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A Health Needs Assessment of an Unhoused Population to Influence Policies and Procedures within an RN-Run Clinic

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Abstract

Unstable housing is a well-documented and significant risk factor for poor health outcomes. Unhoused persons have higher rates of morbidity and mortality when compared to the general population (Onapa et. al, 2021). This DNP project aims to improve understanding of, and quality of care delivered to this vulnerable population through a health needs assessment of unhoused men and using the results to influence policies and procedures of a new RN-run health clinic within a homeless shelter. The needs assessment followed a cross-sectional survey design, residents were interviewed about their unique health needs. The responses were individually reviewed and coded to identify motifs and patterns. Most respondents reported at least one chronic health care concern, the most prevalent being mental health diagnoses. Additionally, most participants reported at least one significant barrier to receiving healthcare. The most common barrier to accessing care was a lack of transportation, followed by health insurance issues and cost. The results of this project highlight several opportunities to improve the health of this community. By establishing trusting relationships with this marginalized population, providers can assist in connecting them with resources to improve access to care and engaging in education about overall health promotion and disease prevention.

A Health Needs Assessment of an Unhoused Population to Influence Policies and Procedures within an RN-Run Clinic.

Unstable housing is a well-documented and significant risk factor for poor health outcomes. People who struggle with homelessness, defined as those who do not have a fixed, regular, and adequate nighttime residence, have higher rates of morbidity and mortality when compared with the general population (Onapa et. al, 2021). People experiencing homelessness also suffer from higher rates of chronic medical conditions and often lack adequate access to the healthcare resources needed to prevent and manage these issues (Kok et. al, 2020). Addressing the unique healthcare needs of this complex and vulnerable population is crucial and will result in decreased total medical expenditures and improved overall quality of care.

Homelessness is a major global issue, currently affecting an estimated 1.6 billion people worldwide, a number that continues to grow (Mitchell et. al, 2023). As of January 2023, an estimated 196,117 people in Washington state and 44,570 people in King County are experiencing homelessness or housing instability at any given moment (Washington State Department of Commerce, 2023). The number of people experiencing unstable housing has dramatically increased in the 2020's. The number of unsheltered Washingtonians grew by 10% from 2020 to 2022, an increase of over 2,000 people. This number is likely underrepresented due to the difficulty of getting an accurate count (The U.S. Department of Housing and Urban Development, 2022). The growing population of the unhoused will continue to put greater strain on the nation's financial resources, especially the healthcare system. The physical and mental health of people who are homeless is generally worse than that of the general population and this group tends to utilize health services at a higher rate. This is largely a result of their complex health care needs and under or untreated comorbid conditions (Subedi & Ghimire 2022).

The healthcare needs of the homeless are a significant burden on the United States medical system with significant monetary and time resources spent on medical conditions which are often preventable or mitigable. Compared to the general population, people experiencing homelessness have a greater number of comorbid conditions and an increased frequency of healthcare utilization, resulting in significantly higher spending on this group (Koh et. al, 2020). Despite increased spending and greater utilization of healthcare resources, people experiencing homelessness consistently rate their interactions with healthcare systems lower than the general population and have poorer health outcomes (Omerov et. al, 2020). Stable housing and basic medical services are associated with improved physical and emotional wellbeing for the unhoused (Onapa et. al, 2021). The social and healthcare needs of this group are distinctly complex, and not well understood by many mainstream medical systems. A thorough assessment of the healthcare needs of this population is required to develop solutions to best meet their goals. The creation and maintenance of interventions tailored to people experiencing homelessness will reduce overall healthcare spending and improve overall quality of care for this marginalized population.

The field of nursing is uniquely poised to serve this vulnerable population. Utilizing registered nurses to meet the health needs of the unhoused lowers healthcare spending due to lower costs associated with staffing and a focus on preventative care (Doran et. al, 2021). Nurses can also contribute to improving the overall quality of healthcare delivery to this group as they are trained with a philosophy of holistic, patient-centered care and serve as patient advocates. Prior literature has shown nurse-run clinics increase access to care, patient satisfaction, better health outcomes, reduce acute healthcare utilization, and provide an increase sense of hope and social support among people experiencing homelessness (Weber, 2019). To best prepare these nurses and clinics for success, it is imperative to gain a better understanding of the unhoused population to tailor care to serve their needs and goals.

