

5-28-2022

## Homelessness in urban communities in the US: A Scoping Review utilizing the Socio-Ecological Model

Rolando F. Trejos Saucedo  
*University of South Florida, [rtrejos@usf.edu](mailto:rtrejos@usf.edu)*

Carla Y. Salazar Marchan  
*University of South Florida, [carlasalazar@usf.edu](mailto:carlasalazar@usf.edu)*

Lauren Linkowski  
*University of South Florida, [lclinkowski@usf.edu](mailto:lclinkowski@usf.edu)*

Shannon Hall  
*University of South Florida, [smhall2@usf.edu](mailto:smhall2@usf.edu)*

Lynette Menezes  
*University of South Florida, [lmenezes@usf.edu](mailto:lmenezes@usf.edu)*

Follow this and additional works at: <https://digitalcommons.unf.edu/fphr>

 [Click the next page for additional authors](#)  
Part of the [Public Health Commons](#)

### Recommended Citation

Trejos Saucedo, Rolando F.; Salazar Marchan, Carla Y.; Linkowski, Lauren; Hall, Shannon; Menezes, Lynette; Liller, Karen; and Bohn, Joe (2022) "Homelessness in urban communities in the US: A Scoping Review utilizing the Socio-Ecological Model," *Florida Public Health Review*. Vol. 19, Article 3. Available at: <https://digitalcommons.unf.edu/fphr/vol19/iss1/3>

This Article is brought to you for free and open access by the Brooks College of Health at UNF Digital Commons. It has been accepted for inclusion in Florida Public Health Review by an authorized administrator of UNF Digital Commons. For more information, please contact [Digital Projects](#).

© 5-28-2022 Protected by original copyright, with some rights reserved.

---

## Homelessness in urban communities in the US: A Scoping Review utilizing the Socio-Ecological Model

### Authors

Rolando F. Trejos Saucedo, Carla Y. Salazar Marchan, Lauren Linkowski, Shannon Hall, Lynette Menezes, Karen Liller, and Joe Bohn

---

# HOMELESSNESS IN URBAN COMMUNITIES IN THE US: A SCOPING REVIEW UTILIZING THE SOCIOECOLOGICAL MODEL

---

**Rolando Trejos Saucedo, MPH**  
**Carla Salazar Marchan, MPH**  
**Shannon Hall, BA**  
**Lauren Linkowski, BS**  
**Lynette J Menezes, PhD**  
**Karen Liller, PhD**  
**Joe Bohn, PhD, MBA**

Florida Public Health Review  
Volume 19  
Page: 15-34  
Published May 28, 2022

*Homelessness remains a core element of the current housing stability crisis in the United States, especially in urban communities. Disparities are an important part of the pathway to homelessness, but they alone are not enough to generate and perpetuate homelessness in the United States (U.S.). Therefore, it is crucial to analyze existing literature to provide an evidence-based framework to help inform homeless-related policies, programs, and interventions to improve the quality of life for homeless individuals. This scoping review aims to map the last five years' literature around homelessness in U.S. urban communities by utilizing the socioecological model to analyze system-based implicated factors. The PubMed database was used to search articles from 2016 to 2020. Included articles were based in the United States at urban communities involving homeless individuals or families. A total of 145 articles were found for screening. Forty-nine articles met the selection criteria. The results of this scoping review suggest that structural, systemic, and historical factors at all the levels of the socioecological model are implicated in the complex reality of homelessness in U.S. urban communities generating individual and collective disparities. Future research and practice need to elucidate the impact of intersectionality among factors associated with homelessness.*

---

**Background** | Homelessness is a hidden epidemic in the United States (U.S.).<sup>1,2</sup> By 2018, 17 out of 10,000 individuals lived in a condition of homelessness, representing 0.2 percent of the U.S. population.<sup>3</sup> Several studies support the notion that homelessness is a chronic condition that results from an array of intrapersonal, psychological, physical, and socioenvironmental factors; therefore, priority should be placed on integrative comprehensive preventive and equitable approaches.<sup>4-6</sup>

Across studies, a higher prevalence of homelessness was found among older, white, males, veterans, men who have sex with men (MSM), and those with a history of or current drug use or abuse, history or current behavioral health disorder, history or current abuse or maltreatment, comorbidity and/or diagnosis for a chronic condition (e.g., HIV, ocular disorders, tuberculosis, traumatic brain injury, and others), those experiencing urban stress, and those who engage in sexual risk behaviors.<sup>1,7-22</sup> Protective factors to homelessness include religious or spiritual practices,

which have been associated with lower drinking frequency, fewer intoxication episodes, and lower overall alcohol consumption.<sup>23</sup> Although previously stated variables can help predict a pathway to homelessness, there are several other factors implicated in generating and perpetuating this condition. For example, even when white individuals, making up 48.3% of the total homeless population, are more likely to experience homelessness at any time in their lives, non-Hispanic blacks are three times as likely as non-Hispanic whites to have experienced homelessness at some point during their lives (12.0 % vs. 3.7 %).<sup>24,25</sup>

Homelessness exists in rural and urban communities and across the lifespan for both individuals and families. A key driver for increased recent homelessness for families is the lack of affordable housing, increased poverty, discrimination against lesbian, gay, bisexual, or transgender (LGBT) youth, racism, or juvenile justice issues.<sup>26,27</sup> Currently, there is scant literature comparing reasons for homelessness

in urban versus rural communities, but critical differences may lie in resources available in social services, employment opportunities, access to mental health services, transient nature of the homeless population, criminalization of homeless in urban areas, and difficulty navigating resources in any local community.<sup>28,29</sup>

This scoping literature review focuses on urban homelessness because of the researchers' partnership with a university street medicine team that has focused its efforts on supporting a local urban homeless population since 2016.

The socioecological model (SEM) emerged as a multilevel and multidimensional view of the determinants of health to guide public health practice.<sup>30</sup> This model provides a framework for understanding the complex interaction between individual, relationship, community, and societal factors that influence health and health-related issues.<sup>30,31</sup> Moreover, researchers have stated that there is no single cause that can explain someone's pathway to homelessness because homelessness experiences are not uniform nor linear; rather, homelessness can be described as a result of the cumulative impact of a number of factors.<sup>32</sup> Therefore, due to its complexity, homelessness should not be addressed or described by solely focusing on individual factors but by recognizing and understanding the interplay of different elements that put people at risk of homelessness.<sup>32,33</sup> By using the SEM in this scoping review, we intended to provide a map of the interaction between intrapersonal, interpersonal, organizational, community, and policy factors that affect homelessness, thus offering a guide about where preventive and healthcare efforts should lie. We utilized the SEM to analyze level-based factors implicated in homelessness among U.S. urban communities and suggest ways to generate access to health and healthcare services, inform policies, and develop programs to improve the quality of life among individuals living with homelessness. The purpose of our research was to analyze the homelessness epidemic in U.S. urban communities through a review of the literature.

**Methods | Search Strategy.** A scoping review of the literature was conducted in January 2021, guided by an experienced research librarian (S.T.). The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) principles were used to guide screening procedures.<sup>34</sup> We used the PubMed database to find full-text articles limited to English language published from January 2016 to December 2020 using the following search strategy: ((((((Urban Health"[Mesh] OR "Urban Health" OR "Urban") AND ("Healthcare Disparities"[Mesh] OR

"Healthcare Disparities" OR "Healthcare Inequalities" OR "Healthcare Inequality" OR "Delivery of Health Care"[Mesh] OR "Delivery of Health Care" OR Healthcare OR health)) AND ("Homeless Persons"[Mesh] OR "Homeless Persons" OR Homelessness OR homeless)) AND ((english[Filter]) AND (2016:2020[pdat]))) NOT (COVID-19 AND (english[Filter])) AND (english[Filter])) ) AND ("United States" OR USA OR "United States of America").

A total of 145 articles were found for inclusion in screening (Figure 1). Forty-nine articles were selected and included in this review. All articles from the initial search were compiled into an EndNote database.

A total of 145 articles were screened by title and abstract. If the article was not focused on homeless populations, it was excluded. Articles with a non-U.S.-based sample and non-full text articles were excluded. A total of 125 articles were selected for full-text review. A total of 49 articles were selected for the final scoping review (Figure 1).

**Data Extraction.** From each article, we extracted the following information: (1) author and year of publication, (2) country, (3) language, (4) sample characteristics (sample size/observations, mean age, and standard deviation [or age range, in case the mean was not provided], race/ethnicity, percentage of males and females), (5) type of location, (6) study type, (7) research design, (8) research setting, and (9) study objective. Race and ethnicity were joined into a single category.

