

By Ula Hwang, Manish N. Shah, Jin H. Han, Christopher R. Carpenter, Albert L. Siu, and James G. Adams

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THE CARE SPAN

Transforming Emergency Care For Older Adults

Ula Hwang (ula.hwang@mountsinai.org) is an associate professor in the Department of Emergency Medicine and in the Brookdale Department of Geriatrics and Palliative Medicine, Icahn School of Medicine at Mount Sinai, and a core researcher in the Geriatric Research Education Clinical Center, James J. Peters Veterans Affairs Medical Center, in New York City.

Manish N. Shah is an associate professor, associate chair for research, and chief of the Division of Prehospital Medicine in the Departments of Emergency Medicine, Public Health Sciences, and Medicine (Geriatrics and Aging), University of Rochester, in New York.

Jin H. Han is an associate professor in the Department of Emergency Medicine and associate research director in the Center for Quality Aging, Vanderbilt University, in Nashville, Tennessee.

Christopher R. Carpenter is an associate professor and the director of evidence-based medicine in the Division of Emergency Medicine, Washington University in St. Louis, in Missouri.

Albert L. Siu is the Ellen and Howard C. Katz Chairman's chair and a professor in the Brookdale Department of Geriatrics and Palliative Medicine, Icahn School of Medicine at Mount Sinai, and the director of the Geriatric Research Education Clinical Center, James J. Peters Veterans Affairs Medical Center, in New York City.

ABSTRACT Already crowded and stressful, US emergency departments (EDs) are facing the challenge of serving an aging population that requires complex and lengthy evaluations. Creative solutions are necessary to improve the value and ensure the quality of emergency care delivered to older adults while more fully addressing their complex underlying physical, social, cognitive, and situational needs. Developing models of geriatric emergency care, including some that are already in use at dedicated geriatric EDs, incorporate a variety of physical, procedural, and staffing changes. Among the options for “geriatricizing” emergency care are approaches that may eliminate the need for an ED visit, such as telemedicine; for initial hospitalization, such as patient observation units; and for rehospitalization, such as comprehensive discharge planning. By transforming their current safety-net role to becoming a partner in care coordination, EDs have the opportunity to become better integrated into the broader health care system, improve patient health outcomes, contribute to optimizing the health care system, and reduce overall costs of care—keys to improving emergency care for patients of all ages.

Already strained and busy providing care for almost 130 million acutely ill and injured patients of all ages,¹ US emergency departments (EDs) must now prepare to deliver high-quality, efficient care to the “silver tsunami” of the aging population. This article describes opportunities to transform the emergency department’s traditionally perceived role as the “front door” of the hospital to becoming the “front porch,” improve the value of emergency care for vulnerable older patients, and partner with other services to help older adults navigate the health care system.

Background

People ages sixty-five and older are increasingly in need of emergency care. From 2010 to 2050,

the rise in the US population of people in this age group will more than double, and those ages eighty-five and older will more than triple.² The demand for emergency care by older adults will be further magnified by the complexity of testing required for their multiple medical conditions, increased need for such testing not available in outpatient offices, and barriers to care that they experience. These barriers include the shortage of primary care providers and geriatricians and financial, transportation, and functional limitations unique to older adults.^{3–5}

Unfortunately, EDs are already strained and “at the breaking point” from crowding of patients of all ages.⁶ Primary drivers of ED crowding in the past decade were greater length of ED stays and greater intensity of services delivered (diagnostic testing, treatment, procedures) for what was probably an increased complexity of

cases.⁷ De facto as the country's health care safety net and by mandate, EDs already function at an extended capacity by providing not only emergency care but ambulatory services as well. Confirmed by a recent RAND Corporation report on emergency use and health care use from 2003 to 2009, primary care practices are increasingly referring patients to the ED for "complex diagnostic workups, handling overflow, after-hours and weekend demand for care."^{8(p viii)}

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These demographic and health trends of an aging population will challenge policy makers and administrators to transform the current emergency delivery model for older adults. Situated at the crossroads of inpatient and outpatient care, emergency departments can flex between the two extremes of being a critical care safety net and being a partner in managing care coordination, transitioning patients away from more expensive inpatient hospitalizations to less expensive ambulatory care evaluations. We believe that instead of acting as the front door of the hospital, EDs should be seen as the front porch: Not all patients will enter the front door for a hospital admission, and many could instead be discharged from the ED back to the community. The ED should remain a critical care provider for those caught by the safety net but also evolve as a partner in care coordination to help achieve three challenging goals: (1) improve patient health outcomes; (2) contribute to optimizing the health care system; and (3) reduce overall costs of care.