One shelter for unhoused men in the Pacific Northwest is dedicated to serving the unhoused population while facilitating their path to sustainable housing and overall health. This organization supports unhoused men in the community by connecting them with resources for stable housing while fostering their overall wellbeing. In 2023, they opened a new shelter for men experiencing homelessness and are currently working to initiate an RN-led clinic to serve the health needs of the residents. The focus of this doctoral project is to support the organizational goal in the establishment of an on-site clinic to serve the needs of the unhoused residents. The aim is two-fold: to conduct a health needs assessment via interviews of the shelter residents and to use the results of the health needs assessment to influence policies of the new RN-run site health clinic.

Background

People experiencing homelessness suffer significant health inequities and face numerous barriers to healthcare. Unhoused individuals are three times more likely to report chronic diseases than the general population. Acute conditions like viral illnesses and skin infections also affect the unhoused population at a significantly higher rate, most likely due to less sanitary living conditions and the close contact with other unhoused persons that occurs in homeless shelters and emergency housing (Onapa et. al, 2021). To receive care for their health needs, people experiencing homelessness utilize emergency services significantly more than the general public for preventable health conditions as well as for injuries and accidents that occur as a direct result of dangerous living conditions (Vohra et. al, 2022).

Psychiatric morbidity also tends to be more prevalent and more severe in the unhoused population. It is estimated that 25% of people experiencing homelessness have a diagnosis of at least one serious mental health condition (Vohra et. al, 2022). Substance use disorder among the unhoused occurs at a rate that is more than three times higher than that of the general population; rates of anxiety were found to be 2.7 times higher, and rates of mood disorders were 4.6 times

higher (Onapa et. al, 2021). Unstable housing situations are likely to worsen an individual's physical and mental health because of the poor living conditions, use of tobacco, alcohol, and drugs, and inadequate access to health services associated with a lack of housing, resulting in a vicious cycle of poor health worsened by inadequate resources (Omerov et. al, 2019).

Unstable housing is associated with premature mortality. Death at younger ages is common in this group and the all-cause mortality rate is 3.5 times higher than that of the general population (Brown et. al, 2022). The average life span for a person experiencing homelessness in the USA is 42-52 years old, a number that is, on average, 30 years less than the average American life span of 77 years. The average person experiencing homelessness in King County, WA can expect only to live 54 years on average (National Health Care for the Homeless, 2020).

The healthcare needs of people experiencing homelessness are a substantial drain on healthcare funding and resources. Many of these costly episodes of healthcare utilization, like emergency room visits, are preventable with appropriate primary and preventative care (Vohra et. al, 2022). However, many unhoused persons are not followed by primary care. This phenomenon can be attributed to a myriad of factors including lack of access to primary care services, lack of health insurance and/or financial resources, lack of healthcare literacy, and mistrust of the healthcare system (Omerov et. al, 2019). Even beyond the emergency room, people struggling with homelessness utilize healthcare at a greater rate and incur more medical costs than the stably housed. As a group, unhoused persons tend to have more chronic and acute medical conditions and require more taxpayer dollars to fund their medical services including outpatient care, emergency department care, inpatient care, and prescription drugs (Wiens et. al, 2021).

Along with worse morbidity, mortality, and substantial healthcare costs, unhoused persons experience marginalization in the healthcare space, delay seeking care, and report poorer health outcomes (Henderson et. al, 2022). Barriers like a lack of identification, financial resources,

medical insurance, and transportation are commonly cited reasons for people experiencing homelessness to avoid medical care (Lewer et. al, 2019). More insidious and systemic issues like mistrust in the medical system, stigmatization, and fear of paternalism or humiliation from healthcare providers further serve to discourage unhoused individuals from seeking healthcare (Henderson et. al, 2022).

