alcohol and other drug use for each passing month at the Center. This finding corresponds to those of our prior studies that have shown the provision of shelter and housing within a harm-reduction framework is associated with reduced substance use and other positive outcomes. 15,16 These collective findings allay concerns that a harm-reduction approach would constitute "enabling behavior" on the part of providers that could increase substance use and substance-related harm. ^{17,18} In fact, the opposite appears true: Low-barrier shelter and service provision that includes safer-use strategies appears to promote both safer use, which reduces risks to the substance user and the larger community, and less use overall.

Physical Health, Mental Health and Quality-of-Life Outcomes

Participants reported a statistically significant albeit relatively small improvement in their general physical health. This finding suggests that low-barrier shelter has the potential to support perceived general health within a short amount of time.

On the other hand, we observed no significant changes over time on other physical and mental health outcomes. One potential explanation for the lack of statistically significant findings is that the relative brevity of the 120-day evaluation period may not be adequate to engender and register these changes. Further, the achievement of positive and sustained changes in physical and mental health in this population likely also requires consistently meeting many other basic needs, including food security, permanent housing, and adequate medical and mental health services.

Perspectives on Housing

Understandably, participants were highly focused on housing as a key next-step after their stay at the Center. Many participants looked forward to attaining housing, noting that it would "be better than being out on the street." However, most participants were wary, knowing that housing is the first step, but also acknowledging they would need ongoing support to continue on a positive trajectory once housing was attained (e.g., financial support, rent assistance, case management, caregiving, and services addressing medical, psychiatric and substance use problems). Fortunately, participants were able to elucidate potential barriers and maintain hope that, with some support, they could successfully move from the streets into housing and thereby move along their own, self-defined pathway to recovery.

Limitations

Limitations of this evaluation deserve mention. First, this evaluation relied on self-report data, which are known to be subject to reporting bias. However, this concern can be mitigated when timeframes are relatively short, the target behavior is not stigmatized, and negative consequences are not tied to disclosure. 19-22 Our evaluation design meets these criteria.

Second, the evaluation comprised data on participants' experiences during the first 120 days of their stay at the Center. This brevity may, in part, explain the nonsignificant findings for longitudinal changes on some outcomes. Chronic and severe health-related problems associated with homelessness and substance use disorder often require more time to resolve, even after crucial interventions, such as shelter and case management, are applied. However, this window on people's trajectories after moving into the Center also highlighted its potential as a setting in which people could use substances more safely and even attain abstinence from alcohol and other drugs.

Final Recommendations

Based on the findings highlighted in this report and discussions with the EAB, we recommend the following next-steps for the Center:

- Community members' and guests' voices should be centered in future Center evaluation, quality improvement, and decision-making. We have found monthly advisory board meetings comprising Center guests, staff and management to be helpful in ensuring different perspectives are integrated.
- Onsite services could be expanded (e.g., onsite medical services) and enhanced to better meet guests' medical, mental health, and substance-use treatment needs and thereby better position them to attain and maintain housing following their stays at the Center.
- Consistent and highly supportive case management is needed to help people successfully transition into and maintain housing over the longer term after their stay at the Center.
- The 2 reports we have generated this year represent early and short-term findings that have already informed day-to-day Center operations. However, ongoing evaluation of the Center is necessary to account for changing parameters both internal and external to the Center and ensure its services, staffing and amenities are responsive to guests' and the larger community's needs. We would recommend a 2-year study that assesses guests' longitudinal outcomes for a) self-reported perspectives on the Center and its impact on their health and well-being, b) housing attainment and maintenance following Center stays, and c) publicly funded service utilization (emergency healthcare, jail).

Conclusions and Future Directions

Despite its limitations, this report provides important information about guests' self-reported physical and mental health status, substance use and related harm, and quality of life during their stay as well as their overall satisfaction with the Center and perspectives on housing next-steps. These data may provide policy-makers and program management with points to consider in striving to meet the Center's stated goals (e.g., securing permanent housing for guests) as well as in program improvement and future replication. Subsequent quantitative evaluations from the City will respond to outstanding questions about the Center's effectiveness in helping guests attain and maintain permanent housing after their stay at the Center. Additional recommendations include continuing to involve guest voices in Center activities, expanding onsite services, ensuring continuity of case management after transitions to housing, and continuing evaluations of the Center on multiple indices. Perhaps most important, this 2-part UW HaRRT Center evaluation has shown that listening to guests and staff about how to address the needs of this population is key. As one guest noted, "The system needs to keep listening to the people that are experiencing homelessness." The answers are here. It's just a matter of listening.

