What’s New in Homeless Health Care?
An Annotated Bibliography of Selected Research Studies, 01/01/18 – 03/31/19

I. Health Status
Travis P. Baggett

Timing and Duration of Pre- and Postnatal Homelessness and the Health of Young Children

Summary: In 2009-2015, the authors surveyed 20,571 low-income caregivers (51% African American, 31% Hispanic, 24% immigrant, 62% unmarried/unpartnered, 62% unemployed) in pediatric clinics and emergency departments in 5 US cities about self-reported timing and duration of homelessness experiences before and after the birth of the child receiving care on the day of the survey. Overall, 3.2% reported homelessness while pregnant ('prenatal') only, 3.7% reported homelessness after the child’s birth ('postnatal') only, and 3.5% reported homelessness during pregnancy and after the child’s birth ('both'). Children in the 'both' group were significantly more likely than those never exposed to homelessness to have been hospitalized, to be in fair or poor health, and to be at increased developmental risk according to a validated risk tool. Children in the 'prenatal' only and 'postnatal' only groups had a generally higher risk of these outcomes as well, but to a lesser degree than those in the 'both' group. In a secondary analysis focusing on 'postnatal' homelessness duration, the risk of selected adverse health outcomes (e.g. fair/poor health) was particularly pronounced among children exposed to 6 or more months of homelessness.

Why we chose this paper: This study expands on a growing body of work highlighting the impact of homelessness on the health of infants and children, suggesting that “there is no safe time during early development for experiencing homelessness.” While this study is limited by its reliance on cross-sectional, self-reported data, the ‘dose-response’ nature of several findings adds credibility to the associations documented and resonates with clinical experience. These findings create increased policy pressure for prevention of homelessness as an investment in child health.

Related paper:

Homelessness Contributes To Pregnancy Complications
Clark RE, Weinreb L, Flahive JM, Seifert RW Hoffberg AS, Spitzer E, Mackelprang JL, Farro SA, Brenner LA

Summary: The authors cross-linked 2008-2015 data from the Massachusetts Emergency Assistance program for homeless families with Massachusetts Medicaid claims to identify 9,124 women who were pregnant during or in the 12 months preceding their entry into the family shelter system. In comparison to a matched sample of 8,757 pregnant women who did not experience homelessness, pregnant homeless women were more likely to have drug and alcohol use disorders and selected mental health disorders. Even after controlling for these factors, homeless women were significantly more likely than non-homeless women to experience a variety of pregnancy-related complications, including 1.9-fold higher rates of early labor and hemorrhage and 2.6-fold higher rates of other complications affecting the mother’s health. In addition, homeless women made fewer ambulatory visits, had more months of receiving no care, and were more likely to use the emergency department while pregnant than non-homeless women.

Why we chose this paper: This is the most comprehensive study of maternal pregnancy complications among homeless women to date. The findings complement those of the preceding study in demonstrating that ‘prenatal’ homelessness not only adversely affects the child but also has substantial and sometimes
severe consequences for the mother. These findings create increased policy pressure for prevention of homelessness as an investment in women’s health.

Related papers:


**Knowledge and Attitudes about Pre-Exposure Prophylaxis among Young Adults Experiencing Homelessness in Seven U.S. Cities**
Santa Maria D, Flash CA, Narendorf S, Barman-Adhikari A, Petering R, Hsu HT, Shelton J, Bender K, Ferguson K

**Summary:** The authors assessed knowledge of and interest in HIV pre-exposure prophylaxis (PrEP) in a cross-sectional survey of 1,427 young adults (mean age 21 years, 37% black, 58% cisgender male, 29% LGBQ) experiencing homelessness in 7 US cities in 2016-2017. Over 84% of respondents endorsed at least one behavior that placed them at increased risk for HIV acquisition, and two-thirds of respondents perceived themselves to be at risk for HIV. Despite this, only 29% were aware of PrEP and only 4% had talked to their doctor about it. PrEP knowledge was higher among transgender participants as well as among those residing in Los Angeles and New York City. Fifty-nine percent of respondents said they would be likely or extremely likely to take PrEP if recommended by their doctor, with no significant differences by sexual orientation.

*Why we chose this paper:* Deploying evidence-based HIV PrEP in clinical practice has proven challenging in some HCH settings. This 7-city study demonstrates that PrEP knowledge is suboptimal and unevenly distributed among homeless young adults with a high burden of HIV risk factors. Concerted efforts at improving PrEP awareness in this and other high-risk subgroups of homeless individuals (e.g. those with active injection drug use disorders) could improve PrEP uptake and reduce the risk of HIV acquisition.