Systematic change is needed to better serve the medical needs of the unhoused population, but healthcare workers can directly impact and improve the quality of care delivered to this population. Perceived positive interactions with healthcare professionals make people experiencing homelessness more likely to seek out healthcare services (Henderson et. al, 2022). Caring for the unhoused population with their complex medical and social needs requires unique healthcare delivery systems tailored to their unique biopsychosocial needs. It is crucial for healthcare workers to listen to and learn from these people to best serve their needs. Registered nurses are valuable members of healthcare teams who can assist with this task. Many studies have shown that registered nurses employed in healthcare organizations specific to unhoused individuals contribute to improved healthcare outcomes and lower total costs (Onapa et. al, 2021). Nurse-led clinics that serve people experiencing homelessness provide essential services including education, direct medical care, and case management that are specifically designed for the unhoused population at a lower cost than primary care clinics or acute medical services (Doran et. al, 2021). A systematic review of nurse-led interventions with populations experiencing homelessness by Weber et al (2019) found that nurse-led interventions improved overall health among the unhoused with effects like increased medication adherence, decreased binge-drinking and the use of tobacco or other drugs, improved participation in preventative health measures, and fewer emergency room visits. Unhoused persons who participated in these nurse-led interventions also experienced greater satisfaction with their care, self-reporting higher levels of self-esteem,

satisfaction, and hope (Weber et. al, 2019). The development and expansion of nurse-led clinics for the unhoused in the community can improve health outcomes among this population.

To reduce healthcare spending and improve overall quality of care, it is essential to gain a better understanding of the unique healthcare needs of the unhoused. This is best accomplished by direct communication with unhoused communities. Although there are many studies and reviews that attempt to assess and measure the needs of unhoused individuals, most of these are the result of retrospective studies and quantitative surveys. Very few studies exist that consider the medical needs of people experiencing homelessness by directly speaking with them and assessing their concerns, fears, hopes, and goals for healthcare in their own words. The need for studies that consider the lived healthcare experience of unhoused people is of particular importance in King County where this population continues to grow yet there is little information regarding their healthcare needs (The U.S. Department of Housing and Urban Development Office of Community Planning and Development, 2022). Once a solid understanding of the unique care needs of this vulnerable population is established, community leaders and organizations dedicated to reducing homelessness can begin to develop policies to best serve these health needs.

The shelter of focus for this doctoral project is one such organization committed to ending homelessness in the local community. Their mission is to "partner with men and the community to create a path from homelessness to stable living," through provision of temporary shelter and basic needs as well as resources to help them find stable housing, including case management, addiction support, employment navigation, and basic mental health resources. In June of 2023, the shelter opened a new, low-barrier shelter for men experiencing homeless, it does not screen for or turn men away based on sobriety, financial resources, or criminal histories. The shelter is currently piloting a new nurse-led clinic and has developed an on-site clinic at the shelter that will be dedicated as a clinic to serve men's basic health needs. A part-time registered nurse has been hired

to run the clinic and perform health services. Attending to the resident's basic health needs is a necessity to ensure whole-person care and to support the men's path to stable housing.

This doctoral nursing project aimed to assist in identifying the care needs of a newly found men's shelter to enhance services provided by an on-site RN clinic. This project explores the following: Persons experiencing homelessness who are utilizing the shelter, what healthcare services are needed, and what should be prioritized to address the men's health needs within the registered nurse clinician's scope of practice and to assist in establishing RN policies and procedures.

Theoretical Framework

The theoretical framework used for this project is the Donabedian model, a conceptual model widely used to evaluate health services and the quality of care provided (Donabedian, 1966). This model examines three components and how they contribute to the overall quality of care: structure, process, and outcomes. Structure refers to the factors that affect the setting of care and could include aspects like the physical facility, staff, organizational policies, and funding. The process is comprised of the actions that make up the care. This could include diagnosis, treatment, and patient education. Downstream of the structure and process are outcomes which are the end effects of care on individual patients and whole populations (Berwick & Fox, 2016).