**Eligibility of Articles.** A total of two screening stages were conducted: (1) an abstract scan and (2) a full-text review of the article. The articles selected met the criteria for inclusion as follows: (1) English language, (2) based in the United States, (3) peer-reviewed, (4) published from 2016 to 2020, (5) urban setting, and (6) focus on homeless individuals. Articles were reviewed manually by two coders: R.T.S. and C.S.M. All conflicts upon article inclusion were resolved by consensus between reviewers.

**Data Analysis.** The data collected from all selected articles were analyzed through a narrative synthesis (NS) as this analysis method is highly effective for heterogeneous findings and this type of research (qualitative, quantitative, and mixed methods), following the standards in narrative synthesis procedures.<sup>35</sup> Popay et al<sup>35</sup> recommended the following as elements of the narrative synthesis process:

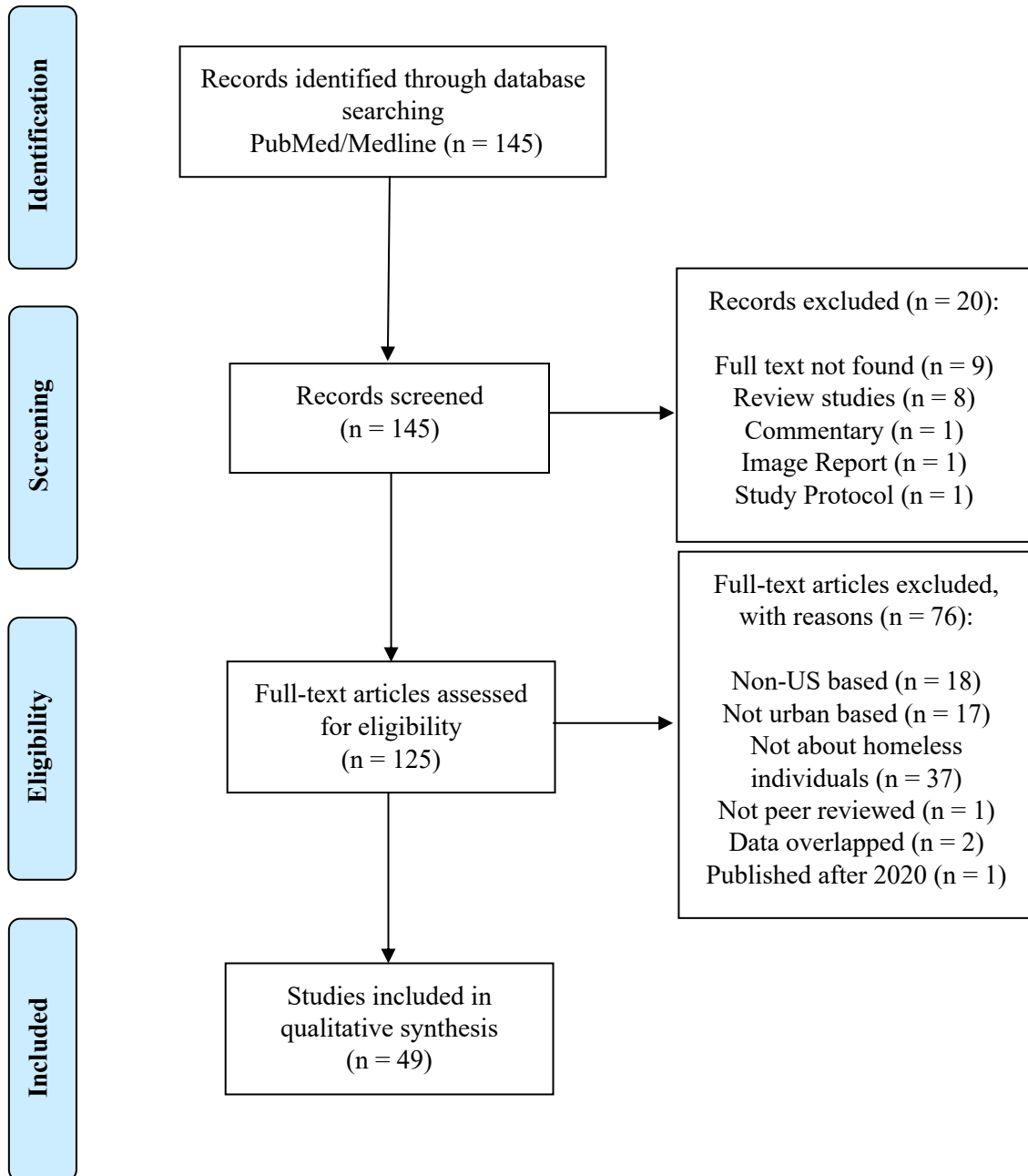
1. Acknowledge and preserve the author's descriptions of the findings and interpretations.
2. Create a respectful synthesis of findings.

3. Explore the possible connections between the results.
4. Assess the thoughtfulness of the review findings.

The first step in the data analysis process was to compile data by themes or central concepts and

classify the findings; then, the socioecological model was used to frame the results from the existing literature. The socioecological framework includes a five level analysis of homelessness.<sup>32</sup> These levels are (1) intrapersonal, (2) interpersonal, (3) organizational, (4) community, and (5) public policy.

**Figure 1.** Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) Flow Diagram



**Results | Characteristics of the articles included.**

Among the 49 included articles, 41 were quantitative, 6 were qualitative, and 2 used mixed methods. In terms of a quantitative methodology, 11 were cross-sectional, 18 were cohort studies, 4 were secondary data analysis, 1 was a discrete choice experiment (DCE), 1 was a case-control, 3 were randomized controlled trials (RCT), 1 was an economic impact, and 2 were retrospective chart reviews. From the qualitative methods studies, 2 were focus groups, 1 was a photovoice, and 3 were interviews.

**Intrapersonal.** Factors at the intrapersonal level of the SEM influencing health include individual characteristics or conditions such as knowledge, attitudes, behaviors, skills, literacy, age, gender, sexual orientation, marital status, race, ethnicity, religious identity, educational level, and personal experiences.<sup>33,36</sup> A total of 17 eligible articles had intrapersonal factors associated with homelessness. In this regard, the intrapersonal level would include social and personal elements implicated in the emotional experience or consequences of homelessness.<sup>33</sup>

Several studies reported the self-awareness of the health, emotional and physical-related risks that homelessness poses.<sup>16-17,21,37</sup> Furthermore, studies indicate that homeless individuals are less likely to complete medical examinations, adhere to pharmacological treatments, complete health-related programs, and medical visits, which impacts the proportion of those individuals who can receive adequate attention and health-related services or medical remission for various health conditions.<sup>12,38-42</sup> This disparity also occurs among homeless individuals among those sheltered and non-sheltered, with the second group having lower odds of completing medical appointments.<sup>41</sup> Several studies report that among homeless individuals entering shelter accommodations, there is a higher prevalence of non-White men with public or no insurance.<sup>11,43-44</sup>

In a study analyzing the prevalence of exchange of sex among a young sample aged 12 to 24, the authors found higher odds among those having experienced homelessness.<sup>45</sup> Being homeless was also independently associated with a higher risk for overdose and a higher burden among young individuals.<sup>46</sup> It was also found that homeless individuals are at five times higher risk for visual impairment than the general U.S. population.<sup>13</sup> Out of the selected studies, only one analyzed COVID-19 related outcomes among homeless individuals, reporting that one in six of those with COVID-19 were at a higher risk for being admitted into the intensive care unit (ICU), connected to mechanical ventilation, and died, compared to those non-homeless.<sup>47</sup>

**Interpersonal.** Interpersonal factors that influence health or health-related issues, as explained in the SEM, are formal and informal social networks, social support systems, and social roles, which include family, friends, and workgroups.<sup>36</sup> A total of 8 eligible articles included interpersonal factors associated with homelessness. The interpersonal level includes social and relationship factors implicated in the configuration of the experience of homelessness such as community engagement, behavioral health disorders, physical disorders, comorbidity, historical and systemic discrimination, healthcare-based discrimination, sexual assault and violence, urban stress, over-policing, substance use disorders (SUD), generational trauma, food insecurity, poverty, family history of homelessness, disability, history of criminal activity, and job loss.<sup>8,10,15,48-52</sup>

Among homeless families, a study reported that parents fear the long-term impact on behaviors and attitudes and other biopsychosocial factors of children who experience homelessness.<sup>49</sup> Unhealthy behaviors such as smoking among homeless individuals have been reported as a coping mechanism for peer pressure in a shelter-based study.<sup>52</sup>

**Organizational.** Organizational factors in the SEM include any social institution with organizational characteristics and both informal and formal rules and regulations that impact health and health-related issues or behaviors such as workplaces, schools, or organizations.<sup>36</sup> Organizational issues, structure, or lack thereof can be barriers that contribute to homelessness yet could be enablers of help for the homeless. A total of 11 eligible articles reviewed organizational factors associated with homelessness.