Related papers:


'The Thing that Really Gets Me Is the Future': Symptomatology in Older Homeless Adults in the HOPE HOME Study
Bazari A, Patanwala M, Kaplan LM, Auerswald CL, Kushel MB

Summary: The authors examined the experience and meaning of physical, psychological, social, and existential symptoms through qualitative semi-structured interviews with 20 older homeless adults (median age 62 years, 85% African American, 65% male) between 2016 and 2017 in Oakland, California. They found that 1) psychological and existential symptoms were highly distressing and often interconnected with physical symptoms, 2) symptoms were caused by a variety of traumatic or taxing experiences across the lifespan and exacerbated by aging and the daily grind of homelessness, 3) symptoms had a substantial negative impact on energy level, functioning, and psychological well-being, and 4) participants developed a number of strategies for coping with or alleviating the burden of their symptoms, including companionship and religion. Most participants believed that their symptoms would be alleviated by housing and the autonomy and peace of mind it would afford.

Why we chose this paper: This paper is an excellent companion to the quantitative HOPE-HOME study of physical, psychological, social, and existential symptoms among older homeless adults presented during last year’s workshop. The findings underscore the multidimensionality of symptoms among older homeless adults, with an emphasis on important but often overlooked non-physical domains of suffering. This study has implications for the design and delivery of health, social, and housing services for this vulnerable subset of homeless individuals.


Mortality Among Unsheltered Homeless Adults in Boston, Massachusetts, 2000-2009
Roncarati JS, Baggett TP, O’Connell JJ, Hwang SW, Cook EF, Krieger N, Sorensen G

Summary: The authors examined overall and cause-specific mortality rates over 10 years of follow-up in a cohort of 445 unsheltered homeless adults (mean age 44 years, 72% male, 67% white) first seen by the Boston Health Care for the Homeless Program (BHCHP) Street Team during 2000. The age-standardized all-cause mortality rate for this cohort was 9.8-fold higher than in the Massachusetts adult population and 2.7-fold higher than in sheltered BHCHP patients from a prior study. Alcohol use disorder, cancer, heart disease, and non-poisoning injuries were among the leading causes of death, each occurring at substantially higher rates than in Massachusetts adults. In addition, with the exception of drug overdose deaths, cause-specific mortality rates were uniformly 2- to more than 4-fold higher than for sheltered homeless adults.

Why we chose this paper: This is the first paper to comprehensively assess mortality rates specifically among those living in unsheltered homeless situations. These ‘rough sleepers’ experience health risks that exceed the already substantial risks facing those living in shelters, underscoring the important role of proactive street outreach to this vulnerable and high risk subset of individuals.

Related papers:

Aldridge RW, Story A, Hwang SW, Nordentoft M, Luchenski SA, Hartwell G, Tweed EJ, Lewer D, Vittal Katikireddi S, Hayward AC. Morbidity and mortality in homeless individuals, prisoners, sex workers, and


**Association between suicide attempts and homelessness in a population-based sample of US veterans and non-veterans**

Tsai J, Cao X


**Summary:** The authors analyzed data on 36,155 adult respondents to the 2012-2013 National Epidemiological Survey of Alcohol and Related Conditions – III to examine the association between lifetime homelessness and lifetime suicide attempts. Among all participants, individuals with lifetime homelessness histories were substantially more likely to have attempted suicide than those without homelessness histories (23.3% vs. 4.4%), and this association remained statistically significant even after controlling for demographic characteristics, mental health disorders, and substance use disorders. In subgroup analyses, the association between lifetime homelessness and lifetime suicide attempts was even stronger among veterans than among non-veterans.

**Why we chose this paper:** This paper adds to a growing body of work demonstrating a connection between homelessness and suicide, although a causal link between these two experiences has not yet been established. The exaggeration of this association among veterans introduces the question of whether this subgroup of individuals may be particularly vulnerable to the psychological trauma of homelessness.

**Related papers:**


**Hepatitis A Virus Outbreaks Associated with Drug Use and Homelessness – California, Kentucky, Michigan, and Utah, 2017**


**Summary:** The authors examined 1,521 cases of acute hepatitis A virus (HAV) infection reported to the Centers for Disease Control and Prevention (CDC) by 4 states with sustained outbreaks: California, Kentucky, Michigan, and Utah. Two-thirds of cases occurred among men. Large percentages of cases involved homelessness (34%) or drug use (48%) as risk factors, with 57% having either of these. Some 54% of cases occurred among people with an indication for HAV vaccination. In response to these outbreaks, CDC officials collaborated with state and local public health agencies to implement a variety of infection control measures directed toward high-risk populations and settings (e.g. drug treatment facilities, syringe exchange programs, and homeless shelters and encampments).
Why we chose this paper: This paper illustrates the indispensible value of epidemiologic investigation in guiding swift and comprehensive public health responses to emerging infectious outbreaks. In October 2018, the Advisory Committee on Immunization Practices voted unanimously to include homelessness as an indication for HAV vaccination, underscoring the importance of continued efforts to promote HAV vaccination in HCH clinic settings.