The Donabedian framework is a widely used and effective tool for analyzing the structure of healthcare services and can help identify potential areas for process improvement. Table 1 details the different components of this framework as they relate to unhoused men who utilize the shelter in the scope of the current project.

Table 1

Structure, Process, and Outcomes for the RN-Run Clinic

Structure	Process	Outcomes
• On-site clinic • Clinic employees (RN, social worker, administrative staff) • Financial resources and equipment • The unhoused residents	• Health Education • Basic First Aid • Foot Care • Assistance with medication management • Connection with healthcare resources • Referrals to specialty care	• Client satisfaction • Increased access to healthcare • Improved medication management • Increased health literacy • Decreased emergency room visits • Increased client trust in medical providers

Methods

This DNP quality improvement project aimed to assess the health status and needs of men experiencing homelessness staying at the shelter using cross-sectional design to inform ongoing discussion about how to best meet the men's health needs as well as instituting new protocols and refining current policies for the RN-run clinic.

Flyers advertising the study and interview times were posted in the shelter commons by the researchers and asked if they wished to participate in the study. Before conducting any survey, the men were informed about the purpose of the project and provided with a handout detailing the project goals and contact information of the researchers. Agreeing to participate and filling out the survey fulfilled the informed consent process. The men were interviewed in a private room separate from the common area to ensure the confidentiality of their responses. Participants were unable to fill out the form the researchers helped fill out the survey question.

The survey questions included current health conditions, medications, health maintenance services needed, barriers to care, and what services they would like offered by the new clinic

(Figure 1). The men were encouraged to answer all questions but were assured that they did not have to answer any questions that made them feel uncomfortable. No identifying information was collected from or attached to the participants to protect the privacy of this vulnerable group.

Organizational approval to conduct this project was granted by shelter staff and the board of directors. The graduate nursing students worked closely with organization staff including the senior manager, site social worker, and clinic registered nurse. Institutional Review Board approval was obtained from the Seattle University IRB.

The data was collected between March 1 through April 31, 2024. Participant responses were recorded by hand during the interview. The results from each survey were individually reviewed by the graduate nursing students. The results were analyzed from the survey question and reported in the order of salience to the client's needs.

Results

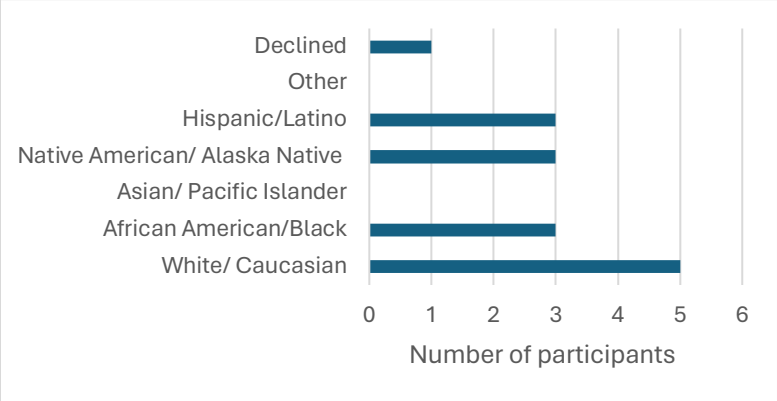
Fifteen survey responses were collected. Participants ranged from 34-72 with a mean age of 54. The ethnic groups represented as follows, 30% (N=5) identified as White, with one-third of participants identifying themselves as non-Hispanic Caucasians. 20% (N=3) of participants were Black, 20% (N=3) identified as Hispanic or Latino, 20% (N=3) identified as Native American/ Alaskan native, and one participant declined to answer.

A diverse variety of education levels was also represented with 27% (N=4) of participants reporting less than a high school level of education, 27% (N=4) reporting a high school diploma or GED, 13% (N=2) achieved a college degree or higher, and 20% (N=3) received alternative education like trade school. 13% (N=2) of the participants declined to report their education level. 67% (N=10) of the participants considered shelter to be their primary place of residence while 27% (N=4) did not; 7% (N=1) of the participants declined to answer. Most participants were not formally employed: only one participant out of the 15 reported having a taxable income. Most residents

(87% of participants) had annual incomes of less than $20,000. One participant reported an annual income of $30,000-$49,999 and one participant declined to respond.