Within a health and healthcare services setting, homeless individuals are more likely to be higher utilizer patients (HUP),<sup>53</sup> experience overmedication, lack of empathy and rapport,<sup>1</sup> and seek health-related services when conditions are in a chronic stage or while in drug overdose.<sup>45,53</sup>

Furthermore, homeless individuals are also more likely to require hospitalization and readmission for physical and behavioral health disorders than non-homeless individuals.<sup>18,19</sup> Additionally, homeless individuals are more than seven times as likely to return to the emergency department (ED) 30 days after their visit, nine times more likely to return after six months, more than ten times more likely to return within one year, and eleven times more likely to return after two years.<sup>7</sup>

When analyzing national housing programs, including the U.S. Department of Housing and Urban

Development-VA Supportive Housing (HUD-VASH) program, several studies reported that the type of project and the services provided by the organization were significantly associated with the number of mental health or primary care visits, and employment status of homeless individuals.<sup>40,54-57</sup>

**Community.** In the SEM, community factors involve relationships among organizations, institutions, and informal networks such as the built environment, neighborhood associations, and community leaders.<sup>36</sup> This level can also include cultural norms and values. Few articles (7) addressed issues at the community level related to homelessness.

Elements such as spirituality, belongingness, and a social network are crucial for the quality of life and quality of care for homeless individuals.<sup>23</sup> Urban settings also pose unique threats to the well-being of homeless individuals. For example, urban-life stress refers to a series of conditions in the environment and the community, including structural racism, that impact the ability of individuals to connect and preserve their well-being.<sup>14</sup> Urban stress has also been significantly associated with a lower tolerance to distress and a diagnosis of major depressive disorder.<sup>14</sup> Authors of a recent study analyzed the outcomes of a community engagement program among homeless Black adults and reported that those engaged in the program presented a decreased risk for chronic homelessness.<sup>58</sup> Chinchilla et al<sup>55</sup> reported that community engagement is a predictor for mental health services utilization, significantly modifying help-seeking behaviors among homeless individuals.

Programs for homeless individuals that include a community of other individuals who have experienced homelessness can effectively create support and civic change among residents.<sup>59</sup> Elements such as affordability and success were also highlighted as crucial to improve factors like autonomy and stability,<sup>49</sup> not only at an individual but also at a collective level.<sup>60</sup>

**Public Policy.** Factors at the policy level of the SEM include local, state, and national laws or policies that impact health or health-related issues and behaviors.<sup>36</sup> Often, these involve policies to allocate resources or plans and actions to achieve a specific goal within society. We found a total of 7 eligible articles that included public policy elements associated with homelessness.

Madigan et al<sup>2</sup> analyzing the prevalence of homelessness in Illinois, indicate that even when there is a decrease in the number of individuals experiencing homelessness through point-in-time (PIT) counts, the number of those who suffer from homelessness is

actually increasing and could be masked behind the methodologies for the PIT calculations, definitions of homelessness, and the lack of alternatives to prevalence estimates using hospital data or multiple data sources. In terms of the economic impact, a study utilizing data from Florida and Connecticut, found that shorter stays by individuals experiencing homelessness result in \$1,900 to \$3,000 total savings per admission, while current approaches that entail longer hospitalization stays result in a 26% and 48% increase in inpatient costs for Connecticut and Florida respectively.<sup>61</sup>

Prioritizing programs or interventions funding at a policy level for homeless individuals poses unique challenges related to enrollment and retention. Medalia et al<sup>62</sup> found that interventions involving individuals on supportive housing could be an alternative to improving the feasibility of cognitive interventions for homeless individuals. Other programs utilizing mentors or advocates, and subsidized phone-based strategies were effective in helping aid the needs and realities of urban homelessness.<sup>63,64</sup> Finally, the creation of public sobering centers were found to improve substance use-related health conditions among homeless individuals.<sup>65</sup>

A policy-level alternative to calculations for homelessness prevalence in the United States could involve Medicaid databases through adding an option to existing Medicaid enrollment forms to self-report homelessness. Vickery et al<sup>66</sup>, analyzing the probability of self-report homelessness from Medicaid enrollment data from the Minnesota Department of Human Services, suggest that when an option to report homelessness exists that is tailored to the needs and realities of a community, homeless individuals are more likely to report it.

**Discussion** | This scoping review compiles the results from observational and experimental studies concluding that homelessness is a chronic condition that entails a higher risk for diagnosis, poor outcomes, and disease burden for most chronic, behavioral, or communicable diseases.<sup>12,13,16,17,21,37-42</sup> From a life-course perspective, there are risks and protective factors that play a role before a person becomes homeless at each developmental stage. For example, losing a job can lead to losing housing stability, which forces a person into a condition of homelessness.<sup>59</sup>

Importantly, as Hsu et al<sup>47</sup> reports, homeless individuals, hold a higher disease burden and risk for mortality due to COVID-19. Other authors reported the lack of access and affordability to preventive and treatment for healthcare services could entail a risk for homelessness.<sup>46,50-51</sup> Few studies analyzed the risk for

homelessness among sexual and gender minorities.<sup>8,9,51</sup> None of the studies included analyzed, from an intersectionality framework, how the social categories included (e.g., racism, gender, sexual orientation, gender identity, socioeconomic status) generate or perpetuate homelessness in urban communities. Studies analyzing federally funded programs, through the HUD-VASH, state the need for comprehensive services that transcend housing into health and healthcare, transportation, application fees, empathy by program providers, and others.<sup>40,54-57</sup>

In response to previously analyzed national trends of substance abuse disorders (SUD) and overmedication among homeless individuals, the USF Tampa Bay Street Medicine (TBSM) Team recently started distributing Naloxone (Narcan) to homeless patients in Tampa. This initiative allows medical students to practice patient education techniques for less educated patient groups—using simple language in a non-judgmental manner to maintain patient trust. On the patient end, several students have reported a sense of empowerment because they feel that this training has afforded them an active role in maintaining the health of their community.

One of the biggest challenges in working towards addressing these specific threats is the lack of understanding among healthcare providers to these daily urban stressors. To combat this, the Humanities Branch of the USF TBSM team conducted a photovoice project, which involved distributing disposable cameras to several patients during clinic hours. At the completion of this project, the team gained invaluable insight into the daily lives of patients and their unique struggles and provided patients with a platform to share their stories in their own voices.<sup>67-68</sup>

Through the continued efforts of the TBSM, relationships with the homeless population should strengthen and become more tailored to specific needs from all angles of health. By providing patients with a direct link to not only physicians and medical students, social service issues can be directly addressed, and preventative measures can be improved through interventions. The said partnership will better address the complex array of patient health needs and provide opportunities for students to practice the collaborative healthcare model.

In relation to the COVID-19 pandemic, street medicine groups throughout the country have found that many homeless individuals lacked a basic understanding of the virus and were without access to reliable knowledge. Street medicine organizations like Portland Street Medicine began to hand out fact cards to their patients, which details information about the

virus, how to recognize symptoms, and practices for keeping themselves safe. This organization has been developing trusting and honest relationships with its homeless population for years, which has enabled them to be successful in dispelling rumors and paranoia among this community.<sup>69</sup> In Tampa, our approach allows us to draw from multiple student skills and from the various USF Health Colleges to provide patients with the most comprehensive care. Learning from Portland, we know that this not only includes tangible medical care but also leaning on prior patient relationships to serve as a trusted information source.

Due to the high demand for emergency department visits among homeless individuals, community-based clinics, hospitals, and street medicine teams can be critical for generating prevention for a cascade of mental, physical, and substance abuse disorders that affect individuals.<sup>10</sup> Integral healthcare services should aim to tailor their programs, interventions, and services to the needs, challenges, and realities of homeless individuals in the urban areas of the United States.<sup>1,22</sup> This scoping review, to our knowledge, is the first to use a socioecological model to analyze factors associated with homelessness in urban settings in the United States from 2016 through 2020.

**Scoping Review Limitations.** There are several limitations to this research. First, we did not include non-published and non-peer-reviewed articles (e.g., preprints, news or media articles, or others). Second, recent studies involving the COVID-19 pandemic and socio-political changes were not included. Third, we also confined this study to homelessness in a five year period (2016-2020), leaving out older and newer studies. Finally, data were not subcategorized by outcomes, as the main interest was to describe the associations across the literature.

