A SAFE DC: A Conceptual Framework for Care of the Homeless Inpatient

Jennifer A. Best, MD
Audrey Young, MD
1 Harborview Medical Center, Seattle, Washington.
2 Evergreen Hospital and Medical Center, Kirkland, Washington.

Disclosure: Nothing to report.

Homeless patients suffer disproportionately from medical disease and from barriers to healthcare, affecting their likelihood of presentation, severity of disease, long-term outcomes, and mortality. In the hospital, homeless patients are frequently cared for by hospitalists. Homeless patients’ unstable social situation may challenge usual systems of inpatient care and discharge. To provide more effective care for this group, it is important to recognize the demographics of the hospitalized homeless patient. We suggest a structured approach to the inpatient care of the unstably housed patient, represented by a simple mnemonic checklist “A SAFE DC,” describing evidence-based adaptations of care, where available, and discussing systems-based approaches to discharge. Journal of Hospital Medicine 2009;4:375–381. © 2009 Society of Hospital Medicine.

KEYWORDS: care standardization, continuity of care, practice-based learning and improvement, transition and discharge planning.

Homeless patients are admitted to the hospital more frequently for both medical and psychiatric conditions as compared with domiciled but otherwise similar patients.1–3 They are also more likely to be hospitalized for conditions usually managed in the outpatient setting, such as cellulitis and respiratory infections.3–5 Physicians have reported a lower threshold for admission of patients whose conditions will worsen on the streets.4 Homeless inpatients are typically younger and may be hospitalized for longer than comparable patients with housing, often at higher cost.4,5 These patients suffer from an average of 8 to 9 active medical problems6 and markedly increased mortality,7–10 with an average life expectancy of 45 years.7 Many homeless patients are uninsured or underinsured11,12 and receive no ambulatory medical care.11 These patients are often cared for by hospitalists.

A general understanding of the unique needs of the homeless population is paramount for the hospitalist who strives to provide high-quality care. The most commonly referenced definition of “homelessness” from the McKinney-Vento Homeless Assistance Act defines a homeless person as an individual who lacks a fixed, regular, and adequate nighttime residence or a person who resides in a shelter, welfare hotel, transitional program, or place not ordinarily used as regular sleeping accommodations, such as streets, cars, movie theaters, abandoned buildings, or on the streets.13 This definition is often extended to include those who are occasionally but unstably housed with family or friends.14 Undomiciled and unstably housed patients face many barriers in obtaining healthcare, including cognitive or developmental impairment, cultural or linguistic issues, unreliable means of transportation, inability to pay for medications and supplies, and addiction and substance abuse.

Systemic barriers include inadequate health insurance, limited access to health services, and provider bias or ignorance toward the issues of homelessness.

A hospitalist working with homeless patients may be discouraged by perceived inability to arrange reliable follow-up or may be frustrated by hospital readmission resulting from patient noncompliance. Commonly, crisis management takes precedence over addressing the fundamental issues of homelessness.15,16 Managing transitions of care at discharge, a vulnerable time for all hospitalized patients,17 is often particularly difficult when a patient has no place to go. We present here a review of selected literature that may inform care of the hospitalized homeless inpatient, providing background information on burden of disease, and supplementing this with evidence-based and consensus-based recommendations for adaptations of care. Additionally, we propose a simple mnemonic checklist, “A SAFE DC,” and discuss systems-based approaches to the challenges of providing care to this population.

A SAFE DC: A Conceptual Framework for Care of the Homeless Inpatient

The mnemonic checklist “A SAFE DC” is an acronym for the 7 parts of a conceptual framework for care of the homeless inpatient (Table 1).

