CHRONIC MEDICAL ILLNESS AND THE HOMELESS

Homelessness continues to be among the most important social problems facing America's urban areas. Since the 1980's a significant body of research has documented the multiple social, psychological and health problems that co-exist among homeless populations. The evidence documenting the extent and impact of chronic medical illnesses within this population is extensive.

Among people experiencing homelessness, 31-46% report having a chronic medical problem.[1,2,3] Substance abuse is also common and is estimated to affect 40-60% of the population.[4] Among those with substance abuse problems, the prevalence of chronic medical illnesses is even higher, estimated at 53%.[5] Prevalence of particular diseases among homeless people range widely depending on the sub-population assessed. However, high prevalence of HIV at 9-19%[6,7,8], hypertension at 30-60%[9,10,11], and latent TB infection at 32-43%[12,13] have been consistently documented.

In order to address the challenges of living on the streets with medical and substance abuse conditions, homeless people use extraordinary amounts of human services. Homeless adults are hospitalized 4-5 times the rate of the general population for medical issues and 100 times more frequently for psychiatric causes.[14,15] Even when compared with other low-income populations, hospitalization rates are 2.7 times

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[3] Burt M et al. Homelessness: Programs and the People They Serve: Findings of the National Survey of Homeless Assistance Providers and Clients. Prepared for the Interagency Council on the Homeless. Dec 1999.
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[5] Burt M et al. Homelessness: Programs and the People They Serve: Findings of the National Survey of Homeless Assistance Providers and Clients. Prepared for the Interagency Council on the Homeless. Dec 1999.
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[12] Zolopa AR et al. HIV and Tuberculosis infection in San Francisco's homeless adults. JAMA 1994; 272(6): 455-61.
[13] McAdam JM, Brickner PW et al. The spectrum of tuberculosis in a New York City men's shelter clinic. Chest 1990. 97:798-805.
[14] Victor CR et al. Use of Hospital Services by Homeless Families in an Inner London Health District. BMJ 1989;299:725-27.

higher.[16] Inpatient lengths of stay for medical issues have also been consistently found to be longer than the general population by more than 1 day.[17] [18] Homeless patients and substance abusers have also been found to be the heaviest utilizers of emergency department services.[19] **These increased rates of hospitalization and increased lengths of stays have a significant impact on urban hospitals. Studies at Boston City Hospital and San Francisco General Hospital found that 26-28% of all inpatient admissions at these public hospitals were for patients experiencing homelessness.[20] [21] A national study of all VA healthcare facilities found that homeless individuals occupied 26% of acute care beds.[22]** The excess hospitalizations, which occur with people experiencing homelessness, have a profound impact on these publicly funded health institutions.

Despite the fact that people experiencing homelessness use a tremendous amount of medical services, they continue to have poor health outcomes. Numerous studies have documented that the mortality rates among homeless people are 3-4 times greater than the general population.[23] [24] [25] [26] **The average age at the time of death has consistently been in the mid-forties.[27] [28] The presence of chronic medical conditions such as congestive heart failure, cardiac arrhythmias, thromboembolic disease, HIV/AIDS, and chronic diseases of the lungs, kidney and liver have all been documented to further increase the risk of death.[29]**

Interventions to improve the health of homeless individuals must address issues of substance abuse. Although rates of alcohol and substance abuse vary depending on

[15] Martell JV et al. Hospitalization in an Urban Homeless Population: the Honolulu Urban Homeless Project. Annals of Int Med 1992; 116:299-303.
[16] Braun R et al. Utilization of Emergency Medical Services by Homeless Adults in San Francisco: Effects of Social Demographic Factors. AHSR & FHSR Annual Meeting Abstracts. 12:114.
[17] Salit SA et al. Hospitalization costs associated with Homelessness in New York City. NEJM 1998. 338(24):1734-1740.
[18] Martell JV et al. Hospitalization in an Urban Homeless Population: the Honolulu Urban Homeless Project. Annals of Int Med 1992; 116:299-303.
[19] Kushel MB et al. Emergency room use among the homeless and marginally housed: Results from a community-based study. Public Health Reports 2002. 92(5): 778-784.
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[21] Kushel MB et al.
[22] Rosenheck R, Kizer KW. Hospitalizations and the Homeless. NEJM 1998; 339:1167.
[23] Hwang SW et al. Causes of death in homeless adults in Boston. Annals of Internal Medicine 1997. 126(8):625-8.
[24] Hwang SW et al. Mortality among men using Homeless Shelters in Toronto, Ontario. JAMA 2000. 283(16):2152-57.
[25] Barrow SM et al. Mortality among Homeless Shelter Residents in New York City. American Journal of Public Health 1999. 89(4):529-34.
[26] Barrow SM et al. Mortality among Homeless Shelter Residents in New York City. American Journal of Public Health 1999. 89(4):529-34.
[27] Hwang SW et al. Causes of death in homeless adults in Boston. Annals of Internal Medicine 1997. 126(8):625-8.
[28] Hanzlick R et al. Health care history and utilization for Atlantans who died homeless. Journal of the Medical Association Georgia 1989. 78(4):205-8.
[29] Hwang SW et al. Risk Factors for Death in Homeless Adults in Boston. Arch Intern Med 1998. 158: 1454-60.