**Conclusion** | The co-occurrence of multiple conditions is an important issue to address in any future research, as this literature review has highlighted the occurrence of challenges across multiple societal levels. As discussed in this article, there are risk factors that impact vulnerable populations such as minors, gender, sexually diverse individuals, and others, leading to a person's path into homelessness. Only through continued cross-sectoral partnerships and efforts at the federal, state, and community levels can policies and interventions be established to help this population address complex biopsychosocial challenges and work their way back to a healthy and contributing place in society.

**Acknowledgments** | We want to thank Stephanie Tomlinson, librarian at the University of South Florida, for her invaluable help guiding this project.



## References |

- \* = Study included in this scoping review.
- \*1. Adkins EC, Zalta AK, Boley RA, Glover A, Karnik NS, Schueller SM. Exploring the potential of technology-based mental health services for homeless youth: A qualitative study. *Psychol Serv.* 2017;14(2):238-245. doi:10.1037/ser0000120
  - \*2. Madigan D, Forst L, Friedman LS. Comparison of State Hospital Visits With Housing and Urban Development Estimates of Homeless: Illinois, 2011-2018. *Am J Public Health.* 2020;110(3):391-393. doi:10.2105/AJPH.2019.305492
  3. Government of the United States of America. The state of homelessness in America. <https://www.whitehouse.gov/wp-content/uploads/2019/09/The-State-of-Homelessness-in-America.pdf>. 2019.
  4. Chatterjee A, So M, Dunleavy S, Oken E. Quality Health Care for Homeless Children: Achieving the AAP Recommendations for Care of Homeless Children and Youth. *J Health Care Poor Underserved.* 2017;28(4):1376-1392. doi:10.1353/hpu.2017.0121
  5. Jego M, Abcaya J, Ștefan DE, Calvet-Montredon C, Gentile S. Improving Health Care Management in Primary Care for Homeless People: A Literature Review. *Int J Environ Res Public Health.* 2018;15(2):309. Published 2018 Feb 10. doi:10.3390/ijerph15020309
  6. Montgomery AE, Szymkowiak D, Culhane D. Gender Differences in Factors Associated with Unsheltered Status and Increased Risk of Premature Mortality among Individuals Experiencing Homelessness. *Womens Health Issues.* 2017;27(3):256-263. doi:10.1016/j.whi.2017.03.014
  - \*7. Amato S, Nobay F, Amato DP, Abar B, Adler D. Sick and unsheltered: Homelessness as a major risk factor for emergency care utilization. *Am J Emerg Med.* 2019;37(3):415-420. doi:10.1016/j.ajem.2018.06.001
  - \*8. Bauermeister JA, Eaton L, Meanley S, Pingel ES; UHIP Partnership. Transactional Sex With Regular and Casual Partners Among Young Men Who Have Sex With Men in the Detroit Metro Area. *Am J Mens Health.* 2017;11(3):498-507. doi:10.1177/1557988315609110
  - \*9. Conte M, Eshun-Wilson I, Geng E, et al. Brief Report: Understanding Preferences for HIV Care Among Patients Experiencing Homelessness or Unstable Housing: A Discrete Choice Experiment. *J Acquir Immune Defic Syndr.* 2020;85(4):444-449. doi:10.1097/QAI.0000000000002476
  - \*10. Doran KM, Rahai N, McCormack RP, et al. Substance use and homelessness among emergency department patients. *Drug Alcohol Depend.* 2018;188:328-333. doi:10.1016/j.drugalcdep.2018.04.021
  11. Garakani A, Cerrito BM, Aloysi AS, Martinez JM, Buono FD. Retrospective Chart Review of Voluntary Admissions to an Inpatient Psychiatric Hospital in New York City: A Demographic Breakdown. *Community Ment Health J.* 2020;56(3):448-455. doi:10.1007/s10597-019-00498-2
  - \*12. Gwadz M, Cleland CM, Kutnick A, et al. Factors Associated with Recent HIV Testing among Heterosexuals at High Risk for HIV Infection in New York City. *Front Public Health.* 2016;4:76. Published 2016 Apr 27. doi:10.3389/fpubh.2016.00076
  - \*13. Henstenburg J, Thau A, Markovitz M, Plumb J, Markovitz B. Visual Impairment and Ocular Pathology Among the Urban American Homeless. *J Health Care Poor Underserved.* 2019;30(3):940-950. doi:10.1353/hpu.2019.0066
  - \*14. Hernandez DC, Daundasekara SS, Zvolensky MJ, et al. Urban Stress Indirectly Influences Psychological Symptoms through Its Association with Distress Tolerance and Perceived Social Support among Adults Experiencing Homelessness. *Int J Environ Res Public Health.* 2020;17(15):5301. Published 2020 Jul 23. doi:10.3390/ijerph17155301
  - \*15. Jain KM, Davey-Rothwell M, Crossnohere NL, Latkin CA. Post-Traumatic Stress Disorder, Neighborhood Residency and Satisfaction, and Social Network Characteristics among Underserved Women in Baltimore, Maryland. *Womens Health Issues.* 2018;28(3):273-280. doi:10.1016/j.whi.2018.02.004
  - \*16. Kelly JD, Cohen J, Grimes B, Philip SS, Weiser SD, Riley ED. High Rates of Herpes Simplex Virus Type 2 Infection in Homeless Women: Informing Public Health Strategies. *J Womens Health (Larchmt).* 2016;25(8):840-845. doi:10.1089/jwh.2015.5579
  - \*17. Kerr EM, Vonnahme LA, Goswami ND. Impact of Targeted Local Interventions on Tuberculosis Awareness and Screening Among Persons Experiencing Homelessness During a Large Tuberculosis Outbreak in Atlanta, Georgia, 2015-2016. *Public Health Rep.* 2020;135(1\_suppl):90S-99S. doi:10.1177/0033354920932644
  - \*18. Lamparter LE, Rech MA, Nguyen TM. Homeless patients tend to have greater psychiatric needs when presenting to the emergency department. *Am J Emerg Med.* 2020;38(7):1315-1318. doi:10.1016/j.ajem.2019.10.012
  - \*19. LaWall E, Wu YY, Fan VY, Ashton M, Sentell T. Living Alone and Homelessness as Predictors of 30-Day Potentially Preventable Hospital Readmission. *Prev Chronic Dis.* 2019;16:E16. Published 2019 Feb 7. doi:10.5888/pcd16.180189
  - \*20. Rajabiun S, Davis-Plourde K, Tinsley M, et al. Pathways to housing stability and viral suppression for people living with HIV/AIDS: Findings from the Building a Medical Home for Multiply Diagnosed HIV-positive Homeless Populations initiative. *PLoS One.* 2020;15(10):e0239190. Published 2020 Oct 1. doi:10.1371/journal.pone.0239190