A: Assess Housing Situation

Hospitals are not required to collect homelessness data. Where such data are collected, they are often inaccurate and internally inconsistent. In 1 survey of inpatients at a public hospital, over 25% of inpatients met strict criteria for homelessness.18 Effective discharge planning begins on...
admission.\textsuperscript{15} Hospitalists should ask specifically about housing status at the onset of hospitalization.\textsuperscript{19} This should be done in a direct, yet sensitive, manner. Given the recent economic downturn, increasing numbers of individuals and families are marginally housed; these patients may not show outward signs of homelessness and may not volunteer this information during the initial encounter. Be aware that some patients may become homeless during hospitalization,\textsuperscript{19}\textsuperscript{16} often as a result of inability to work or attend to financial matters during an inpatient stay. Resultant medical debt is a common cause of personal bankruptcy and homelessness following discharge.

Although it is accepted that a patient should be medically stable prior to discharge and that the decision to discharge should be based on medical, not financial considerations,\textsuperscript{20,21} other standards for discharge vary from provider to provider. Hospitalists may be more cautious in discharging a patient without a stable home,\textsuperscript{4} yet facilitating outpatient follow-up care or arranging transfer to a sheltered, structured environment can lengthen the hospital stay.

Many cities offer formal medical respite care in a number of forms well described in the literature, including free-standing\textsuperscript{22–25} or shelter-based units,\textsuperscript{25,26} or skilled nursing facilities that contract directly with hospitals for short stays. One innovative model is the “hoptel,” or hospital hotel,\textsuperscript{27} a temporary housing facility proximate to the hospital to which self-sufficient homeless patients may be discharged for recuperation. Some hospitals distribute motel vouchers at discharge.\textsuperscript{22,25} All of these options provide opportunities for rest and recovery. Some facilities are staffed with a nurse who can check vital signs and provide wound care. Respite discharge may decrease early readmission and death rates\textsuperscript{23} and decrease repeat hospitalizations,\textsuperscript{24} particularly in human immunodeficiency virus (HIV) patients.

The National Health Care for the Homeless Council (NHCHC) maintains a national map and directory of respite care programs and services (see Table 2). Hospital providers should develop familiarity with all programs offered in a given geographic area and work closely with case managers and social workers to ensure that a homeless patient is considered for all programs for which he or she is eligible.

### S: Screening and Prevention

In addition to treating the presenting condition, a hospitalist should evaluate homeless patients for disease processes common in indigence. A full physical examination, preferably unclothed, is also recommended.\textsuperscript{28} Homelessness markedly increases an individual’s risk of chronic medical conditions. Reactive airway disease and chronic obstructive pulmonary disease (COPD) occur at higher rates as a result of tobacco and inhalational drug abuse. Diabetes mellitus, hypertension, and chronic liver and renal disease may

---

**TABLE 1. A SAFE DC: A Conceptual Framework for the Care of the Homeless Inpatient**

| A | assess housing status |
| S | screening and prevention |
| A | address primary care issues |
| F | follow-up care |
| E | end of life discussions |
| D | discharge instructions, simple and realistic |
| C | communication method after discharge |

---

**TABLE 2. Online Tools and Resources for Providers**

NHCHC (http://www.nhchc.org)

Clinical Practice Guidelines (http://www.nhchc.org/clinicalpracticeguidelines.html), including downloadable general and specific care recommendations for patients with:
- Cardiovascular disease
- HIV/AIDS
- Otitis media
- Asthma
- Chlamydial and gonococcal infections
- Reproductive healthcare
- Diabetes mellitus (wallet-sized personal health history available for homeless patients)

Clinical Practice Resources (http://www.nhchc.org/clinicalresources.html)

Shelter Health Fact Sheets for patients (in English and Spanish) (http://www.nhchc.org/ShelterHealth/ToolKitB/B13FactSheetsEngl7AF5D.pdf)

NHCHC Clinicians’ Network (http://www.nhchc.org/network.html)

- Respite resources, including Introduction to Medical Respite Care (http://www.nhchc.org/Respite/introduction.html)
- Discharge Planning resources (http://www.nhchc.org/dischargeplanning.shtml)

National Coalition for the Homeless (http://www.nationalhomeless.org)

- Directory of local homeless service organizations by state (http://www.nationalhomeless.org/resources/local/local.html)
- National housing database for the homeless and low-income (http://www.shelterlistings.org)
- Homeless Health Care Los Angeles (http://www.hhcla.org)