Related paper:

**Subsistence difficulties are associated with more barriers to quitting and worse abstinence outcomes among homeless smokers: evidence from two studies in Boston, Massachusetts**

**Summary:** The authors examined data from a 2014 cross-sectional survey of 306 homeless smokers (mean age 48 years, 75% male, 64% non-white) and a 2015-2016 randomized controlled trial (RCT) involving 75 homeless smokers (mean age 46 years, 45% male, 59% non-white) at Boston Health Care for the Homeless Program. In both studies, participants were asked about past-month difficulties finding food, shelter, clothing, and other subsistence needs. Among survey participants, those with greater subsistence difficulties endorsed more barriers to quitting smoking. Among RCT participants, greater subsistence difficulties at baseline were associated with a lower likelihood of biochemically-confirmed smoking abstinence over 8 weeks of follow-up in a dose-response fashion (see figure).

Why we chose this paper: This paper illustrates the impact of competing survival priorities specifically, and of the social determinants of health more broadly, on health-oriented behaviors among homeless individuals. The findings suggest a role for assessing and addressing competing survival needs when attempting to intervene upon health behaviors in homeless health care settings, particularly when targeting behaviors such as smoking that may be perceived by patients as less immediately harmful or problematic and therefore less of a priority than other needs.

**Related papers:**

Cannabis use is associated with lower rates of initiation of injection drug use among street-involved youth: A longitudinal analysis

Summary: The authors examined whether daily cannabis use was associated with progression to injection drug use in a longitudinal cohort of 481 street-involved youth (median age 21.5 years, 69% male) with prior non-injection drug use experience in Vancouver, Canada. At baseline, 47% of participants reported daily cannabis use. Over a median of 22 months of follow-up, participants who used cannabis daily were 34% less likely to initiate injection drug use. Subanalyses found that this association was driven by a 45% reduction in the likelihood of stimulant injection initiation, whereas no significant effect (either positive or negative) was found for opioid injection initiation.

Why we chose this paper: This paper will undoubtedly fuel ongoing controversy about the implications of cannabis legalization and its potential impact on other substance use. The findings challenge the “gateway” hypothesis but should be placed in context: participants universally had non-cannabis drug involvement at baseline by virtue of the cohort inclusion criteria. Additionally, potential harms of daily cannabis use in this sample of youth and young adults was not assessed. Finally, the findings stand in contrast to those of the cross-sectional study listed below, where non-medical cannabis use (but not medical cannabis use) was associated with an increased likelihood of stimulant and opioid use.

Related paper:

The effect of forensic events on health status and housing stability among homeless and vulnerably housed individuals: A cohort study
Walsh C, Hubley AM, To MJ, Norena M, Gadermann A, Farrell S, Hwang SW, Palepu A

Summary: The authors examined the association between forensic events (arrest or incarceration) and housing instability and physical and mental health status in a longitudinal cohort of 1,173 homeless and vulnerably housed adults in Vancouver, Toronto, and Ottawa, Canada. At baseline, 38% reported a forensic event in the preceding year. Over 4 years of follow-up, participants who experienced forensic events had significantly more residential moves but did not differ from participants without forensic experiences with respect to physical or mental health status.

Why we chose this paper: This paper extends previous observations in demonstrating the adverse impact of arrest and incarceration on residential stability. The lack of association between forensic events and health status during follow-up is surprising but should not overshadow the large body of evidence demonstrating the dramatically increased risk of death following prison release. Critical time interventions focusing on the post-release / post-forensic period could help to mitigate both the residential and health-oriented risks associated with these events.

Related papers:


II. Health Care / Interventions
Katherine Diaz Vickery

EMS Can Safely Transport Intoxicated Patients to a Sobering Center as an Alternate Destination
Smith-Bernardin SM, Kennel M, Yeh C

Summary: This paper evaluated the ability of the nurse-staffed San Francisco Sobering Center to operate as a safe alternative destination to the emergency department (ED) for low-risk adults with alcohol intoxication. They examined more than 11,500 visits from over 3,200 adults over 3 years. Nurses and doctors systematically reviewed cases to determine reasons for transfer to the ED if that occurred. Most people stayed at the sobering center for 6-8 hrs. Case reviews found 35% of referrals came from emergency medical services (paramedics), 12% from the ED, 23% from a mobile van service, and 9% from the police. Just over 500 patients, 4% of the total, were transferred to the ED. Reasons for transfer included elevated pulse (26%), alcohol withdrawal (19%), pain (19%), vomiting (13%), and altered mental status (13%). One person died at the sobering center of cocaine overdose during this period. Client request was included in reasons for transfer to the ED. Most clients (77%) had more than one clinical indication for transfer to the ED. Social workers and peer navigators offer care coordination, psychiatric referral, and housing support for willing clients. Authors conclude the sobering center is a safe alternative to the ED for low-risk adults.

