

Quantifying the Risks of Hospitalization—Is It Really as Safe as We Believe?

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Even though I could not remember her name, I remembered her story, and I would bet that my colleagues did as well. She was someone that we had all cared for at one time or another. She frequently presented to the hospital with chest pain or shortness of breath attributable to a combination of longstanding congestive heart failure, chronic obstructive pulmonary disease, and cocaine abuse. But most tragic of all, she was homeless, which meant that she was frequently hospitalized not only for medical complaints but also for a night's shelter and a bite of food. Even though she often refused medical treatment and social workers' efforts to stabilize her housing situation, the staff in the emergency room and observation unit all knew her by name and greeted her like an old friend. And then one day she stopped showing up to the hospital. Sitting in the emergency department (ED), I overheard that she was found outside of a storefront and had passed away. Saddened by her death, which was not unexpected given her medical issues, I still wondered if we had done right by her during the hundreds of times that she had come to our hospital. Clinicians at busy safety-net hospitals face these questions every day, and it would seem beyond doubt that our duty is to address both medical and nonmedical determinants of health of everyone that walks through our door. But is this in fact the right thing to do? Is it possible that we unwittingly expose these vulnerable patients to risks from hospitalization alone?

In this month's *Journal of Hospital Medicine*, Sekijima et al. sought to quantify precisely the risks of hospitalization, particularly among the subset of patients whose "severity" of medical problems alone might not have warranted hospital admission, a scenario known colloquially as a "social" admission.¹ In real time, an inhouse triage physician classified patients as being admitted with or without "definite medical acuity." Investigators retrospectively identified adverse events and illness acuity using standardized instruments, the Institute for Healthcare Improvement Global Trigger Tool and Emergency Severity Index, respectively. Despite the acknowledged differences in the patient population and the inherent subjectivity within the designation process, Sekijima et al. found no statistically significant difference in the percentage of admissions with an adverse event nor in the rate of adverse events per 1,000 patient

days. Falls, oversedation/hypotension and code/arrest/rapid response activation were the most frequently encountered adverse events.

Delving deeper into the origin of admissions without definite medical acuity, the authors identified homelessness, lack of outpatient social support, substance use disorder, and lack of outpatient medical support as the most common reasons for "nonmedical" admissions. As healthcare providers, we recognize that these factors are generally long-term, chronic socioeconomic determinants of health. Despite our objective knowledge that we are limited in our ability to fix these problems on a short-term basis, the authors' observations reflect our compulsion to try and help in any way possible. Patients admitted without definite medical acuity were more vulnerable and had higher rates of public insurance and housing insecurity. However, they were less acutely ill, as indicated by lower Emergency Severity Index scores. These factors were not associated with statistically significant differences in either 48-hour ED readmission or 30-day hospital readmission rates.

The process of appropriately triaging patients to an inpatient setting is challenging because of wide variability in both patients and ED providers. Hospitalists are increasingly recognized as an additional resource to assist in the triage process, as we are uniquely in a position to view the patient's clinical presentation within the context of their anticipated clinical trajectory, promote effective utilization of inpatient bed availability, and anticipate potential barriers to discharge. Graduate medical education now identifies the triage process as a specific milestone within the transitions of care competency, as it requires mastery of interpersonal communication, professionalism, systems-based thinking, and patient-centered care.² However, many institutions lack a dedicated faculty member to perform the triage role. Our institution recently examined the feasibility of instituting a daily "huddle" between the admitting hospitalist and the ED to facilitate interdepartmental communication to create care plans in patient triage and to promote patient throughput. Available admission beds are valuable commodities, and one challenge is that the ED makes disposition decisions without knowledge of the number of available beds in the hospital. The goal of the huddle was to quickly discuss all patients potentially requiring admission prior to the final disposition decision and to address any modifiable factors to potentially prevent a "social" admission with social work early in the day. Further work is in progress to determine if introducing flexibility within existing provider roles can improve the triage process in a measurable and efficient manner.

Many challenges remain as we balance the medical needs

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Received: June 14, 2019; Revised: July 2, 2019; Accepted: July 4, 2019

© 2020 Society of Hospital Medicine DOI 10.12788/jhm.3282

of patients with any potential social drivers that necessitate admission to the inpatient hospital setting. From an ED perspective, social support and community follow-up were “universally considered powerful influences on admission,” and other factors such as time of day, clinical volume, and the four-hour waiting time target also played a significant role in the decision to admit.³ Hunter et al. found that admissions with moderate to low acuity may be shorter or less costly,⁴ which presents an interesting question of cost-effectiveness as an avenue for further study. As clinicians, we are intuitively aware of the subjective risk of hospitalization itself, and this work provides new objective evidence that hospitalization confers specific and quantifiable risks. Though we can undoubtedly use this knowledge to guide internal decisions about admissions and discharges, do we also have an obligation to inform our patients about these risks in real time? Ultimately, hospitalization itself might be viewed as a “procedure” or intervention that has inherent risks for all who receive it, regardless of the individual patient or hospital characteristics. As hospitalists, we should

continue to strive to reduce these risks, but we should also initiate a conversation about the risks and benefits of hospitalization similarly to how we discuss other procedures with patients and their families.

Disclosures: The authors have nothing to disclose.

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