Figure 1

Racial Distribution of Participants (n=15)

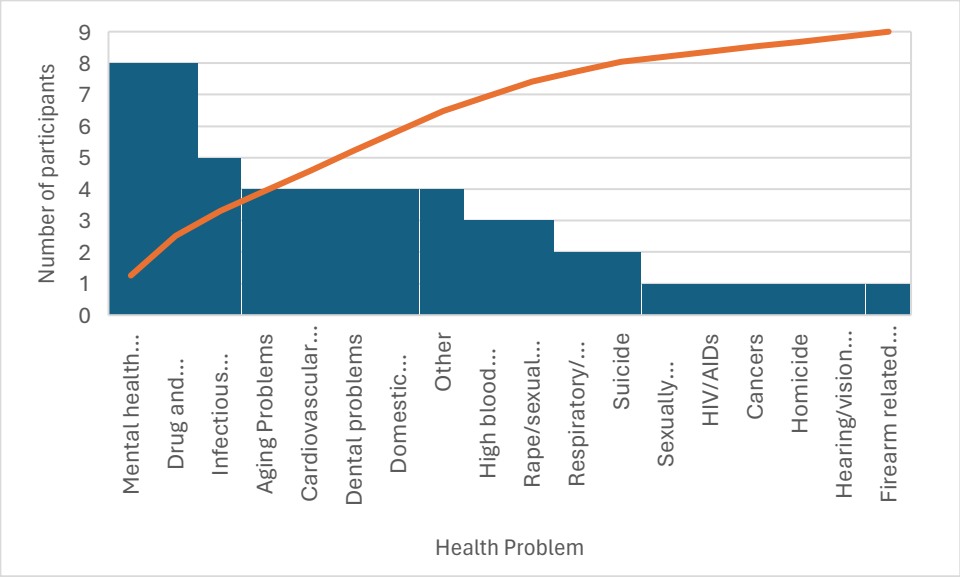


Most participants, 27% (N=4) received healthcare through Medicaid, 20% of participants (N=3) had no insurance, 13% (N=2) used both Medicaid and Medicare, and 13% (N=2) had private insurance. One participant used Indian Health Services, one participant was on their parent's health insurance, one received health insurance from Medicare, and one participant declined to answer. 67% (N=10) were vaccinated against COVID and 33% (N=5) were unvaccinated.

When asked about their perceived four most pressing health problems in the shelter community, the participants responded that drug and alcohol related problems and mental health problems were the most impactful. Numerous participants also listed aging problems, cardiovascular disease, infectious disease, dental problems, and domestic violence as important health problems (see Figure 2).

Figure 2

Participant Responses to: "What do you think are the four most important health problems in your community?" (n=15)



Participants were also asked to rank their own personal health and the health of the shelter as a community, given the choices of very unhealthy, unhealthy, somewhat healthy, healthy, and very healthy. For personal health, most participants (N=6) reported being healthy. Five participants reported feeling somewhat healthy, two reported feeling unhealthy, one reported feeling very healthy, and one reported feeling very unhealthy. For the health of the shelter as a community, most participants, (N=5) ranked the community as somewhat healthy, four believed it to be healthy, two believed it was very healthy, and two believed it was unhealthy. Two participants declined to comment on the health of the shelter community.

The most reported health problem among the respondents was mental health issues; with 60% of the participants (N=9) reporting some type of mental health diagnosis. Depression and anxiety were the most prevalent mental health conditions, reported by 40% of the participants (N=6). 26 % of the participants reported domestic violence and 20% of the men experienced rape sexual assault. Other conditions reported include PTSD (N=1), gender dysphoria (N=1), and schizophrenia (N=1). Chronic pain was prevalent in this population, reported by one-third of participants (N=5). A third of participants also reported continuing to struggle with the sequelae of past injuries or accidents. Four participants (27%) reported type two diabetes and four reported

cardiovascular health issues (including hypertension, heart murmur, prior MI, and prior stroke). Three participants (20%) reported respiratory problems (including asthma and COPD), three reported arthritis, and three reported vision problems, most of the participants reported a lack of dental care. Two respondents (13%) reported neurologic conditions (epilepsy and migraines) and two reported current infection. Other conditions reported by a single participant respectively included chronic fatigue and GERD. Ten participants (67%) reported the current use of cigarettes or vapes. Two participants had no current medical conditions.