Why we chose this paper: Little data is available about the safety of sobering centers. This study suggests they may offer a client-centered, cost-effective alternative to the ED. This study offers operational details and research findings to help other locations explore creation of nurse-staffed sobering centers.

Related paper:

Treatment of latent Mycobacterium tuberculosis infection with 12 once weekly directly-observed doses of isoniazid and rifapentine among persons experiencing homelessness
Nwana N, Marks SM, Lan E, Chang AH, Holcombe M, Morris SB

Summary: Tuberculosis disproportionately impacts people experiencing homelessness in the U.S. including in its latent (dormant) form. Treatment of latent tuberculosis has historically involved 9 mo. of medication, but less than half of people finished all their medicine. Recent research suggests a new, shorter tuberculosis treatment (two medications given once per week for 12-weeks) works as well and many more people complete it. This study examines how well this shorter medication course worked for people experiencing homelessness. They found more than three-fourths (76.6%) completed treatment; 14% were lost to follow-up. Almost 5% of people stopped taking the medicine for adverse events and another 5% refused treatment.
**Why we chose this paper:** A shorter course of weekly medication offers an opportunity for improved treatment of latent tuberculosis among people experiencing homelessness.

**Related papers:**


**PTSD Symptoms, Vicarious Traumatization, and Burnout in Front Line Workers in the Homeless Sector**
Waegemakers Schiff J, Lane AM

**Summary:** High rates of trauma among people experiencing homelessness can have an impact on providers and staff. There are now over 130,000 workers in homelessness services in the U.S. and an estimated equal number in ancillary services. Canadian researchers examined the background and demographic characteristics of homeless service providers and measured their levels of vicarious trauma, post-traumatic stress disorder (PTSD), and burnout. They administered a survey to 23 organizations in two major cities collecting 472 completed surveys. They found 51% of service providers had a 2-year college degree or less, 35% had a bachelor’s degree or equivalent (most in the liberal arts), and 13% had a graduate degree. They found average levels of burnout, vicarious trauma, and compassion satisfaction to other helping professions. 24% of respondents had burnout or vicarious trauma so high it suggested they should step back from their current duties. 33% experienced traumatic stress suggestive of PTSD, much higher than emergency responders and others. Both burnout and vicarious trauma predicted higher scores on the PTSD screen. Authors conclude that trauma-informed care ought to include considerations for staff and that interventions at the organizational level are needed to determine how to lessen the high rates of trauma and burnout among homeless service providers.

**Why we chose this paper:** There was an increase in 2019 of scholarship about the wellbeing, burnout, training, and education of homeless service providers. This is an important consideration as we all work to build and maintain a workforce of empathetic, client/patient-centered service providers. Knowing risk factors for burnout may support system-wide practices to support employee wellbeing

**Pediatric Emergency Department Visits for Homelessness After Shelter Eligibility Policy Change**
Stewart AM, Kanak MM, Gerald AM, Kimia AA, Landschaft A, Sandel MT, Lee LK

**Summary:** Massachusetts has guaranteed shelter to families and children since 1983. In 2012 new regulations required documentation of homelessness before being shelter-eligible and included spending the night in the emergency department (ED). Authors looked at visits to the ED at Boston Children’s Hospital before and after these regulations (2010 to 2016). They found ED visits for homelessness increased 13-fold during this period while the number of children experiencing homelessness was 1.4 times greater. After the regulations, children were more than three times as likely to present to the ED with no medical complaint. Payment for ED visits (average: $557/visit) cost more than 4 times the cost of shelter.

**Why we chose this paper:** This paper offers a simple and powerful description of ED visits before and after a policy change. It illustrates the presumably unintended consequence of a policy meant to protect children and families. The findings demonstrate the need to consider impacts of housing policies across sectors like health care and the risk of creating programs that medicalize conditions like homelessness.

**Related paper:**
Effect of a Computerized Alert on Emergency Department Hepatitis A Vaccination in Homeless Patients During a Large Regional Outbreak

Castillo EM, Chan TC, Tolia VM, Trumm NA, Powell RA, Brennan JJ, Kreshak AA


**Summary:** San Diego experienced a substantial and prolonged Hepatitis A virus outbreak in 2017. Approximately half of cases occurred among people experiencing homelessness. Vaccination is a safe and effective method of protection from the virus. The County public health department asked San Diego emergency departments (EDs) to participate in vaccination efforts during the outbreak. This paper examined the impact of an alert in the medical records system of one hospital to remind providers to give people experiencing homelessness the vaccine. They found a significant increase in the number of vaccinations given. No vaccines were given in a historic control period, 23 in the pre-alert outbreak period, and 465 when the alert was used during the outbreak.

**Why we chose this paper:** Participation of EDs in vaccination campaigns during outbreaks is less common than other sites. This paper suggests they are a feasible and effective location to reach people experiencing homelessness. Alerts in health records can be an effective way to prompt new behavior among health care providers. Alerts tied to reliable indicators of homelessness offer potential to shape practice for this population.