- \*21. Thompson RG Jr, Elliott JC, Hu MC, Aivadyan C, Aharonovich E, Hasin DS. Short-term effects of a brief intervention to reduce alcohol use and sexual risk among homeless young adults: Results from a randomized controlled trial. *Addict Res Theory*. 2017;25(1):24-31. doi:10.1080/16066359.2016.1193165
- \*22. Tsai J, Blue-Howells J, Nakashima J. Needs of homeless veterans: 5 years of the CHALENG Survey 2012-16. *J Public Health (Oxf)*. 2019;41(1):e16-e24. doi:10.1093/pubmed/fdy076
- \*23. Wendt DC, Collins SE, Nelson LA, Serafini K, Clifasefi SL, Donovan DM. Religious and Spiritual Practices Among Home-less Urban American Indians and Alaska Natives with Severe Alcohol Problems. *Am Indian Alsk Native Ment Health Res*. 2017;24(3):39-62. doi:10.5820/aian.2403.2017.3
24. Fusaro VA, Levy HG, Shaefer HL. Racial and Ethnic Disparities in the Lifetime Prevalence of Homelessness in the United States. *Demography*. 2018;55(6):2119-2128. doi:10.1007/s13524-018-0717-0
25. United States Department of Housing and Urban Development. The 2020 annual homeless assessment report (AHAR) to congress. <https://www.huduser.gov/portal/sites/default/files/pdf/2020-AHAR-Part-1.pdf>. Published January 2021.
26. Brott H, Kornbluh M, Incaudo G, Banks L, & Reece J. Placing a spotlight on rural homelessness: Identifying the barriers and facilitators to successfully supporting homeless families within rural communities. *Journal of Poverty*. 2019; 23(3):179-201. doi:10.1080/10875549.2018.1549184
27. Morton MH, Dworsky A, Matjasko JL, et al. Prevalence and Correlates of Youth Homelessness in the United States. *J Adolesc Health*. 2018;62(1):14-21. doi:10.1016/j.jadohealth.2017.10.006
28. Bowen EA, Miller B, Barman-Adhikari A, Fallin K, & Zuchlewski D. Emerging adult homelessness in geographic perspective: A view from the Rust Belt. *Children and Youth Services Review*. 2017; 73:213-219. doi:10.1016/j.childyouth.2016.12.013
29. Goodling E. Intersecting hazards, intersectional identities: A baseline critical environmental justice analysis of US homelessness. *Environment and Planning E: Nature and Space*. 2020; 3(3):833-856. doi:10.1177/2514848619892433
30. Turnock BJ. Public health: what it is and how it works. 6th ed. Jones & Barlett Learning; 2015.
31. Centers for Disease Control and Prevention. The social-ecological model: A framework for prevention. <https://www.cdc.gov/violenceprevention/about/social-ecologicalmodel.html>. 2021
32. Gaetz S & Dej E. A new direction: A framework for homelessness prevention. Toronto. Canadian Homelessness Research Network Press. 2017. <http://www.deslibris.ca/ID/10089734>
33. Nooe RM & Patterson D. The ecology of homelessness. *J Hum Behav Soc Environ*. 2010; 20(2):105-152. doi:10.1080/10911350903269757
34. Moher D, Liberati A, Tetzlaff J, Altman DG; PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Ann Intern Med*. 2009;151(4):264-W64. doi:10.7326/0003-4819-151-4-200908180-00135
35. Popay J, Roberts H, Sowden A, Petticrew M, Arai L, Rodgers M, Britten N, Roen K, & Duffy S. Guidance on the conduct of narrative synthesis in systematic reviews: A product from the ESRC Methods Programme. ESRC, London. 2006.
36. McLeroy KR, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. *Health Educ Q*. 1988;15(4):351-377. doi:10.1177/109019818801500401
- \*37. Ingber A, Garcia MN, Leon J, Murray KO. Chagas Disease Knowledge and Risk Behaviors of the Homeless Population in Houston, TX. *J Racial Ethn Health Disparities*. 2018;5(2):229-234. doi:10.1007/s40615-017-0362-0
- \*38. Beiler A, Magaret A, Zhou Y, Schleyer A, Wald A, Dhanireddy S. Outpatient Parenteral Antimicrobial Therapy in Vulnerable Populations--People Who Inject Drugs and the Homeless. *J Hosp Med*. 2019;14(2):105-109. doi:10.12788/jhm.3138
- \*39. Clemenzi-Allen A, Neuhaus J, Geng E, et al. Housing Instability Results in Increased Acute Care Utilization in an Urban HIV Clinic Cohort. *Open Forum Infect Dis*. 2019;6(5):ofz148. Published 2019 Mar 27. doi:10.1093/ofid/ofz148
- \*40. Cusack M, Montgomery AE. Barriers and facilitators to housing access and maintenance in HUD-VASH: Participant and staff perspectives. *Soc Work Health Care*. 2018;57(6):422-439. doi:10.1080/00981389.2018.1441213
- \*41. Humensky JL, Fattal O, Feit R, Mills SD, Lewis-Fernández R. Factors Associated With Outpatient Visit Attendance After Discharge From Inpatient Psychiatric Units in a New York City Hospital. *Psychiatr Serv*. 2017;68(6):624-627. doi:10.1176/appi.ps.201600150
- \*42. Pedersen ER, Ewing BA, D'Amico EJ, Miles JNV, Haas AC, Tucker JS. Predictors of Retention in an Alcohol and Risky Sex Prevention Program for Homeless Young Adults. *Prev Sci*. 2018;19(4):459-467. doi:10.1007/s11121-018-0866-9
- \*43. Doran KM, Johns E, Schretzman M, et al. Homeless Shelter Entry in the Year After an Emergency Department Visit: Results From a Linked Data Analysis. *Ann Emerg Med*. 2020;76(4):462-467. doi:10.1016/j.annemergmed.2020.03.006
- \*44. Montgomery AE, Szymkowiak D, Cusack MC, et al. Veterans' assignment to single-site versus scattered-site permanent supportive housing. *Am J Orthopsychiatry*. 2020;90(1):37-47. doi:10.1037/ort0000380

- \*45. Boyer CB, Greenberg L, Chutuape K, et al. Exchange of Sex for Drugs or Money in Adolescents and Young Adults: An Examination of Sociodemographic Factors, HIV-Related Risk, and Community Context. *J Community Health*. 2017;42(1):90-100. doi:10.1007/s10900-016-0234-2
- \*46. Calvo M, MacFarlane J, Zaccaro H, et al. Young people who use drugs engaged in harm reduction programs in New York City: Overdose and other risks. *Drug Alcohol Depend*. 2017;178:106-114. doi:10.1016/j.drugalcdep.2017.04.032
- \*47. Hsu HE, Ashe EM, Silverstein M, et al. Race/Ethnicity, Underlying Medical Conditions, Homelessness, and Hospitalization Status of Adult Patients with COVID-19 at an Urban Safety-Net Medical Center - Boston, Massachusetts, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69(27):864-869. Published 2020 Jul 10. doi:10.15585/mmwr.mm6927a3
- \*48. Footer KHA, Park JN, Rouhani S, et al. The development of the Police Practices Scale: Understanding policing approaches towards street-based female sex workers in a U.S. City. *PLoS One*. 2020;15(1):e0227809. Published 2020 Jan 24. doi:10.1371/journal.pone.0227809
- \*49. García I, Kim K. "I Felt Safe": The Role of the Rapid Rehousing Program in Supporting the Security of Families Experiencing Homelessness in Salt Lake County, Utah. *Int J Environ Res Public Health*. 2020;17(13):4840. Published 2020 Jul 5. doi:10.3390/ijerph17134840
- \*50. Jackson TS, Moran TP, Lin J, Ackerman J, Salhi BA. Homelessness Among Patients in a Southeastern Safety Net Emergency Department. *South Med J*. 2019;112(9):476-482. doi:10.14423/SMJ.0000000000001016
- \*51. Li JS, Urada LA. Cycle of Perpetual Vulnerability for Women Facing Homelessness near an Urban Library in a Major U.S. Metropolitan Area. *Int J Environ Res Public Health*. 2020;17(16):5985. Published 2020 Aug 18. doi:10.3390/ijerph17165985
- \*52. Pratt R, Pernat C, Kerandi L, et al. "It's a hard thing to manage when you're homeless": the impact of the social environment on smoking cessation for smokers experiencing homelessness. *BMC Public Health*. 2019;19(1):635. Published 2019 May 24. doi:10.1186/s12889-019-6987-7
- \*53. Bell J, Turbow S, George M, Ali MK. Factors associated with high-utilization in a safety net setting. *BMC Health Serv Res*. 2017;17(1):273. Published 2017 Apr 14. doi:10.1186/s12913-017-2209-0
- \*54. Chinchilla M, Gabrielian S, Hellemann G, Glasmeier A, Green M. Determinants of Community Integration Among Formerly Homeless Veterans Who Received Supportive Housing. *Front Psychiatry*. 2019;10:472. Published 2019 Jun 26. doi:10.3389/fpsyg.2019.00472
- \*55. Chinchilla M, Gabrielian S, Horan WP, et al. Comparing Tenant and Neighborhood Characteristics of the VA's Project- vs. Tenant-Based Supportive Housing Program in Los Angeles County. *J Health Care Poor Underserved*. 2019;30(4):1373-1393. doi:10.1353/hpu.2019.0098
- \*56. Garrett N, Bikah Bi Nguema Engoang JA, Rubin S, Vickery KD, Winkelman TNA. Health system resource use among populations with complex social and behavioral needs in an urban, safety-net health system. *Healthc (Amst)*. 2020;8(3):100448. doi:10.1016/j.hjdsi.2020.100448
- \*57. Kim K, Garcia I. Why Do Homeless Families Exit and Return the Homeless Shelter? Factors Affecting the Risk of Family Homelessness in Salt Lake County (Utah, United States) as a Case Study. *Int J Environ Res Public Health*. 2019;16(22):4328. Published 2019 Nov 6. doi:10.3390/ijerph16224328
- \*58. Barceló NE, Lopez A, Tang L, et al. Community Engagement and Planning versus Resources for Implementing Depression Quality Improvement: Exploratory Analysis for Black and Latino Adults. *Ethn Dis*. 2019;29(2):277-286. Published 2019 Apr 18. doi:10.18865/ed.29.2.277
- \*59. Cheezum RR, Rosso MT, Niewolak N, Cobb T. Using PhotoVoice to Understand Health Determinants of Formerly Homeless Individuals Living in Permanent Housing in Detroit. *Qual Health Res*. 2019;29(7):1043-1055. doi:10.1177/1049732318816670
- \*60. Kucukboyaci NE, Long C, Smith M, Rath JF, Bushnik T. Cluster Analysis of Vulnerable Groups in Acute Traumatic Brain Injury Rehabilitation. *Arch Phys Med Rehabil*. 2018;99(11):2365-2369. doi:10.1016/j.apmr.2017.11.016
- \*61. Shetler D, Shepard DS. Medical Respite for People Experiencing Homelessness: Financial Impacts with Alternative Levels of Medicaid Coverage. *J Health Care Poor Underserved*. 2018;29(2):801-813. doi:10.1353/hpu.2018.0059
- \*62. Medalia A, Saperstein AM, Huang Y, Lee S, Ronan EJ. Cognitive Skills Training for Homeless Transition-Age Youth: Feasibility and Pilot Efficacy of a Community Based Randomized Controlled Trial. *J Nerv Ment Dis*. 2017;205(11):859-866. doi:10.1097/NMD.0000000000000741
- \*63. Moxley DP, Washington OGM. Souls in Extremis: Enacting Processes of Recovery from Homelessness Among Older African American Women. *J Relig Health*. 2016;55(3):1038-1054. doi:10.1007/s10943-015-0180-9
- \*64. Stewart C, Kopinski H, Liebschutz J, et al. The provision of cell phones as a recruitment and retention strategy for people who inject drugs enrolling in a randomized trial. *Drug Alcohol Depend*. 2018;184:20-25. doi:10.1016/j.drugalcdep.2017.11.019
- \*65. Smith-Bernardin S, Carrico A, Max W, Chapman S. Utilization of a Sobering Center for Acute