Figure 3

Participant responses to: "How do you pay for your health care?" (n=15)

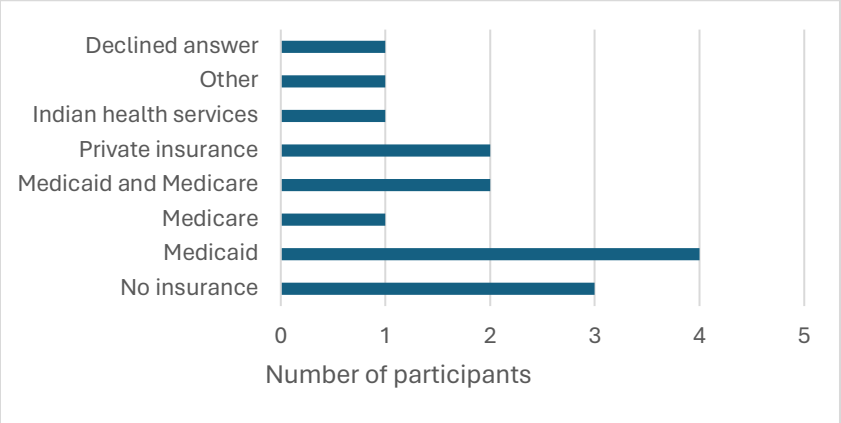
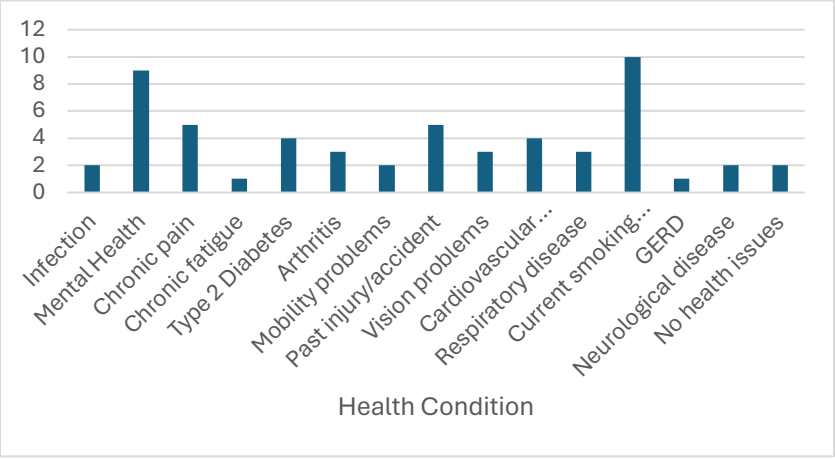


Figure 4

Participant responses to: "What health conditions do you have?" (n=15)

