High Boarding Rates of Older Adults in the Emergency Department: An On-going Threat to Quality and Safety

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Boarding in the emergency department (ED), defined by the American College of Emergency Physicians as “a patient who remains in the emergency department after the patient has been admitted or placed into observation status at the facility but has not been transferred to an inpatient or observation unit,” was first described as a significant barrier to effective patient care in the 1980s.\(^1\) Forty years later, it remains a considerable troubling indicator of inefficiencies and dysfunction within health care systems across the United States. Boarding is especially challenging for older adults who have baseline vulnerabilities due to physiologic changes with aging, hearing loss, multimorbidity, frailty, and polypharmacy.\(^2\) Without access to a quiet private room and space for their caregiver, they are often left unsupervised, leading to communication errors, falls, and delay in treatment of their medical conditions.\(^3\) Boarding also delays essential services such as physical therapy which are known to reduce the risk of early functional decline.\(^4\) The bright lights and sounds of an ED during prolonged hallway waiting creates additional psychological stressors, increases anxiety, and reduces patient satisfaction.\(^5\) Delirium may result, which is associated with prolonged hospitalizations and poorer health outcomes.\(^6\) Despite boarding being a significant risk factor for clinical decline and mortality,\(^7\) there has been little success in finding lasting solutions to this serious problem. Questions remain as to who is at greatest risk for ED boarding and what factors lead to higher rates for some populations versus others. Understanding factors leading to increased wait time in the ED will help health system stakeholders identify ways to mitigate risk for poor outcomes in this vulnerable population.

In the Winter 2024 issue of JGEM, Baardwijk et al. presented retrospective data comparing boarding rates between a rural 55-bed and urban 275-bed hospital within one health system.\(^8\) The purpose of the study was to identify factors associated with high ED boarding rates, they defined as waiting 8 or more hours for discharge disposition. These sites were chosen for comparison due to similarity in demographics of their patient populations. From 7/01/2021 to 6/30/2022 both EDs saw similar volumes of patients, with a slightly higher number in the rural ED aged 65 and older (33% versus 27% urban). There was a slight difference on the 5-point Emergency Severity Index, mean acuity rural (2.83) and urban (2.62), with lower scores indicating higher complexity. Despite having similar patient numbers and demographics, the rural hospital experienced a higher number of boarders compared to the urban hospital (8% versus 2%). Of the boarders, a much higher proportion of older adults was seen in the rural compared to urban ED (65% versus 38%). The overwhelming majority of patients in both locations were Caucasian, and both experienced boarding peaking in the winter months. Given the limitations of this retrospective study, the authors did not find patient characteristics as causation of higher boarding rates and surmised that factors outside of the ED were more likely to influence boarding in their health system. For example, average daily hospital occupancy rates were not reported, and they did not have data on barriers to hospital discharge, such as availability of nursing
home beds in the community. Nevertheless, this study highlights the continued problem of alarming trends in ED boarding and need for prospective research to identify and mitigate the causes.

There are many potential contributors to boarding problems in health care systems. Financial pressures in United States hospitals push bed occupancy rates above 85%, with most academic medical centers at or above 100% capacity. In addition, health systems are incentivized to favor elective admissions and procedures, further contributing to ED access block. At the same time, the COVID-19 pandemic has worsened an already strained workforce, reducing access to health care professionals across the care continuum. Hospital units, skilled nursing facilities, home health, and hospice agencies have been forced to downsize or close due to lack of personnel, further eroding the ability to move patients out of the hospital and ED to a more appropriate place of care.

In 1999 the Institute of Medicine published To Err is Human, which called for a national effort to make health care safer. Since then, patient safety and quality has been top of mind for health administrators, leading to investment of research funding, widespread adoption of clinical practice guidelines, and public reporting of quality data. The ED, as a 24-7 service, depends on operational efficiency and sets the pace for standards of care within health care systems. Addressing the issue of boarding older adults within the ED requires a multipronged approach in collaboration with hospital and community services. First, there is a need for investment in geriatric-focused infrastructure, including specialized units equipped to meet the unique needs of older patients. This entails enhanced staff training in geriatric care and creating age-friendly environments within hospitals. Geriatric EDs, which use standardized, evidence-based approaches to managing common geriatric issues, have demonstrated positive outcomes including early patient mobility, adoption of delirium prevention protocols, and lower ED length of stay. To date, over 500 hundred EDs worldwide have obtained some level of ACEP Geriatric Certification.

Second, health systems need to invest in innovative pathways that decompress the stress on the ED and expedite admission and discharge processes within the hospital. The inpatient discharge process is a multistep process that may require hours of coordination before a patient is able to leave. Some hospitals provide discharge lounges which are designated waiting areas for patients who are awaiting transportation, thereby allowing a new occupant into an inpatient bed. The Center for Medicare and Medicaid services created a waiver under their Medicare Shared Savings Program that removes the 3-day inpatient stay rule so their beneficiaries can admit to post-acute care facilities sooner.

Third, hospital-based solutions are needed to improve patient flow and safety protocols. Health systems should expand the availability of ancillary services, including interventional procedures, consultations and diagnostic imaging, with extended weekday and weekend hours. In addition, smoothing elective admissions and surgeries across the week will improve bed access. Many hospitals have established a hospital throughput command center with a dedicated bed czar who is responsible for continuous quality improvement. Finally, effective delirium prevention programs such as the Hospital Elder Life Program have been shown to reduce hospital length of stay and facilitate earlier discharges to home.

Fourth, health systems should invest in outpatient programs that reduce utilization of the ED for non-emergent issues and unstable chronic medical conditions. Medicare Advantage programs are growing exponentially and driving Accountable Care Organizations to invest in expanded ambulatory clinic hours, telehealth, community health workers and home-based primary care. Many states have Programs for All-Inclusive Care for the Elderly which combine adult day care services with interdisciplinary medical care and have shown to reduce health care utilization, including ED visits.

Finally, all stakeholders should raise the alarm of dangerous ED boarding and pressure their institutions to invest in solutions. Prospective research studies are needed to evaluate alternatives to boarding and their impact on health outcomes of older adults. By investing in geriatric-specific health care infrastructure, improving hospital and ED throughput, and expanding community-based resources, we can safeguard the health of older adults, thereby meeting the 1999 IOM vision for safer and higher quality of care.
KEY WORDS
Boarding, Geriatrics, Patient Safety

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REFERENCES