Alcohol Intoxication. *Acad Emerg Med.* 2017;24(9):1060-1071. doi:10.1111/acem.13219

66. Vickery KD, Shippee ND, Bodurtha P, et al. Identifying Homeless Medicaid Enrollees Using Enrollment Addresses. *Health Serv Res.* 2018;53(3):1992-2004. doi:10.1111/1475-6773.12738

67. Liebenberg L. Thinking critically about photovoice: Achieving empowerment and social

change. *Int J Qual Methods.* 2018;17(1). doi:10.1177/1609406918757631

68. Fast D. Dream homes and dead ends in the city: a photo essay experiment. *Sociol Health Illn.* 2017;39(7):1134-1148. doi:10.1111/1467-9566.12563

69. Portland Street Medicine. Portland Street Medicine COVID19. <https://www.portlandstreetmedicine.org/covid19>. Published March 2020.

Rolando Trejos Saucedo, MPH, College of Public Health, University of South Florida, Tampa, FL. Carla Salazar Marchan, MPH, College of Public Health, University of South Florida, Tampa, FL. Shannon Hall, BA, Morsani College of Medicine, University of South Florida, Tampa, FL. Lauren Linkowski, BS, Morsani College of Medicine, University of South Florida, Tampa, FL. Lynette J Menezes, PhD, Associate Professor, Department of Internal Medicine, University of South Florida, Tampa, FL. Karen Liller, PhD, MA, Professor and Director of the Activist Lab, College of Public Health, University of South Florida, Tampa, FL. Joe Bohn, PhD, MBA, Assistant Professor, College of Public Health, University of South Florida, Tampa, FL. Email at: [jbohn2@usf.edu](mailto:jbohn2@usf.edu).

Copyright 2022 by the *Florida Public Health Review*.

Author (Year)	Sample size/Observations	Mean age (SD)/ Age group	Race/Ethnicity	Gender	Study type	Research design	Research setting	Study objective
1. Adkins et al. (2017)	24	18 to 20 years old M: 18.8 (SD=0.8)	66.7% African American/Black, 4.2% Central American, 20.8% Mixed, 8.3% Other. (73.9% Non-Hispanic, 6% Hispanic)	62.5% female 37.5% male	Focus Group	Qualitative	Shelter	Summarize the findings from these focus groups and discuss implications for further work exploring the use of technology to provide mental health interventions to homeless youth.
2. Amato et al. (2019)	986 patients with documented homelessness, and 3482 controls	Patients with documented homelessness median age (42.8), while controls' median age was (31.1)	White: Homeless (48.8%) Control 44.6%) Black: Homeless (44.7%) Control (47.0)	Male: Homeless (56.3%) Control (47.8%)	Retrospective cohort	Quantitative	N/A	Compare emergency care utilization between individuals with documented homelessness to those enrolled in Medicaid without documented homelessness.
3. Barceló et al. (2019)	897 participants	N/A	Latino: 409 (45.6%) Black: 488 (54.4%)	Latino Women: 262 (64.1%) Black Women: (58.0%)	Cohort	Quantitative	N/A	Examine the consistency of overall study findings at 6-months in specific racial/ethnic groups, including both "main" (clinical) as well as "community-prioritized" outcomes.
4. Bauermeister et al. (2017)	357 participants	23.13, SD=2.86	Black (48.7%) White (26.6%) Latino (15.7%) Other race (9.0%)	Men (100%)	Cross-sectional survey	Quantitative	N/A	Examine the prevalence and risk correlates of transactional sex in a sample of Young Men Who Have Sex with Men (YMSM) living in Detroit.
5. Beiler et al. (2019)	596 participants	N/A	White: Homeless PWID (83.0%) Housed PWID (79.2%) Homeless Non-PWID (55.6%) Housed non-PWID (73.3%)	Male: Homeless PWID (62.3%) Housed PWID (75.0%) Homeless Non-PWID (55.6%) Housed non-PWID (73.3%)	Retrospective cohort	Quantitative	Harborview Medical Center (HMC)	Evaluate treatment outcomes in PWID and the homeless in our OPAT program.
6. Bell et al. (2017)	247 cases 247 controls	Cases: mean age 55.28 (SD=15.7) Controls: mean age	Cases: Black (88.2%) Other (18.6%) Controls:	Cases: Male (56.68%) Female (43.32%) Control:	Case-control	Quantitative	N/A	Define the population of high-utilizer patients (HUPs) at a large, to understand how these patients differ from patients who are not

		56.09 (SD=15.6)	Black (76.5%) Other (23.5%)	Male (56.68%) Female (43.32%)				HUPs, and to analyze how their demographic, medical, and social factors contribute to their healthcare use and mortality rates.
7. Boyer et al. (2017)	1818 participants 197 ever exchanged sex 1521 never exchange sex	Most common age group 21-24: 968 (53.2%)	Black (66.2%), Hispanic (21.1%), White (4.4%), Mixed (5.7%), Other (2.6%)	Male (42.2%) Female (53.3%) Transgender (4.6%)	Cross-sectional survey	Quantitative	Tampa, Los Angeles, Washington DC, Philadelphia, Chicago, Bronx, New Orleans, Miami, Memphis, Houston, Detroit, Baltimore, Boston, and Denver	Examine associations among sociodemographic factors, HIV risk, and community context (e.g., economic insecurity, job training, housing instability, crime victimization, and perceived community norms) in adolescents and young adults who ever exchanged sex for drugs or money.
8. Calvo et al. (2017)	257 participants	Mean age: 45.5	Black (29%) White (16%) Latino (49%) Other (7%)	Male (67%) Female (31%) Transgender (2%)	Cross-sectional survey	Quantitative	NYC	Answer the following questions: (1) are there differences in the socio-demographic characteristics between young NYC HRP participants (aged 18–30) and older participants; (2) are young participants more likely to report overdose, injection drug use, and other health risk behaviors; and (3) what factors are associated with recent overdose among young participants?
9. Cheezum et al. (2019)	17 participants	N/A	Nearly participants all were African American	Twelve were men and five were women	Photovoice	Qualitative	Detroit, MI	Conduct a community-based participatory research (CBPR) Photovoice study to better understand what Housing First residents in Detroit identify as factors that impact their health.