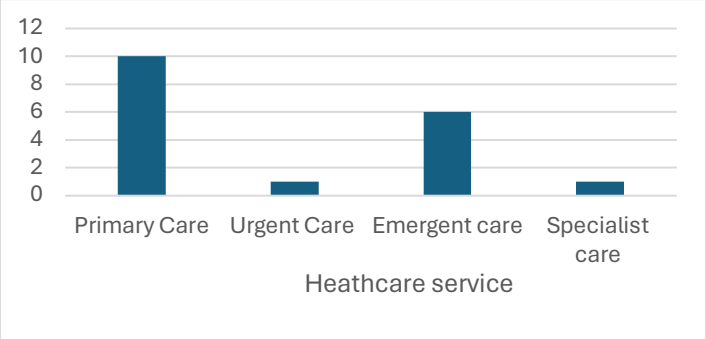


The use of a wide variety of medications was found among the participants. The most common medications reported by this population were medications for diabetes, (reported by two participants), antihypertensives (reported by two participants), over-the-counter pain relievers (N=2), inhalers (N=2) reported by two participants), prednisone (N=2), and antidepressants (N=2) reported. Other medications reported included antibiotics, cholesterol lowering agents, oxycodone, gabapentin, and carbamazepine. Two interviewees reported using alcohol and cannabis to medicate for pain. One-third of participants reported not taking any medications. Many men could not recall the specific medications they were taking and instead provided the class of drug used or condition treated, for example: "medication for my hypertension."

Most participants (10 responses or 67%) reported current use of primary care services. The men reported receiving care at a variety of locations in King County including Neighbor Care, SeaMar and Overlake in Bellevue, HealthPoint in Renton, and UW Montlake. Six participants (40%) reported consistent use of emergency medicine services, with two participants (13%) reported exclusive use of emergency medical care. One participant reported using urgent care services. Only one respondent was currently accessing specialty care, a neurologist.

Figure 5

Participant responses to: "What medical services do you currently use?" (n=15)

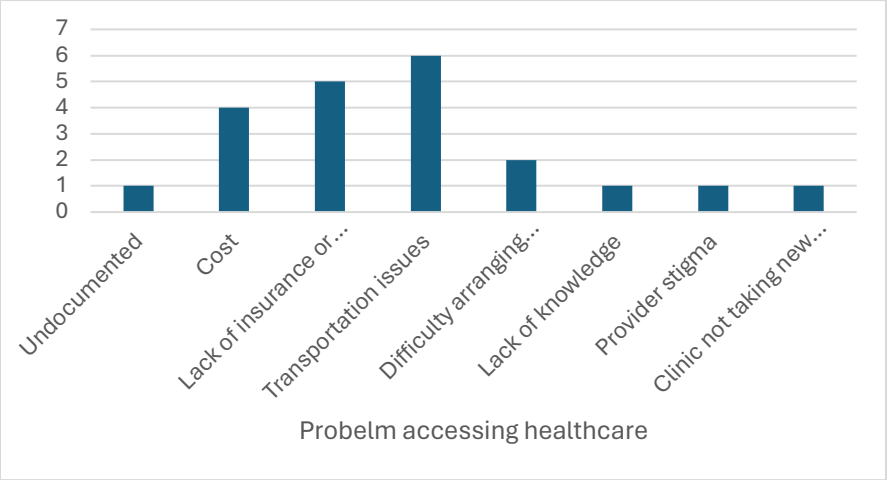


Most participants reported at least one significant barrier to receiving healthcare. The most reported barrier to accessing care was a *lack of transportation*, experienced by six (40%)

participants. One-third of interviewees (five respondents) reported difficulties with or a lac*k of insurance* as a factor interfering with their ability to access care. Four men (27%) reported *the cost of care* as a *barrier to seeking medical* services. Two participants (13%) reported difficulty with setting up appointments. Other barriers to care reported by the men included *fear of provider stigma, lack of knowledge, clinics not taking new patients*, and status as an undocumented immigrant.

Figure 6

Participant responses to: "Do you have any problems with accessing or receiving health care? If so, what makes it hard for you to get healthcare?" (n=15)



Discussion

The physical health needs of the unhoused community of this shelter seem to be similar to that of the general population, with commonly reported conditions ranging from diabetes to hypertension and obstructive lung disease. Mental health problems were significantly more prominent among the unhoused. 60% of respondents reported some kind of mental health diagnosis in this study, whereas it is estimated 20% of the general population suffers from some sort of mental health condition (National Institute of Mental Health, 2023). Tobacco smoking among this population was also significantly higher than the general population with 67% of participants reporting current use of cigarettes, compared with 11.5% of the general population

(Leas et. al, 2023). Several participants referred to past or active substance use disorder, with many reporting the use of drugs and/or alcohol to self-medicate for pain or mental health problems. Although the men reported complex health needs like managing sequelae from a stroke, epilepsy, and severe mental health issues like schizophrenia, only one respondent was currently seeing a specialist to receive care. Most participants reported receiving primary care, but they were often unable to recall their last visit or who their primary care provider was. These findings confirm what has been noted in previous studies: that mental health issues are a significant burden on the unhoused community (Wiens et. al, 2021) (Stergiopoulos et. Al, 2019). Care for mental health is a critical element of healthcare for this population and has been demonstrated to improve health and social outcomes (Stergiopoulos et. al, 2019).