**Abbreviations:** AIDS, acquired immune deficiency syndrome; HIV, human immunodeficiency virus; NHCHC, National Health Care for the Homeless Council.
TABLE 3. Preventative Services to Consider for Homeless Inpatients

| Vaccines: hepatitis A and B, influenza, *Pneumococcus*, Td |
| Tobacco abuse: cessation counseling and resources |
| Substance abuse: information regarding needle exchange programs, social work consultation for treatment options |
| Tuberculosis: consider screening with PPD (spot sputum for AFB) |
| Sexual behavior: counseling on safer sex practices and STD risk |
| Domestic and street violence: social work consultation for counseling and resources |
| Mental health: depression screening, MMSE |

Abbreviations: AFB, acid-fast bacilli; MMSE, mini-mental state examination; PPD, purified protein derivative; STD, sexually-transmitted disease; Td, tetanus-diphtheria.

remain undetected for years, with end-organ effects commonly seen at presentation. Peripheral vascular disease is 10 to 15 times more frequent than in the general population.\(^\text{16,28,29}\) Tuberculosis, with prevalence rates greater than 30 times the national average,\(^\text{30}\) and other communicable diseases, including HIV, hepatitis B, and hepatitis C,\(^\text{16}\) are exceedingly prevalent and in some cases endemic.\(^\text{12}\) Infestations are also common. One out of 5 Health Care for the Homeless clients has an infectious or communicable disease.\(^\text{15}\) Up to two-thirds of homeless individuals are HIV-positive, with younger, Hispanic, and black populations at highest risk.\(^\text{29}\) Systemic infections may be traced to poor dentition, common in this population. Poor vision and skin conditions, also rampant,\(^\text{30}\) are easily overlooked in acute care encounters. The rate of drug and alcohol abuse in the homeless population may be as high as 8 times that of the general population.\(^\text{31}\) In 1 survey of homeless adults, the majority identified substance abuse as a major factor in ongoing homelessness.\(^\text{32}\) Mental illness prevalence in the may be as high as 80% to 95%\(^\text{33}\) and street violence is commonplace; more than 50% of homeless women have been sexually assaulted.\(^\text{11}\)

There is a paucity of data on the effectiveness of patient health interventions for the homeless. In a 2005 systematic review of 45 studies evaluating the impact of various programs on homeless health, only 1 targeted an inpatient population.\(^\text{34}\) Furthermore, the literature suggests that street-based or shelter-based delivery of preventative services is most effective for undomiciled patients.\(^\text{35}\) Understanding these limitations, inpatient admission remains an opportunity to offer services that may decrease morbidity.

Evidence-based preventative measures (Table 3) include vaccination against hepatitis A and hepatitis B in the intravenous drug-using homeless population. An accelerated hepatitis B vaccine administration schedule, with doses at 0, 7, and 21 days and a booster at 12 months, has been shown to increase completion rates.\(^\text{36}\) Drug users should be advised to utilize needle exchange programs and avoid sharing equipment. Sexually active homeless patients should be counseled regarding safe sexual practices and condom use. Consider tuberculosis screening with purified protein derivative (PPD) testing and spot sputum check, which have been shown in a shelter-based intervention to detect an infection rate of 3.1%.\(^\text{37}\) Notably, within that cohort, symptom-based screening was not found to be helpful. Influenza, diphtheria, tetanus, and pneumococcal vaccinations are also recommended, but have not been studied in regard to secondary decrease of infection rates in the homeless.

Admission to the hospital should be considered a “treatable moment” for substance abuse. In focus groups of homeless smokers, 76% of participants expressed intention to quit within 6 months and all were interested in using pharmacotherapy and behavioral treatments.\(^\text{38}\) In another study comparing admitted homeless vs. domiciled substance-using adults, a higher percentage of the homeless patients were found to be in the action stage of change, as compared with the precontemplative or contemplative stage.\(^\text{39}\) When ongoing use is likely, recommended strategies include advocating for safer routes or patterns or use and praising small successes on the continuum to abstinence.\(^\text{40}\) Where such services are available, the hospitalist should coordinate with primary care providers (PCPs) and social workers to refer patients for drug treatment and rehabilitation. Likewise, mental health follow-up should be confirmed and ongoing care coordinated with the patient’s mental health case worker, if one exists.