**Related paper:**

Dual Use and Hospital Admissions among Veterans Enrolled in the VA’s Homeless Patient Aligned Care Team

Trivedi AN, Jiang L, Johnson EE, Lima JC, Flores M, O’Toole TP


**Summary:** This paper compared the rates of hospitalization among Veterans experiencing homelessness and enrolled in a Homeless Patient Aligned Care Team (H-PACT) who mostly use the Veteran’s Administration (VA) clinics to those who use non-VA clinics. This was possible because of a new set of data that linked VA records to Medicare records. In total they included 1,725 Veterans in their study. They found that this group had many outpatient visits (50-60 per year), mostly at the VA. Veterans who got care at non-VA clinics were 10-times more likely to have a Medicare-financed hospitalization. This was especially true if they had many outpatient visits. Veterans who split care between VA and non-VA settings are at high risk of hospitalization.

**Why we chose this paper:** This paper, and another from this same special issue of *Health Services Research*, are the latest examples of the important work being done at the VA to understand and combat homelessness. Merging VA and Medicare records was an important step in more fully understanding the health, health care use, and costs of Veterans experiencing homelessness.

**Related papers:**

**Advance Care Planning for Older Homeless-Experienced Adults: Results from the Health Outcomes of People Experiencing Homelessness in Older Middle Age Study**

Sudore RL, Cuervo IA, Tieu L, Guzman D, Kaplan LM, Kushel M

*Summary:* Researchers in Oakland, CA are following a group of 350 adults with experience of homelessness aged 50 and older (HOPE HOME study). This paper describes surveys of 275 of these adults about advanced care planning which they define as “a process that supports adults at any age or stage of health in understanding and sharing their personal values, life goals, and preferences regarding future medical care.” This included questions about surrogate decision-makers, or trusted people who could make medical decisions for them if they were ever too ill to make their own decisions. They found 61% of people had surrogate decision makers. More than one in three (35.8%) had thought about advanced care planning, but only 21.5% had discussed their wishes for medical care overall, mostly with family (15.7%), and very few with a healthcare worker (4%), friend (3.3%), or social worker (1.1%). Eighteen percent of people had formal documentation of a surrogate decision-maker and 8.8% had completed an advanced care directive. Those most likely to have completed advanced care directives were black, had adequate health literacy, had 1-6 confidants (compared to none), and had 3 or more chronic conditions. They recommend forms to homeless service providers found here: www.prepareforyourcare.org.

*Why we chose this paper:* As the U.S. homeless population ages more rapidly than their housed peers, considerations of the role of health care and social service providers in advanced care planning will be increasingly important. It may surprise providers to know that more than half of homeless people (61%) have a trusted surrogate decision-maker. The fact that so few people in this study had discussed their advanced care plans with healthcare or social workers quantifies a major opportunity for improved, whole-person care.

*Related papers:*  


**Health Care Utilization and Expenditures of Homeless Family Members Before and After Emergency Housing**

Clark RE, Weinreb L, Flahive JM, Seifert RW
Summary: This paper describes use of healthcare among adults and children in Massachusetts before and after entry into emergency shelter. By merging Medicaid billing records (claims) with housing records, authors described patterns of emergency department (ED) and hospital visits and total costs. Their paper included over 44,000 children and 34,783 adults most (87-88%) of whom experienced one episode of homelessness but some (12-13%) who experienced two or more episodes. They found rising rates ED and hospital use surrounding entry into emergency shelter especially among adults. Rates gradually lowered after shelter entry. Authors note limitations in housing data that did not allow them to link people across families.

Why we chose this paper: This paper demonstrates innovative data-linkage that, while still limited, represents a significant advancement in the study of how health and unstable housing interact over time. Furthermore, it provides better understanding of the needs of families and children experiencing homelessness.


Continuity of Care among People Experiencing Homelessness and Mental Illness: Does Community Follow-up Reduce Rehospitalization
Currie LB, Patterson ML, Moniruzzaman A, McCandless LC, Somers JM

Summary: The Vancouver At Home study is one of five cities participating in Canada's recent large-scale test of the impact of Housing First on adults who are homeless with mental illness. This group is known to visit the hospital often. This paper focuses on a whether or not outpatient follow-up after hospitalization helps to prevent re-hospitalization in the 12 mo. after the first hospital visit. It is commonly believed, and has been shown in non-homeless populations, that outpatient follow-up soon after hospital discharge can prevent re-hospitalization. However authors found that in their sample of 433 people in Vancouver, more than half of the eligible sample (53 percent; n = 128) were re-hospitalized within 1 year following an index hospital discharge. Neither outpatient medical services nor laboratory services within 7 days following discharge were associated with a significantly reduced likelihood of rehospitalization within 2, 6, or 12 months. Authors conclude, there is "a need to address housing as an essential component of discharge planning alongside outpatient care."

