

Things Fall Apart: Preventing High Readmission Rates Among Homeless Adults

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Recent changes in Medicare policy have spurred attention to and efforts to prevent hospital readmissions. Since October 2012, the Centers for Medicare and Medicaid Services (CMS) established a rule to financially penalize hospitals that are found to have an excess 30-day readmission rate for select conditions, via the Hospital Readmissions Reduction Program (HRRP). To calculate the excess readmission rate, CMS compares the rate of readmission for the selected conditions to those of other hospitals, after adjusting for the age and disease severity of readmitted patients and the hospital's overall patient mix. When applied, the penalties affect all of the hospital's Medicare admissions, not just those that result in readmission.

Since the HRRP came into effect, there have been reductions in 30-day readmission rates for the selected conditions. The focus on readmissions has gone beyond just those covered by Medicare and has spurred hospitals to implement readmission prevention programs. Most of these programs are hospital-based, using nurses, pharmacists or peer coaches to coach patients through the discharge process, ensure that patients understand discharge instructions, receive prescribed medications, and have timely follow-up with their outpatient healthcare providers.^{1, 2} Clinical trials of these interventions have had mixed results.^{1, 2} In 2015, hospitals that served a higher proportion of low-income Medicare beneficiaries were more likely to be penalized.³ While this could reflect lower quality of care among hospitals with more low-income patients, it could also reflect the ways in which the conditions of poverty increase readmission rates, separate from medical care.

In his groundbreaking book, "Evicted: Poverty and Profit in the American City," Matthew Desmond writes: "Without stable shelter, everything else falls apart."⁴ In this issue of JGIM, Saab et al. provide compelling evidence for one of the ways that things fall apart when people are homeless: high rates of hospital readmissions.⁵ In Saab's study, the

investigators identified, from a cohort of homeless residents of Toronto, those with an index hospitalization. The investigators then created a match for each homeless participant by finding a hospitalized low-income resident of Toronto matched for age, sex, and reason for and severity of admission diagnosis. Comparing the 30-day readmission rates between the two groups, they found that those who were homeless were three times more likely to be readmitted (22.2 % versus 7.0 %). To further understand the factors associated with readmission in the homeless cohort, the investigators used data collected on the homeless sample, including substance use, physical and mental health, chronic conditions, access to health care and features of the index hospitalization (length of stay, discharge against medical advice, discharge location), to examine factors that predicted readmission. They found only two factors associated with readmission: having left the hospital against medical advice or having a primary care provider. No individual health factor or hospital factor (length of stay, discharge disposition) was found to be significant.

The association between homelessness and increased hospitalization rate, length of stay, and readmissions has long been recognized.⁶ While some of this may be due to shared risk factors—substance use and mental health problems are associated with both homelessness and acute care utilization—much of it is due to the conditions of homelessness itself. This may be especially true in thinking about hospital readmissions. There has been increased recognition of what a vulnerable time hospital discharge is. Krumholz et al. have defined "post-hospital syndrome," a period of increased vulnerability following hospitalization.⁷ The problems that give way to post-hospital syndrome—interrupted sleep, poor nutritional status, and physiologic and psychic stress—are hallmarks of the experience of homelessness. And the suggested interventions to protect patients during this time are not available to those experiencing homelessness. Other risks identified for readmission focus on the need to improve communication between hospital staff and outpatient providers, reduce medication errors, and recognize worrisome symptoms early—all are complicated when the patient him- or herself cannot be reached by, or reach, members of his or her healthcare team post-discharge.

There has been only one randomized controlled study that demonstrated reductions in hospital readmissions among people experiencing homelessness. This study randomized homeless participants with chronic medical illnesses hospitalized at a

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safety-net hospital to usual care versus an intervention that included post-hospitalization case management, temporary housing and permanent housing.⁸ By design, this study examined the effect of ending homelessness post-hospitalization. Because the logistics of offering permanent supportive housing (subsidized housing with on-site, or closely linked, supportive services) immediately following hospitalization was too difficult, the investigators combined several different interventions that address homelessness: medical respite care, intensive case management and permanent supportive housing. Medical respite, while not a solution to homelessness, is more feasible to enact immediately post-hospitalization than is permanent housing. Defined as acute or post-acute care for homeless individuals who are too ill to be on the street, but not sick enough to require hospital care, medical respite provides short-term accommodations and access to medical and nursing care. A systematic review of studies of respite care found 13 relevant studies, of varying quality.⁹ Examining studies with quasi-experimental designs that allowed for comparison, the authors of the systematic review conclude that respite care likely does reduce 90-day readmission. In the United States, respite programs are funded through a patchwork of mechanisms, including support from discharging hospitals, local government general funds, philanthropy and Medicaid. While some programs have been able to receive Medicaid reimbursement for some respite services, the lack of a clear funding stream for respite care has limited their expansion. The threat of readmission penalties for Medicare beneficiaries, the rise of accountable care organizations, and the overall focus on readmissions as a quality measure may spur hospitals and health systems to expand medical respite, either by funding respite beds or by advocating for public insurers to cover the costs. While medical respite itself won't solve homelessness, it is a promising intervention to reduce the high rates of readmissions experienced by homeless individuals.

Within the homeless cohort, Saab et al. found that having a primary care provider was associated with a higher likelihood of readmission. While this seems counterintuitive, this finding is in line with other research that has found that homeless patients with a primary care physician (PCP) still rely heavily on visits to the emergency department.¹⁰ These findings may represent reverse selection—those homeless individuals with poorer health may be more likely to have an identified PCP. But, an alternate explanation is also possible. Primary Care Providers may serve an important surveillance function—PCPs may recognize that a recently discharged homeless individual is showing signs of worsening health—and may prompt the readmission. The authors remark that since having a PCP is associated with an increased risk of readmissions, those PCPs will be well-positioned to address high readmission rates. But, this assumes that the interventions, such as medical respite, exist in their community. As important as PCPs are to patients'

health, without access to the interventions that address the root causes of the readmissions, PCPs may not be able to affect the likelihood of readmission. Perhaps the best role that PCPs can play in preventing readmission is through advocating for the development of programs, such as medical respite, to reduce the likelihood of readmission among homeless individuals.

Access to health care for people who are homeless is necessary, but not sufficient. There is no doubt that, whatever the effect on acute care utilization, having a healthcare provider offers important advantages to the health of someone experiencing homelessness. Yet, the true health-seeking approach to homelessness is to address the conditions of homelessness themselves. Medical respite offers a promising avenue to reduce readmissions. But readmissions represent the tip of the iceberg of the devastating health consequences of homelessness. A true solution will require ending homelessness. Healthcare providers should demand nothing less.

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