10. Chinchilla et al. (2019)	Tenant-based (978) Project-based (114)	Mean age in years: 53.24 SD=12.43	Black (56.7%) White (33.8%) Asian (1.65%) American Indian/Alaskan (2.0%) Native Hawaiian/Pacific Islander (0.5%)	Male (63.8%)	Retrospective Cohort	Quantitative	Los Angeles County	Examine whether formerly homeless Veterans housed through HUD-VASH within Los Angeles County with project-based vouchers differ from those with tenant-based vouchers.
11. Chinchilla et al. (2019)	560 participants	Mean age 52.93 (SD=12.95)	Latino (16.61%) African American (57.17%) White (38.18%)	Male (93.57%)	Retrospective Cohort	Quantitative	Greater Los Angeles	Focuses on community integration among formerly homeless veterans housed in the HUD-VASH. Community integration encompasses physical, social, and psychological integration.
12. Clemzi-Allen et al. (2019)	1198 participants	Median: 50	White 42% Black 24% Latino 24% Other 10%	Female 13%	Retrospective Cohort	Quantitative	HIV Clinic at San Francisco General Hospital (SFGH)	Examine the impact of housing status and HIV primary care visit adherence on acute care utilization among patients in a large safety-net HIV clinic in San Francisco.
13. Conte et al. (2020)	65 participants	(61%) were older than 41 years	White (45%) Black/African American (31%) Latino (18%) Others (6%)	Male (77%) Female (13%) Male-to-female transgendered/transgendered woman (5%) Other gender not listed (5%)	Discrete Choice Experiment (DCE)	Quantitative	San Francisco General Hospital's HIV primary care clinic	Understand patient preferences for, relative utility of, and trade-offs between program components to help design a clinic-based care model to improve retention in care and treatment outcomes among PLWHUH.
14. Cusak et al. (2018)	135 participants				Interview, Secondary data analysis, and Focus groups	Mixed methods	N/A	Understand participants' views on the factors contributing to their exits from HUD-VASH, as well as how program staff may respond to challenges.
15. Doran et al. (2018)	2305 participants	Homeless Mean age: 49.3 (SD=13.1)	Homeless Hispanic/Latino (36.2%) Non-Hispanic Black	Homeless Female (18.7%)	Cross-sectional survey	Quantitative	N/A	Characterize alcohol and drug use in a sample of homeless vs. non-homeless ED patients.

		Not Homeless Mean age: 45.7 (SD=16.5)	(41.0%) Non-Hispanic White (11.7%) Other 25 (7.9%) Not Homeless Hispanic/Latino (58.3%) Non-Hispanic Black (20.3%) Non-Hispanic White (11.7%) Other (9.7%)	Not Homeless Female (47.8%)				
16. Doran et al. (2020)	1929 participants	Shelter Entrant mean age: 47.7 (SD=13.3) Not Shelter Entrant mean age 45.6 (SD=16.7)	Shelter Entrant Hispanic/Latino (29.5%) Non-Hispanic black (51.6%) Non-Hispanic white (10.5%) Other (8.4%) Not Shelter Entrant Hispanic/Latino (60.7%) Non-Hispanic black (17.6%) Non-Hispanic white (11.8%) Other (9.9%)	Shelter Entrant: Men (84.2%) Female (14.7%) Trans (1.1%)  Not Shelter Entrant: Men (49.2%) Female (50.4%) Trans (0.4%)	Prospective cohort	Quantitative	New York City	Determine the incidence and timing of homeless shelter entry after an ED visit among patients who are not currently homeless.
17. Footer et al. (2020)	250 participants	Average age 36 years (SD = 9)	White (66%) Black (23%) Hispanic/multiracial/other (11%)	Female (100%)	Cross-sectional Survey	Quantitative	Baltimore	Explore the basic socio-demographic and behavioral factors associated with increased exposure to policing as measured by the Police Practices Scale (PPS), and provide a scale for subsequent validation and use in the North American context, allowing for the more systematic examination of the impact of existing police patrol practices among key populations and assisting in both future intervention design and implementation.
18. Garakani et al. (2020)	581 participants	Average age of 45.8 years (SD=15.7)	White 38%/35% (M/F), Hispanic 28%/26% (M/F), African-American 30%/35% (M/F)	Male (53.2%) Female (46.8%)	Retrospective Chart Review	Quantitative	New York	Gain a better understanding of factors contributing to patients presenting for voluntary treatment in urban psychiatric institutions, including age, race, employment, insurance, and housing.



19. García et al. (2020)	19 household	Average age 37.5 years	White (69.5%) Hispanic (26%)	N/A	Focus Group	Qualitative	N/A	Improve residential security for families experiencing homelessness not only in Salt Lake County, but in other regions across the nation and even the globe.
20. Garrett et al. (2020)	154,719 participants	Mean age 42.5	Native American (2.7%) Asian (4.1%) Black (African American or African), non-Hispanic (30.6%) Hispanic (Latino) (15.4%) White, non-Hispanic (42.4%) Other (1.5%) Unknown (3.3%)	Female (50.6%)	Secondary data analysis	Quantitative	N/A	Quantified the relationship between three social and behavioral complexity factors (homelessness, a history of county jail incarceration, and substance use disorder or mental illness) and three types of health system resources (encounters with care coordination professionals, appointments that are booked but not attended by the patient (i.e., missed appointments), and excess hospital days).
21. Gwadz et al. (2016)	2307 participants	Mean age 39 years old (SD = 12.06).	African-American/Black (75%) Latino/Hispanic (23.93%)	Male (57.6%)	Interview	Qualitative	New York City	Examine individual/attitudinal-, social-, and structural-level factors associated with past-year HIV testing among heterosexuals at high risk for HIV.
22. Henstenburg et al. (2019)	91 participants	majority of participants were aged 40– 65 years old (73.6%)	White (23.1%) Black or African American (59.3%) Hispanic (15.4%) Native American (1.1%) Asian/Pacific Islander (1.1%)	Men (100%)	Cross-sectional survey	Quantitative	N/A	Describe rates of visual impairment and ocular pathology of men at a homeless shelter in a major United States city.
23. Hernandez et al. (2020)	567 participants	Mean age 43.56 (SD=12.0)	White/non-minority (56.6%) Minority (43.4%)	Male (63.5%) Female (36.5%)	Cross-sectional survey	Quantitative	Six homeless shelters in Oklahoma City, Oklahoma	Examine an intrapersonal characteristic (distress tolerance) and an interpersonal characteristic (social support) for potential associations between urban stress and depression and between urban stress and PTSD among a sample of

								adults experiencing homelessness.
24. Hsu et al. (2020)	2,729 patients	Main age group 50–59 (18.9%)	44.6% non-Hispanic black (black) patients and 30.1% Hispanic or Latino (Hispanic) patients.	Female (51.9%) Male (48.1%)	Retrospective cohort	Quantitative	Boston Medical Center (BMC)	Describe the characteristics and clinical outcomes of adult patients with laboratory-confirmed COVID-19 treated at BMC during March 1–May 18, 2020.
25. Humensky et al. (2017)	1,884 patients	N/A	N/A	N/A	Retrospective chart review	Quantitative	New York City	Examine the rate of attendance of the initial appointment in one city hospital and whether rates vary among specialty units.
26. Ingber et al. (2018)	212 participants	Median age 49 years	African American (43.4%) Caucasian (41.0%) Other (9.4%) Mixed (3.3%) American Indian (2.8%)	Male Sex (79.0%)	Cross-sectional survey	Quantitative	Houston, TX	Ascertain specific characteristics of homeless residents that might make them higher-risk for T. cruzi infection than the general public.
27. Jackson et al. (2019)	923 patients	Median age 44	Black (71.3%) Asian (1.6%) Hispanic (6.5%) Other (4.0%) White (16.7%)	Male (55.1%)	Cross-sectional survey	Quantitative	Atlanta, Georgia	Conduct a direct patient survey to describe the proportion and demographics of ED patients who have experienced homelessness within the past 12 months in an urban safety net hospital in Atlanta, Georgia.
28. Jain et al. (2018)	438 participants	No PTSD Mean age 42.8(SD=8.2) PTSD Mean age 43.5(SD=8.2)	No PTSD African-American (97%) All other (3%) PTSD African- American (98%) All other (2%)	Female (100%)	Cross-sectional survey	Quantitative	Baltimore, MD	Examine the relationship between PTSD and social network and neighborhood factors among women with a low socioeconomic status.
29. Kelly et al. (2016)	213 participants	Median age 49	African American (47.9%) White (27.2%) Mixed (14.1%) Other (10.8%)	Female (100%)	Cross-sectional survey	Quantitative	San Francisco	Determine the seroprevalence and correlates of HSV-2 infection in a high-risk sample of homeless and unstably housed women to inform current HSV-2 screening guidelines.