Related papers:


How to help homeless youth suffering from first episode psychosis and substance use disorders? The creation of a new intensive outreach intervention team
Doré-Gauthier V, Côté H, Jutras-Aswad D, Ouellet-Plamondon C, Abdel-Baki A
Psych Research 2019;273. DOI: 10.1016/j.psychres.2019.01.076
Summary: Canadian authors focused on youth who are homeless suffering from their first episode psychosis and addiction in this study. They designed an intervention with emphasis on facilitating the early exit out of homelessness, access to care, and improving psychosis and addiction outcomes. Their intervention followed the first 42 participants in their new intensive outreach intervention team in Montreal from 2012-2015. The outreach team included an early psychosis intervention service and people who specialized in Addiction Services. They assessed how the youth were doing at multiple time points, clinically (mental health symptoms), functionally (work/study, housing autonomy) and with regard to substance use disorder (severity/control). They also measured acute services use (hospitalizations, emergency room visits). Despite significant challenge when they started the intervention (eg. cluster B personality, substance use disorders, legal problems, childhood trauma and lower education level), the majority reached housing stability after 6 months and their functioning and illness severity improved with time.

Why we chose this paper: This focused intervention on homeless youth with the specific combination of first episode psychosis and substance use is an example of what targeted programs may be effective. This targeted program may be particularly effective at preventing longer-term homelessness because of its focus on this specific high risk group. It also offers an important of an “open study” that was done very carefully as a new program was being designed and started.

Related paper:

Other interesting health care / intervention papers this year:

Smoking cessation among people who are homeless:


Substance use among people who are homeless:


III. Housing
Stefan G. Kertesz

Impact of supportive housing on substance use-related health care utilization among homeless persons who are active substance users
Miller-Archie SA, Walters SC, Singh TP, Lim S
Summary: The authors compared homeless individuals with substance use disorders (SUD) (n=827) placed in supportive housing to individuals not placed in supportive housing (n=731) in regarding 3 forms of health care utilization related to substance use. All individuals met criteria for chronic homelessness, and all had a clinician-verified SUD diagnosis. They were not in treatment at time of placement. Statistical modeling was used to try to make the groups as comparable as possible, but they did not differ greatly in regard to clinical or social characteristics. Two years after eligibility, the placed persons had

- lower likelihood of visiting the emergency department for substance use related diagnoses (20% vs 32%) and
- lower likelihood of hospitalization for SUD (26% vs 36%), and
- greater likelihood of using substance use disorder outpatient treatment (47% vs 39%).

All these differences held up in statistical models to address such differences as existed between these two groups.

Why we chose this paper: This paper suggests that housing interventions may alter the type of health care utilized for addictive disorders away from emergency/acute care toward formal treatment. The differences found were not large, however. It could be hoped that more robust changes emerge with further services built around patients, communities and their aspirations.

Geriatric conditions among formerly homeless older adults living in permanent supportive housing.
Henwood BF, Lahey J, Rhoades H, Pitts DB, Pynoos J, Brown RT

Summary: The authors completed interviews and geriatric assessments among 237 adults aged 45 and older who were housed through permanent supportive housing agencies in Los Angeles. Individuals had an average age of 58; were mostly male (87%) and African American (61%); and had a median lifetime homeless experience of 5 years prior to housing. Fully 58% rated their health as poor or fair and 26% reported symptoms of alcohol or drug problems.

- 42% reported difficulty with activities of daily living
- 57% reported a fall
- 51% reported mobility problems.
- Between 20% and 44% met criteria for cognitive impairment

Why we chose this paper: Individuals experiencing chronic homelessness are over 50 on average, and thus housing programs prioritizing chronically homeless persons increasingly serve a population that is older chronologically and biologically. This study underscores that service for formerly homeless persons in permanent supportive housing will require expertise, time, and potentially services that reflect elements of the expertise utilized by geriatric specialty teams, including occupational therapy and in-home assessment.

What interventions work best for families who experience homelessness? Impact estimates from the Family Options Study.
Gubits D, Shinn M, Wood M, Brown SR, Dastrup SR, Bell SH

Summary: The authors analyze results from a 2282-family study conducted across 12 cities. The families were randomized to usual care, or expedited access to

- long-term rental support, or
- short-term rental support with case management and financial support (often according the “rapid rehousing model”), or
- transitional housing, supervised housing up to 30 months case management

On most outcomes, the long-term rent subsidy group attained better outcomes than usual care, and the other two interventions failed to do better than usual care. For example, the use of emergency shelters in
the past 6 months, as reported at 20 months, occurred for 27% of usual care vs 12% of long-term rental subsidies. Some of the significant differences favoring long-term rental support were modest (number of schools attended by a child was 1.73 vs 1.94, significant statistically at p<0.01). Actual intervention costs per family per month were highest for persons assigned transitional housing ($2706), versus $1172 for long-term rent subsidies, $880 for short-term rent subsidies, and $4819 for families in emergency shelters. The overall costs incurred by families in usual care with no special offer of housing was $41,000 over 37 months and 9% more if offered long-term rent subsidies.