the particular homeless population examined, rates of 50% or greater are common. Rates among homeless men in Baltimore have been documented to be as high as 85%.[30] In Chicago, 34% of homeless people self-reported that substance abuse was a cause of their homelessness.[31] For the long term homeless, the rates are considerably higher. For instance, among homeless people discharged from Chicago hospitals to respite care 80% have substance use issues.[32]

Not only is substance abuse a common problem among homeless populations, but there is evidence to suggest that homelessness worsens the severity and health impact of substance abuse. One study, which effectively documented this linkage, was by Safaeian et al, which followed a cohort of IV drug users in Baltimore prospectively during periods of homelessness and housing. They found that, in addition to the rates of HIV/AIDS being 4 times higher among IV drug users who were homeless, individuals who became homeless had a two fold increase in the number of high risk behaviors in which they engaged. When they became housed, the frequency of high-risk behaviors decreased, thus suggesting that homelessness itself contributes to the worsening health effects of substance abuse.[33]

Although numerous studies during the last twenty years have documented the poor health outcomes and heavy service utilization of homeless people in the United States, there have been few studies, which have shown that these can be improved by intervening with housing options.[34] However, recently, there has been increasing evidence that providing housing and intensive case management to homeless people with severe mental illnesses has a dramatic impact. There have now been 10 randomized trials, which have assessed the effectiveness of case management for mentally ill homeless individuals. Eight of the ten have shown case management to be effective in reducing days of homelessness and psychiatric symptoms, and/or improving treatment retention.[35]

Case management then may be a significant feature in efforts to address the needs of the homeless. Orwin has demonstrated that case management can increase retention rates of homeless adults in substance abuse treatment, a population for which retention is a particular challenge. Taken together with the work of Drake, which showed the positive impact of integrated, multidisciplinary treatment on days of homelessness and Milby which implies that housing may improve substance abuse treatment effectiveness, interventions that deliver case management and housing services through integrated systems may have significant impact on substance abuse treatment and overall health outcomes in the homeless population.

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[30] Breakey MB et al. Health and Mental Health Problems of Homeless Men and Women in Baltimore. JAMA 1989. 262(10):1352-57.
[31] Chicago Continuum of Care Research – 2002. University of Illinois at Chicago.
[32] Interfaith House Report – 2002-2003. Chicago
[33] Safaeian M et al. Longitudinal Correlates of Homelessness in Injection Drug Users in Baltimore. APHA National Meeting, Atlanta 2001.
[34] Buckley R, Bigelow DA. The multi-service network: reaching the unserved multi-problem individual. Community Mental Health Journal. 28(1):43-50, Feb 1992.
[35] Morse G. A Review of Case Management for People who are Homeless: Implications for Practice, Policy, and Research.

Studies have also looked at the impact of providing permanent supportive housing to the mentally ill homeless, the largest of which was the “New York-New York Initiative”(NY-NYI). The NY-NYI researchers found that, on average, prior to placement, people in the study used over $40,000 of publicly funded services per year. After being provided with supportive housing, over $16,000 was saved per housing unit per year. The publicly funded services, which were impacted most by access to housing, were mental health hospitalizations, medical admissions reimbursed by Medicaid, and shelter costs.[36]

Medically ill homeless people are similar to the mentally ill homeless in that both groups utilize large amounts of costly, publicly-funded services, and both groups are more likely to have been homeless for more than 12 months. For example, in the Respite Care Outcomes Study, homeless patients with HIV/AIDS spent an average of 15.5 days in a public hospital during 12 months of follow-up compared with 2.4 days for those primary diagnosis was trauma.[37] In the CHHP Pilot Study, 14 of the first 18 (78%) participants enrolled have been homeless for over a year.[38] In comparison, among the general homeless population of homeless people in the USA, approximately 10% are homeless longer than 12 months.