30. Kerr et al. (2020)	1,369 participants	Main age group 45-54 years old (33.7%)	Black (85.8%) Other/multiracial (6.0%) White (8.2%) Hispanic (2.7%)	Male (84.2%)	Cohort	Quantitative	Atlanta, Georgia	Evaluate factors associated with, and the effect policy changes and educational interventions had on, Tuberculosis (TB) screening and awareness among persons experiencing homelessness (PEH) in Atlanta.
31. Kim et al. (2019)	2348 historical records for 1462 homeless families	78.6 percent of homeless families were families whose age of a homeless family head was between 20 and 39.	73.1 percent of homeless families were families with a White family head.	86.5 percent of the data sample was female	Retrospective cohort	Quantitative	Salt Lake County	Analyze the dynamics of homeless families by identifying the physical, social, and economic characteristics of a homeless family affecting the likelihood of their decision to stay, exit, and return the shelter.
32. Kucukboyaci et al. (2018)	148 participants	N/A	N/A	N/A	Retrospective cohort	Quantitative	N/A	Analyze the complex relationship between various social indicators that contribute to socioeconomic status and healthcare barriers.
33. Lamparter et al. (2020)	138 participants	Median age of 40 for participants Homeless and non-homeless	Homeless: White (49%) African American (40%) Other (12%) Hispanic (10%) Non-Homeless: White (46%) African American (39%) Other (16%) Hispanic (21%)	Homeless: Male (76%)  Non-Homeless: Male (24%)	Retrospective cohort	Quantitative	Illinois	Assess differences in chief complaint of homeless versus non-homeless patients upon presentation to the ED. Our secondary endpoints included differences in ED utilization between the two groups in terms of length of stay, ambulance use, diagnosis, and disposition.
34. LaWall et al. (2019)	21,274 participants	No PPR: ≥65 years (54.3%)  Have PPR: ≥65 years (56.1%)	No PPR: White (21.2%) Chinese (4.5%) Filipino (16.3%) Hawaiian (13.4%) Japanese (25.5%) Other PI (6.6%) Other (8.4%) Have PPR: White (22.3%) Chinese (4.8%) Filipino (15.9%)	No PPR: Male (52.1%) Female (47.9%)  Have PPR: Male (53.4%) Female (46.6%)	Cohort	Quantitative	O'ahu, Hawai'i	Assess two social factors collected from EHRs — social isolation and homelessness — in predicting 30-day potentially preventable readmissions (PPR) to hospital.

			Hawaiian (17.8%) Japanese (23.8%) Other PI (7.2%) Other (8.2%)					
35. Li et al. (2020)	32 participants	N/A	White (38%) Hispanic/Latino (22%) African American/Black (22%) Other/Mixed Race (19%)	Female (53%) Male (47%)	Interview	Qualitative	U.S. West Coast	Examine the lesser known social and structural reasons for vulnerabilities for homelessness among women.
36. Madigan et al. (2020)	N/A	N/A	N/A	N/A	Retrospective cohort	Quantitative	Illinois	Assess the value of hospital records in augmenting information on homelessness counts at a state level.
37. Medalia et al. (2017)	91 participants	Average age 20.14 (SD = 1.03)	Caucasian (1.1%) Black/African American (71.4%) Hispanic/Latino (20.9%) Other 6.6%)	Male (43.96%) Female (56.04%)	Cohort	Quantitative	Covenant House (CH) New York City	Examine the feasibility and efficacy of cognitive interventions provided to 18–22-year-old homeless youth living in supportive urban housing.
38. Montgomery et al. (2020)	60,522 participants	Single-site: Main age group 55-64 years (42.4%) Scattered-site: Main age group 55-64 years (39.3%) Transition: Main age group 55-64 years (48%)	Single-site: Black (37.8%) White (52.6%) Other (9.6%) Hispanic (9.2%) Scattered-site: Black (44.9%) White (46.6%) Other (8.6%) Hispanic (9.0%) Transition: Black (33.6%) White (47.2%) Other (19.2%) Hispanic (6.4%)	Single-site: Female (100%)  Scattered-site: Female(12.9%)  Transition: Female (8.8%)	Secondary data analysis and focus groups	Mixed-methods	N/A	Describe the characteristics and needs of Veterans who moved into single-site HUD-VASH programs, the rationale for developing single-site HUD-VASH programs, and the services provided in single-site programs that are responsive to Veterans' needs.
39. Moxley et al. (2016)	530 participants	Women (100%)	African American (100%)	Older	Interview	Qualitative	N/A	Understand homelessness as experienced by older minority women, develop intervention strategies to facilitate the movement of the participants out of homelessness, and illuminate the women's recovery process.
40. Pedersen et al. (2018)	100 intervention (AWARE) participants	Mean age 21.75 years (SD=1.86)	Non-Hispanic White (28%) African American (23%)	Male (69%)	Cohort	Quantitative	N/A	Explore whether a demographic characteristics, homelessness severity, service usage, alcohol and

			Hispanic (26%) Multiracial/Other (23%)					other drug (AOD) behaviors, mental health, sexual risk behavior, and readiness to change AOD and sexual risk behaviors assessed prior to the first AWARE session predicted retention in the program at later sessions
41. Pratt et al. (2019)	40 participants	Mean age 50.20 (SD=9.2)	African American or Black (80.0%) Native American/Alaskan Native (2.50%) White (15.0%) More than one race (2.5%)	Male (72.5%) Female (27.5%)	Randomized trial	Qualitative	N/A	Understand the important interplay between smoking cessation and the social environment for smokers experiencing homelessness.
42. Rajabiun et al. (2020)	471 participants	Main age group 31–54 years (71.8%)	African-American/Black (45.0%) Hispanic (21.0%) White (26.1%) Other (including multiracial) (7.9%)	Cisgender male (75.0%) Cisgender female (21.2%) Transgender or Other identified (3.8%)	Cohort	Quantitative	HIV primary medical care centers	Explore the participant and program factors for achieving stable housing at six months and how these factors influence HIV health outcomes.
43. Shetler et al. (2018)	St. Francis hospital provided 3,328 care episodes  Holy Cross Hospital provided 1,927 care episodes to patients experiencing homelessness	N/A	N/A	N/A	Economic Impact	Quantitative	Florida and Connecticut	Examine the financial impact of MR on hospitals and insurers in states with varying Medicaid coverage. Urban case-study hospitals were selected from a state with Medicaid expansion under the Affordable Care Act (Connecticut) and without expansion (Florida).
44. Smith-Bernardin et al. (2017)	1,271 adults	Mean age 44.4 (SD=0.38)	White (43.6%) Latino/a (22.9%) Black (19.2%) Native American (2.7%) Other (11.6%)	Male (82.2%) Female (17.8%)	Secondary data analysis	Quantitative	San Francisco, CA	Describe the population utilizing a sobering center for public alcohol intoxication and compare between single-visit users, repeat users, and high users.
45. Stewart et al. (2018)	81 participants	Mean age 38.4 (SD=11.1)	Caucasian (60.5%) African-American (22.2%) Hispanic	Female (45.7%)	Randomized trial	Quantitative	Boston Medical Center (BMC) Boston, MA	Compare the feasibility of offering pay-by-month phones to gift card compensation as part of an ongoing randomized

			(14.8%) Other (2.5%)					controlled trial of hospitalized PWID.
46. Thompson et al. (2017)	61 participants	Mean age 19.28 (SD=1.20)	African American (36.07%) Hispanics (47.54%) Others (16.39%)	Male (41.67%)	Randomized trial	Quantitative	Northeastern crisis shelter	Evaluate a brief intervention (BI) to reduce both alcohol use and sexual risk behaviors among homeless young adults.
47. Tsai et al. (2019)	Year 2012 N = 6859 Year 2013 N = 7741 Year 2014 N = 7126 Year 2015 N = 3765 Year 2016 N = 3191	Mainly 45–60 years old	Mainly White	Mainly men	Retrospective cohort	Quantitative	N/A	Examination of changes in the needs of homeless veterans in National surveys of homeless veterans.
48. Vickery et al. (2018)	1,677 enrollees	N/A	N/A	N/A	Secondary data analysis	Quantitative	N/A	Design and test the validity of a method to identify homelessness among Medicaid enrollees using mailing address data.
49. Wendt et al. (2017)	134 Participants	AI/AN Mean age 46.9 years (SD=9.7)  Non- AI/AN Mean age 49.0 years (SD=10.0)	AI/AN: AI/AN (76.9%) > 1 race/ethnicity (23.1%) Non- AI/AN: White/Caucasian (63.4%) Black or African American (15.6%) Hispanic (9.7%) Asian/Pacific Islander/Native Hawaiian (4.9%) > 1 race/ethnicity (23.1%) Other (3.7%)	AI/AN: Male (92%)  Non- AI/AN: Male (95%)	Secondary data analysis	Quantitative	N/A	Describe the impact of religious and spiritual affiliation and practices on severe alcohol problems in a sample of homeless urban American Indian/Alaska Native (AI/AN).

Note: N/A means not available