Why we chose this paper: There have been few randomized trials focused on family homelessness. This paper provides a nice overview of the major findings. In essence long-term rental subsidies cost a bit more than the typical services otherwise offered, with notable benefits for housing and social functioning.

Housing versus treatment first for supportive housing participants with substance use disorders: a comparison of housing and public service use outcomes
Hall G, Walters S, Gould H, Lim S

Summary: The authors compared service use after housing placement in New York City, between two groups that were chronically homeless and had clinician-verified substance use disorder diagnoses, without severe mental illness:
- “Active users”: 512 who were not in any addiction treatment
- “Treatment participators”: 1425 who had completed treatment or had made progress in treatment for substance use disorder

Both groups achieved lengthy time housed (mean 1145 days for treatment participators, 1261 for active users). The likelihood of discharge from housing was somewhat higher for the treatment participators (hazard ratio, adjusted for other characteristics, 1.43, 95% CI = 1.17-1.73). However, the treatment participators who left were a bit more likely to have left on voluntary basis (35%) compared to active users (23%), and more likely to proceed to their own apartment (17% vs 3%), compared to active users. Treatment participators had lower likelihood of going to jail compared to active users.

Why we chose this paper: This is not a randomized trial, but the observation is intriguing. It suggests that supportive housing programs can, often but not always, accommodate individuals who have known substance use disorder and have not entered addiction treatment before housing. It also provides support for the view that persons who are treated or in treatment at time of housing may show less difficulty in terms of jail time after housing, or discharge on involuntary basis. It thus tends to reaffirm both sides of common claims made on behalf of Housing First.

Long-term housing subsidies and SSI/SSDI income: Creating health-promoting contexts for families experiencing housing instability with disabilities
Glendening ZS, McCauley E, Shinn M, Brown SR

Summary: It is estimated that 21% of adults in sheltered homeless families have a disability, but there has not been much effort to assess whether homeless families regularly obtain federal disability benefits in the process of being helped with housing. This study looked at over 2000 homeless families in a 12-community trial. It found that 34.1% reported some disability in the family. The disability was reported for a child under age 16 in 19.9%, and an adult other than the one being interviewed in 9.2%. At follow-up of 20 months, the presence of disability in the family was associated with fewer work hours, greater economic distress and greater food insecurity. At baseline, 27.9% of the respondents with disability reported SSI/SSDI income. At 20-month follow-up, 36.9% did, a modest increase. If there was a disability in the family at baseline, then SSI/SSDI income was associated with 50% lower likelihood of returning to shelter.
Why we chose this paper: This study serves as a reminder that disability potentially meriting federal benefits is common in homeless families, including the children in such families. To the extent that federal funds for disabled individuals could secure housing, they should be sought. The study suggests that even in the context of a multisite randomized trial, the gains in access to these benefits were quite modest.

Systems change in the context of an initiative to scale up Housing First in Canada

Summary: A large randomized trial of Housing First versus Usual Care was conducted in Canada from 2009 to 2013, and obtained good results. Afterward, technical assistance was offered to 18 Canadian communities to support adoption of Housing First (2013-2016). The authors combined interviews, focus groups and field notes from their own technical assistance to analyze what favored or impeded adoption of Housing First at the community level, using what they termed a “systems change framework.” The perspective assumes that if Housing First is to make a difference, communities have to define the problem, assess how their current systems as potential contributors, and develop interactive community strategies to address it. For successful communities, there were changes in the mindset across multiple agencies about Housing First, and sometimes new agencies and collaborations set up. The communities named Housing First as a priority goal, and in some instances allocated new subsidies and set up new systems to coordinate who should receiving housing. Observers noted that federal and provincial policies could be helpful, or less so. For example, provincial and federal policies limited the ability to access Assertive Community Treatment teams.

Why we chose this paper: Unlike many typical health interventions, housing for persons experiencing homelessness is a community endeavor in which any single provider or agency is dependent on changes in perspective at the community level. Its success depends in good part on tasks that clinicians don’t always learn in school: engagement of community leaders, politicians, funders, social service agencies, and more. This study does not prove that one of these components is crucial. However, it provided a structured way to consider “systems change” for housing.

National Utilization Patterns of Veterans Affairs Homelessness Programs in the Era of Housing First
Tsai J, Byrne TH

Summary: The authors categorized patterns of service utilization by homeless Veterans who had engaged homeless assistance through the United States Department of Veterans Affairs between 2014 and 2017, tracking the use of a range of different VA services for 61,040 Veterans. Using statistical techniques, they identified five common patterns. About 59% engaged in “brief program use”, which involved relatively short usage of any single program, more often a rapid housing assistance program known as Supportive Services for Veteran Families (SSVF). Heavy use of VA’s permanent supportive housing was found among 21%, and 6% made heaviest use of a transitional housing program known as Grant and per Diem. Heavy use of multiple programs characterized 3%, while use primarily of rapid rehousing characterized 10%. Many of the brief program users (63%) and transitional program users (43%) proceeded to their own permanent housing in the absence of VA support.