REFERENCES

- 1. US Department of Housing and Urban Development. The 2017 annual homelessness assessment report to Congress: Part 1 Point-in-Time Estimates of Homelessness. Washington, DC. Retrieved on 1/3/2018 from: https://www.hudexchange.info/resources/documents/2017-AHAR-Part-1.pdf. 2017.
- O'Connell JJ. Premature mortality in homeless populations: A review of the literature. Nashville, TN: 2. National Health Care for the Homeless Council, Inc.; 2005.
- 3. Executive Order 2016-05. Vol 3 C.F.R.2016.
- 4. Sobell LC, Sobell MB. Timeline followback: A technique for assessing self-reported ethanol consumption. In: Allen J, Litten RZ, eds. Measuring Alcohol Consumption: Psychosocial and Biological Methods. Totowa, NJ: Humana Press; 1992:41-72.
- 5. Miller WR, Tonigan J, Longabaugh R. The Drinker Inventory of Consequences (DrInC): An instrument for assessing adverse consequences of alcohol abuse. Test manual (Vol. 4, Project MATCH Monograph Series). Rockville: National Institute on Alcohol Abuse and Alcoholism; 1995.
- 6. Ware JE, Kosinski M, Dewey JE. How to score version two of the SF-36 Health Survey. Lincoln, RI: QualityMetric, Inc.; 2000.
- 7. Coons SJ, Rao S, Keininger DL, Hays RD. A comparative review of generic quality-of-life instruments. PharmacoEconomics. 2000;17:13-35.
- Eakman AM, Carlson ME, Clark FA. The Meaningful Activity Participation Assessment: A measure of 8. engagement in personally valued activities. International Journal of Aging & Human Development. 2010;70(4):299-317.
- 9. Hardin JW, Hilbe JM. Generalized linear models and extensions, 3nd Edition. College Station, TX: Stata Press; 2012.
- 10. MacArthur GJ, van Velzen E, Palmateer N, et al. Interventions to prevent HIV and Hepatitis C in people who inject drugs: a review of reviews to assess evidence of effectiveness. The International journal on drug policy. 2014;25(1):34-52.
- 11. Aspinall EJ, Nambiar D, Goldberg DJ, et al. Are needle and syringe programmes associated with a reduction in HIV transmission among people who inject drugs: a systematic review and meta-analysis. International journal of epidemiology. 2014;43(1):235-248.
- 12. Platt L, Minozzi S, Reed J, et al. Needle syringe programmes and opioid substitution therapy for preventing hepatitis C transmission in people who inject drugs. The Cochrane database of systematic reviews. 2017;9:Cd012021.
- 13. Platt L, Minozzi S, Reed J, et al. Needle and syringe programmes and opioid substitution therapy for preventing HCV transmission among people who inject drugs: findings from a Cochrane Review and meta-analysis. Addiction (Abingdon, England). 2018;113(3):545-563.
- 14. Platt L, Sweeney S, Ward Z, et al. Public Health Research. Assessing the impact and cost-effectiveness of needle and syringe provision and opioid substitution therapy on hepatitis C transmission among people who inject drugs in the UK: an analysis of pooled data sets and economic modelling. Southampton (UK): NIHR Journals Library; 2017.
- 15. Clifasefi SL, Lonczak HS, Collins SE. Seattle's Law Enforcement Assisted Diversion (LEAD) Program: Within-Subjects Changes on Housing, Employment, and Income/Benefits Outcomes and Associations With Recidivism. Crime Deling. 2017;63(4):429-445.
- 16. Collins SE, Malone DK, Clifasefi SL, et al. Project-based Housing First for chronically homeless individuals with alcohol problems: Within-subjects analyses of two-year alcohol-use trajectories. American Journal of Public Health. 2012;102:511-519.

- 17. Denning P, Little J. Practicing harm reduction psychotherapy: An alternative approach to addictions (2nd edition). New York: Guilford Press; 2012.
- 18. Rotunda RJ, West L, O'Farrell TJ. Enabling behavior in a clinical sample of alcohol-dependent clients and their partners. J Subst Abus Treat. 2004;26(4):269-276.
- 19. Clifasefi SL, Collins SE, Tanzer K, Burlingham B, Larimer ME. Agreement between self-report and archival public service utilization data among chronically homeless individuals with severe alcohol problems. Journal of Community Psychology. 2011;39:631-644.
- 20. Maisto SA, Sobell MB, Sobell LC. Reliability of self-reports of low ethanol consumption by problem drinkers over 18 months of follow-up. Drug and alcohol dependence. 1982;9:273-278.
- 21. Babor TF, Stephens RS, Marlatt GA. Verbal report methods in clinical research on alcoholism: Response bias and its minimization. Journal of Studies on Alcohol. 1987;48:410-424.
- 22. Carey KB. Clinically useful assessments: Substance use and comorbid psychiatric disorders. Behaviour Research and Therapy. 2002;40:1345-1361.

ACKNOWLEDGMENTS

Drs. Susan Collins and Seema Clifasefi authored this report with support from UW HaRRT Center staff, including Silvi Goldstein, Alyssa Hatsukami, Gail Hoffmann, Victor King, Joey Stanton and Emily Taylor. We would also like to thank the current and former members of the Navigation Center Evaluation Advisory Committee, including David Baca, Lovella Black Bear, Jessica Chow, Jerred Clouse, Noah Fay, Brenda Frazier, Lindsey Garrity, Alana Glanell, Margaret King, Jacqueline Martin, Jennifer McSherry, Maria Metzler, Sonny Nguyen, Debbi Northfield, Charles Schrag, Tracy Struck, Joey Stanton, and Eric Zerr, for providing guidance, feedback and insight into these data and for their valuable contributions to this report. Finally, we thank all of the participants for agreeing to share their thoughts, feelings, experiences and wisdom with us.

This evaluation was supported by a contract from the City of Seattle awarded to Drs. Seema Clifasefi and Susan Collins.

NOTES

- Appendices available upon request, including consent forms, measures, and analysis output.
- Suggested citation: S.E. Collins & S.L. Clifasefi. (August, 2018). Navigation Center program evaluation report - Part 2: Guest satisfaction and health-related outcomes. Harm Reduction Research and Treatment (HaRRT) Center, Seattle, WA.