Moreover, among the men who participated in the current project needs assessment survey the most reported barriers to care were lack of resources and knowledge, prior negative experience receiving care, inadequate health insurance, cost of care, and inability to access transportation. Many participants reported actively needing help to obtain a bus pass and set up Medicaid, some others had problems arranging appointments and cited a lack of knowledge of navigating the healthcare system. A health needs assessment conducted among unhoused men in San Francisco by Thorndike et. al (2022) supports our findings. They identified the most prevalent barriers to care reported in this group were negative prior healthcare experiences (including provider stigma), lack of transportation, and critical demands of day-to-day survival activities that took precedence (finding food, a safe place to sleep). Provider, continuity of care was disrupted by provider turnover, each time they felt they had to start over (Thorndike et al., 2022).

Important roles for the new RN onsite clinic which could lead to overall improved quality of care for this population would be to assist with health education, advocate for preventative care, identify individual-level barriers, provide basic physical and mental health screening, and assist

with coordination of care to connect men with healthcare services. Nurses are uniquely suited to engage in health education with patients. The new clinic RN connecting directly with the men to discuss their health concerns as well as conduct broader, more general educational seminars about various health topics, the increased health literacy among the men could result in lower healthcare costs and increased satisfaction with care (Omerov et. al, 2020). The RN-Run clinic can provide a crucial service within the RN scope of practice by helping to educate men on the healthcare and insurance system and then work to connect the men with resources to allow them affordable healthcare, such as assisting with Medicare and Medicaid enrollment.

There are several limitations to this study; first, the sample size was small (n=15) and only representative of the residents who volunteered their time to participate. These men are likely more engaged with their healthcare and driven to discuss it with the nurses; their responses may not be reflective of the needs of the majority of the community. Second, this study occurred within a small and specific subpopulation of people experiencing homelessness: male residents residing in a temporary shelter in Bellevue, WA. The health needs of women experiencing homelessness likely differ greatly from this population and should be assessed in future projects. The participants also had the benefit of temporary housing and the ability to access social worker support on-site. Thus, their barriers to receiving health care are likely fewer and different from their unhoused counterparts who do not have access to similar resources.

Further research opportunities exist to continue to develop policies based on survey responses and to later evaluate the efficacy of these protocols in serving the resident's health needs. Future DNP projects could focus on continued assessment of the population's evolving health needs and evaluate the efficacy of the RN clinic in meeting these needs. Evaluation could focus on metrics such as resident and staff satisfaction evaluated with surveys to determine if the clinics' practices helped improve the quality of care delivered to the community. Multidisciplinary

team efforts in providing men's health-specific screenings, designing educational programs, transitioning to permanent housing, and teaching new skills for employment are crucial to the well-being of homeless people. The eventual employment of an onsite advanced practice provider (APP) to work with the multidisciplinary team can further broaden the services on site to provide drop-in basic health services.

Conclusion

The outcomes of this health needs assessment and development of the RN-led clinic will have direct effects on improving health equity in the region. Homelessness is associated with poor health status. Poor health status puts people at risk of further housing instability and makes it more difficult for unhoused individuals to attain stable housing (Brown et. al, 2022). To better address a key risk factor for homelessness and to ensure the overall wellbeing of the community, APPs must work directly with unhoused individuals to assess their needs and deliver quality care. This project will directly improve the health of the unhoused men by allowing them to voice their needs and preparing the RN clinic to serve those needs. The RN clinic will contribute to improved health outcomes beyond direct medical care by providing education, advocating for patients, and empowering the men to be active participants in their health which are essential in the path to stable housing.

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