Why we chose this paper: The Department of Veterans Affairs is somewhat unique in both the richness of its services across the United States and the built-in access to a health care system. However, this study may have resonance outside of Veterans’ care in part because it shows that often the exit from homelessness does not depend on long-term permanent supportive housing, but on re-engagement with temporary forms of assistance. The data do not prove that such services alone are sufficient for all persons, but they are a hint about the diversity of pathways taken by people leaving homelessness behind.
The elusive goal of social integration: A critical examination of the socio-economic and psychosocial consequences experienced by homeless young people who obtain housing
Thuilien NS, Gastaldo D, Hwang SW, McCay E

*Summary:* The authors studied the experiences of 9 Canadian homeless youth aged 19 to 24, each of whom moved from a youth shelter to permanent housing. They did this through direct observation, hanging out, questionnaires and interviews. They coded their data with reference to a framework that consider a range of upstream social determinants of health (economic policies, social class) and downstream social determinants (material circumstances of the individual, behavioral and other characteristics of the individual). Their report shows that these formerly homeless youth remained outsiders in their society, far from the mainstream. And yet they were also less able to access services since they were not in shelters. Their finances were precarious, and they felt alone, bored, or trapped. Poverty, low education and underemployment were not “ended” by housing. The jobs for these youth were low-wage positions with very high economic vulnerability.

*Why we chose this paper:* While adult clinicians in HCH programs are familiar with health problems and housing, the social challenges of isolation may not be as easy to consider simultaneously. This paper provides a reminder of what life is like after a formerly homeless young person gains an apartment. Isolation and risk of return to homelessness remain threats.

A Randomized Controlled Trial of a Rapid Re-housing Intervention for Homeless Persons Living with HIV/AIDS: Impact on Housing and HIV Medical Outcomes
*AIDS Behav* 2019. doi: 10.1007/s10461-019-02461-4

*Summary:* There have been prior studies suggesting that control of the human immunodeficiency virus (HIV) is considerably more likely if a person experiencing homelessness can obtain housing. Data have not been entirely consistent, however. These authors recruited and randomized 225 adults to a an “enhanced program” focused on rapid rehousing with intense case management and rental help, versus referral to more standard organizations in the network of New York City. Actual attainment of permanent housing was fairly slow in both trial arms. However, 35% of the “enhanced program” was housed by 6 months, compared to 18% for usual care. At time of study start, the “enhanced program” group had worse viral control (28%) compared to usual care (52%), despite the effort to randomly assign the two groups. After the study, they had attained equal viral control (see figure). The interaction term of trial arm by time indicated a much more robust gain for persons in the “enhanced program.”

*Why we chose this paper:* It has been difficult to prove that permanent housing delivers health benefits. This may be due to non-housing factors that influence the course of many human conditions. However, HIV offers a particularly interesting situation where control of a virus depends substantively on whether a life is organizeable enough to take one or two pills a day. That likely is easier if a person has their own home.
Despite the potentially odd-looking finding (see graph), the paper suggests that housing helps people get control of HIV.

Permanent Supportive Housing: Evaluating the Evidence for Improving Health Outcomes Among People Experiencing Chronic Homelessness
National Academies of Sciences, Engineering, and Medicine
Committee on an Evaluation of Permanent Supportive Housing Programs for Homeless Individuals
Washington DC: National Academies Press, 2018

Summary: A National Academies consensus panel on Permanent Supportive Housing sets the stage for future initiatives, and most notably for research. Its authority derives from the credibility of the experts who serve the panel, and the breadth and depth of its review.

- Among this panel's findings are the truism that permanent supportive housing improves housing outcomes.
- They state the data are not compelling for health, save for HIV/AIDS. The authors do affirm that housing is a necessary platform for health-related activity.
- The panel concluded that there is insufficient evidence that Permanent Supportive Housing saves health care costs or is even cost-effective. This last point is because the randomized trials lacked consistent measure of effectiveness, although this reviewer remains puzzled by that statement. The report cautions against an argument that housing homeless people will guarantee net cost savings to society.
- The authors offer a note of caution about choosing individuals to housing based on the types of "coordinated assessment tools" used in many communities such as VI-SPDAT. Put simply, there is a lack of evidence to support such tools as the optimum ways of allocating housing.

Why we chose this paper: The mere existence of a National Academy of Medicine report on permanent supportive housing report is important and will provide future grant proposals and book chapters with an obvious document to cite. Beyond that, the findings temper some claims that reach the media.