As of this date, there have been no controlled trials of these interventions with people who are homeless and have a chronic medical illness. CHHP has a research component that will provide such a controlled trial. And if the proposed CHHP “Housing First” and “Intensive Case Management” Model of services reduces the need for hospital services, decreases the severity of substance use, and improves health outcomes for homeless people with chronic medical illnesses, this could have significant implications for local, state, and federal policy.

A CHICAGO HOUSING FOR HEALTH PARTNERSHIP

Individuals with a chronic medical illness who lack stable, safe housing are often discharged from Chicago hospitals with a referral to temporary, emergency shelter. Emergency shelters for single adults in Chicago typically provide a light dinner and a

[36] Culhane DP et al. The Impact of Supportive Housing for Homeless Persons with Severe Mental Illness on the Utilization of the Public Health, Corrections and Emergency Shelter Systems: The New York-New York Initiative. April 2001. Report to the Corporation for Supportive Housing.
[37] Buchanan DR et al. Respite Care Outcomes Study. Presentation at the 2003 National SGIM Meeting.
[38] CHHP Pilot Report – AIDS Foundation of Chicago, June 2003.

place to sleep overnight, along with coffee and perhaps a snack in the morning before the facility closes for the day. Residents are often forced to spend their daytime hours seeking out food and cover from the outdoor elements. This existence is burdensome to a healthy adult, but can be life threatening for a homeless person dealing with a severe, chronic medical condition. Without adequate rest, proper nutrition, clean water, access to clean bathrooms, a place to refrigerate medications, and follow-up health assistance, additional stress is placed on the body and the recovery process is either prolonged or altogether impossible.

As described in a paper called *Medical Respite Services for Homeless People: Practical Models,* "[39] a lack of appropriate recuperative options for people without homes is likely to result in various negative outcomes.

- Continuity of care suffers when providers lose their patients to the streets, with no ability to follow up on their efforts or ascertain outcomes.
- Without a secure location in which to recuperate, patients have difficulty adhering to the medical advice of their providers, ranging from difficulty following recommended medication schedules to inability to rest, eat appropriately and drink plenty of liquids.
- The patient's inability to adhere to the recommended treatment may then result in complications and emergencies, which in turn result in increased costs to the medical system.
- Patients and providers are both frustrated and dissatisfied when medical treatment seems ineffective, due to incomplete recuperation".

The Chicago Housing for Health Partnership (CHHP) agencies share the belief that when homeless individuals with chronic medical conditions are able to focus their energies on healing and maintaining their health, rather than straining to find a place to sleep each night, their health outcomes will improve. CHHP Project members also agree that services should be provided in an efficient, cost-effective manner. To that end, the System Integration Team of case managers was implement and evaluate three main interventions:

1) <u>Expedited Hospital Discharge</u> - project participants will benefit from a coordinated system of discharge into a specialized Interim Housing facility;

2) <u>Housing First</u> - stable housing is facilitated and expedited by project participation; and

3) <u>Integrated and Intensive Case Management Services</u> - delivered through a "Systems Integration Team" which is a sub-set of Chicago's Continuum of Care.

The National Health Care for the Homeless Council (NHCHC) is a strong advocate for people who are both homeless and impacted by health issues. NHCHC provides public education, conducts research, and implements services throughout the

[39] National Health Care for the Homeless Council, July 2000.

country. One study cited by NHCHC called “Under the Safety Net: The Health and Social Welfare of the Homeless in the United States”[40] found that teams have a number of advantages over individual case managers:

- Teams make better use of available resources, overcome fragmentation of services, and promote individualized care.
- Teams arrive at more complete patient profiles faster, combining assessments from various clinical perspectives.
- Teams are client-centered; clients have more options because they are less dependent on any one practitioner.
- Teams engender feedback and mutual support that preserves staff energy”.

In the paper published by the NHCHC Clinicians’ Network, the Council states, “integrated, interdisciplinary care is essential to address the multiple and complex health problems that are endemic to a significant portion of the homeless population. Integrated services for homeless people are thought to be most effective when they are broad-based, comprehensive, continuous and individualized, simultaneously addressing clients' medical and psychosocial needs”. [41]

The CHHP Project implements comprehensive, integrated services, as recommended by NHCHC, while at the same time applying a “Housing First” strategy. The CHHP Case Management SIT makes every effort to not only transition homeless individuals into stable housing, but works diligently to insure that the consumers have the resources and skills needed to maintain that housing. The premise of the Systems Integration Team project is that by implementing a “Housing First” strategy coupled with integrated and intensive case management services, homeless individuals with chronic health problems and substance use histories will live a longer, healthier life.

[40] The National Health Care for the Homeless Council, August 2001.
[41] NHCHC Clinicians’ Network, June 2000.