A: Address Primary Care Issues

The inpatient setting is often a homeless patient’s only ongoing source of medical care, but may not meet all of his or her healthcare needs. During an admission for congestive heart failure (CHF), for example, he or she may receive diuresis and afterload reduction but not “outpatient” interventions such lipid and blood pressure management. Chronic diagnoses, such as malignancy, may be viewed as secondary and remain unaddressed. Questions about extent of a hospitalist’s obligations to provide primary care arise in cases where a patient has failed to establish (and the system failed to provide) an outpatient medical home.

Just as emergency department physicians have become de facto primary care providers for underserved patients, hospitalists can expect to provide routine care for patients facing homelessness. Some interventions traditionally considered outpatient services, such as pneumococcal vaccination or counseling regarding smoking cessation, are now identified as inpatient core quality measures. Whether sexually transmitted disease or colon cancer screening or evaluation of cardiac risk status, for example, should become inpatient services for medically indigent patients is open for debate. Whenever possible, our goal is to facilitate screening and specialty consultations in the inpatient setting when this will not unnecessarily prolong hospitalization.

F: Follow-Up Care

Ideally, transfer of care occurs smoothly between the hospitalist and a PCP or specialist who will provide a patient’s ongoing medical care. Because many homeless patients lack...
or cannot identify a consistent outpatient provider, they may require additional assistance to ensure they receive medical care after discharge. If the patient has a PCP, the hospitalist should initiate contact with this individual at admission and discharge, forwarding relevant records in a timely fashion, including a faxed or electronic discharge summary. We often provide patients with a hard copy of the discharge summary and ask them to hand-carry it to any follow-up appointments. When a patient has no PCP, the hospitalist should attempt to expedite establishment of primary care. Unfortunately, many communities have limited primary care availability for patients who lack health insurance, posing challenges for hospital providers and patients.

At our institution, follow-up appointments are often made by a clerk or nurse who later relays the appointment date and time to the patient. Some clinics collect contact information and call the patient themselves. There are frequent lapses in this scheduling system; some patients never receive a follow-up appointment because they have no means of contact. Providing a scheduled follow-up date and time prior to discharge may circumvent this problem.41

It is also optimal if some options for follow-up care do not require a previously scheduled appointment. At our institution, a postdischarge “aftercare” clinic fills this need for patients without an established PCP, until such a relationship can be established. Aftercare appointments are designed to address specific, time-critical, clinical issues (eg, assessing response to antibiotics, follow-up creatinine in patient on diuretics, etc). To the degree that it is possible, selecting a site for follow-up care that minimizes transportation (eg, a shelter-based clinic) may improve the likelihood of follow-up. It is wise to ask the patient when and where he or she would prefer to be seen. Consider that evening appointments may be best for day workers.28 Some authors have advocated that providers consider dispensing fewer numbers of medications at any given time, in order to enhance compliance with the follow-up appointments, even if this may not reflect optimal medical management.

Careful consideration should be given before ordering tests for which results may not be available prior to anticipated discharge. These may include microbiological cultures, pathology reports, or sexually transmitted disease screening, including HIV testing. Note that even when a patient does have an established PCP, the hospitalist’s liability for medical care may persist after hospital discharge. Emergency room physicians, for example, have been found liable for lack of postdischarge communication of radiologic findings.42

Timely and thorough documentation is critical. In many cases, a hospitalist is the only physician aware of a homeless patient’s active medical issues. On admission, records should be thoroughly reviewed to ensure that pressing concerns, even those not traditionally requiring hospitalization, are addressed in a timely fashion. Detailed discharge documentation helps to ensure that ongoing issues are not lost during follow-up. It may be useful to provide a given patient with a portable summary of his or her medical history for self-reference and facilitation of ongoing care, particularly for those with a history of seeking healthcare at multiple facilities.28

E: End-of-Life Discussions

Given the increased mortality and decreased life expectancy of the homeless population, an acute care hospitalization provides an excellent opportunity to discuss end-of-life preferences, particularly if the patient does not have an established PCP. Focus groups have noted little difference in the range of end-of-life preferences of the homeless as compared with the general population, yet a common fear among the homeless is that of an anonymous death, or a “life without remembrance.”43 Many homeless patients believe that physicians would use deceit in withdrawing life-sustaining support or that their body might be disposed of without consent. They identify advance directives as a way to regain control over their lives.44 It is important to obtain and update emergency contacts for friends and family on each admission. Notably, homeless people often designate an unrelated friend or associate as their decision maker, rather than family, and express that it is less important to have family present at their death as it is to be cared for compassionately and respectfully by those who are present.44

D: Discharge Instructions Simple and Realistic

Health illiteracy profoundly affects homeless patients. In the predischARGE narratives of 21 low-income urban medical inpatients, almost one-half believed it would be impossible to follow medical advice at discharge.45 Healthcare providers may overestimate a patient’s ability to understand discharge instructions46 and to provide self-care at the time of discharge.47 Homeless patients are at high risk for disease relapse following discharge, given chaotic living conditions and lack of social support.1 The presence of community support has been shown to decrease the likelihood of rehospitalization.48

Medication compliance poses a particular challenge. In 1 study, one-third of homeless patients reported inability to comply with medications.2 Cost, storage capability, and complexity of regimen are common obstacles. Side effects should be considered when medications are selected, since common side effects like gastrointestinal upset or diarrhea, or desired effects like diuresis, may be intolerable if a patient cannot reliably access a restroom. Physicians should also weigh the possibility that discharge medications and supplies may be abused or stolen on the streets. Difficulty accessing routine meals can be particularly problematic in homeless patients with diabetes, who must eat on a regular schedule in order to avoid hypoglycemia. Diabetic goals may be adjusted accordingly to minimize risk. Diet may also be an issue if a patient must take a medication with
food, as with some antiretrovirals. The physician must anticipate an erratic diet and, whenever possible, dose medications accordingly. Directly observed therapy for diseases such as tuberculosis is optimal if the ability to comply is in question. 28 The NHCHC has developed guidelines for adaptations of care in homeless patients with a variety of clinical conditions, including diabetes mellitus, HIV, cardiovascular disease, and asthma; these are available for reference and download on their website (Table 2).

Illiteracy and low educational level also impact compliance. In 1 sample of indigent psychiatric patients, 76% read at or below the seventh grade level. 49 Aftercare instructions should be easy to understand by those with lower levels of education (fourth grade level or less), written down in simple language, and reviewed verbally by nurse, pharmacist, and physician. Consider initiating projects within your hospital to streamline discharge instruction forms. 50 The use of pictorial or video-assisted discharge instructions for common diagnoses is an area of promise. 17,51,52

Of note, there is no body of literature addressing the extent to which hospitalists or other inpatient physicians alter treatment goals at the time of discharge for homeless patients, but this may be a common occurrence and warrants further study.

C: Communication Methods After Discharge

Before discharge, clarify how a patient can be contacted for additional test results or information regarding follow-up appointments. Although some homeless patients maintain mobile phones, telephone-based methods used by some hospitalists for postdischarge follow-up 53,54 may be unreliable in this population. Some shelters or respite facilities will accept messages for clients who reside there; others will provide clients with access to voicemail or e-mail. For those patients who are technologically savvy, free e-mail accounts can readily be obtained and accessed at public facilities, such as the public library. Contact information for a case manager can also be very useful. We occasionally ask patients to return to the hospital to retrieve test results or a message from their physician at a predetermined time and place. Where safe and appropriate, providing patients with direct physician contact information (rather than general hospital information) may minimize communication barriers.

The Big Picture: Systems-Based Approaches to the Discharge of Homeless Patients

The discharge of homeless patients is suited to a comprehensive, interdisciplinary approach. There are many challenges to effective discharge planning: lack of time, lack of process ownership at the institutional level, financial constraints, and perhaps most significantly, lack of consensus regarding best practices. 19 There is growing acknowledgement of the need to develop policies and standardize practice in this area. Hospitalists are uniquely situated to contribute to the development of new initiatives at the institutional, local, and national level.

Interventions (Table 4) may be as simple as the identification of a dedicated social worker for all homeless discharges 15,21,55 or creation of a hospital-wide discharge planning committee or inpatient homeless consultation service. 15,21 The distribution of discharge planning guides for patients and resource lists to providers is also gaining in popularity. 21,56 Some innovations specifically target clinicians, such as training seminars that teach communication skills and motivational interviewing and build familiarity with safety-net services within the community. 21,57 Community-based programs include medical respite care services, previously discussed, and the facilitation of “preferred provider” relationships directed by hospitals toward skilled nursing facilities willing to accept homeless and other challenging clients. 15

Homelessness has also been identified as an area of focus by state governments, with many states funding initiatives to improve training and assistance to homeless providers, policies for discharge planning from public institutions, and homeless needs assessments. Some states have gone so far as to determine that discharge to an emergency shelter is “not appropriate.” 19 On the national level, large advocacy organizations such as the NHCHC and National Coalition for the Homeless have spearheaded “Housing First” efforts on behalf of homeless patients and providers throughout the country. Such programs have been shown to decrease healthcare expenditures, emergency department visits, and hospitalizations in certain homeless populations. 58,59 Check the NHCHC website for consolidated discharge planning program development resources for healthcare institutions (http://www.nhchc.org; see Table 2 for additional links).

Commentary

Homeless patients frequently require more energy and services at the time of service in order to achieve standard medical care. Optimally, a patient assumes full responsibility for his or her health, but there may be limits to this responsibility for selected patients, 60 especially in light of limited access to primary care. Understandably, homeless patients may focus more on immediate physical needs (eg, food,
shelter, safety) than on chronic medical problems. In addition, they may experience a sense of “unwelcomeness” from healthcare providers that they perceive as discrimination; this may dissuade them from seeking care. The inpatient physician should aim to build trust with each encounter. As suggested by 1 author, it is important to “promise only what can be delivered and deliver what is promised.” Involving the patient in care and decision-making is the most important first step in accomplishing this goal.

It is important in caring for homeless patients to reframe one’s notion of a “successful outcome.” Ideally, on resolution of his or her acute medical issues, a homeless patient would be discharged to permanent housing with substance abuse and mental health treatment. This scenario is unfortunately rare. The hospitalist often has little ability to arrange stable, on-demand housing at discharge. He or she is best advised to focus on optimizing acute care delivery at the point of care and maximize opportunities for future health.

It has been suggested that the discontinuity inherent in the hospitalist model may confer a special obligation on hospital medicine providers to abide by a more rigorous standard of care; one might argue that this obligation becomes even more compelling when applied to this vulnerable population. In 1 study, a disturbing 27% of an American cohort of homeless adults had no healthcare contacts in the year prior to death, underscoring this group’s underutilization of health services. Armed with this knowledge, hospitalists should seize every healthcare interaction as an opportunity to offer therapies with potential for longer-term benefit.

Address for correspondence and reprint requests: Jennifer A. Best, Harborview Medical Center, 325 Ninth Avenue, Seattle, WA 98104; Telephone: 206-744-3243; Fax: 206-744-6063; E-mail: jabeth@u.washington.edu Received 6 May 2008; revision received 6 May 2009; accepted 27 May 2009.

References


14. Wright NMI, Tompkins CNE. How can health services effectively meet the health needs of homeless people? Br J Gen Pract. 2006;56:286–293.


41. Lowenthal G. The best way to improve emergency department follow-up is actually to give the patient a specific appointment. J Gen Intern Med. 2006;21:398.


Published online in wiley InterScience (www.interscience.wiley.com).