SPECIAL CARE NEEDS OF OLDER ADULTS Older adults seen in the ED have increasingly complex medical and psychosocial care needs. Unlike their younger counterparts, they are more likely to have cognitive impairment, falls, depression, functional impairment, depression, and sensory impairment and to be taking multiple medications.⁹ These characteristics complicate the evaluation and management of older adults in the ED. Consequently, the emergency physician's decision to admit the older patient to the hospital or discharge to home is similarly complex. Despite occurring with relative frequency, however, these syndromes (problems associated with aging) are underappreciated and under-recognized by emergency clinicians.⁹ Routine evaluation of these conditions is time consuming and labor intensive. Therefore, it may not be feasible to perform such assessments in the traditional ED model, where efficiency is emphasized.¹⁰ The physician evaluation is often focused on the primary complaint itself, and geriatric

conditions are overlooked or ignored.

A relevant example of a condition prevalent in older emergency patients is cognitive impairment, such as dementia and delirium, which occurs in up to 40 percent of such patients.^{11,12} Cognitive impairment affects all facets of elder emergency care, yet it is missed in the majority of cases and represents a safety concern.¹¹ For example, obtaining an accurate history is crucial to directing the appropriate diagnostic approach. Many patients with cognitive impairment, however, are unable to provide an accurate history.¹³ This may lead to inadequate diagnostic workups and potentially inaccurate or delayed diagnoses of life-threatening conditions. Upon discharge, patients with cognitive impairment are less likely than others to understand their discharge instructions, leading to noncompliance and readmissions.¹¹ As such, routine cognitive evaluation in the ED is recommended as a quality indicator.¹⁴ Unfortunately, many cognitive assessments take more than ten minutes to complete,¹⁵ which is a substantial barrier to implementing them in traditional EDs.

PRAGMATIC GERIATRIC SCREENING AND PLANNING Instead of evaluating each geriatric condition individually, an alternative method is to take a more global approach to identifying older patients at high risk for adverse events, such as death, decline in physical function, rehospitalization, or institutionalization, especially in those who are discharged home. For example, the Identification of Seniors at Risk is a self-reported six-item tool with modest predictive ability that was developed to detect these adverse events in the ED setting.¹⁶ Other tools entail a more comprehensive (thirty to sixty minutes) geriatric assessment wherein a nurse or social worker evaluates the patient's functional, cognitive, psychiatric, and social status.¹⁷

Finally, patient and caregiver involvement evaluating relevant medical alternatives has been noted over the past few decades.¹⁸ Shared decision making, or prioritizing goals of care, occurs when health care providers and knowledgeable patients or caregivers review and comprehend the available treatment options. The role of the health care provider is to respect patient autonomy while facilitating informed medical decisions. ED assessments and incorporating patients' prioritization of their own goals of care¹⁸ will affect emergency care planning for older adults. We recommend that patients being discharged from the ED have a risk assessment; receive comprehensive discharge planning that includes shared decision making; and become involved in care transitions with their patient-centered medical home, primary care provider, or appropriate specialty consultation, such as

James G. Adams is a professor and chair in the Department of Emergency Medicine at the Feinberg School of Medicine, Northwestern University, and senior vice president and chief medical officer, Northwestern Medicine, in Chicago, Illinois.

physical therapy or home care services, or all three.

REDESIGNED SERVICE SETTINGS To optimize emergency care for older adults, alternative models of care have been proposed to address their special care needs. To improve ED-based care, “geriatric emergency departments” and “senior emergency rooms” now exist to serve patients ages sixty-five and older.¹⁹ The usual model for ED care in the United States consists of rapid patient evaluation, diagnosis of acute medical conditions, treatment, and then discharge home or admission to an inpatient unit. Such care processes, however, focus on the needs of the health care system and not the special care that older patients require. Typical ED planning focuses on rapid patient assessment, evaluation, and turnover. Patient privacy and comfort are forsaken for greater staff maneuverability and flexible capacity. By “geriatricizing” the traditional emergency department, a geriatric ED model of care includes interdisciplinary staff education in evidence-based protocols for the geriatric syndromes and conditions described above, care coordination, and appropriate structural modifications to the physical space—all of which have been shown to improve the quality of care and safety of older adults while lowering inpatient costs.¹⁹

Focusing on the special care needs of older adults by targeting evaluation on geriatric conditions and improving care transitions, geriatric EDs can provide an environment that improves older patients’ experiences and can incorporate novel interdisciplinary care pathways. We believe that dedicating resources to the education and training of interdisciplinary staff focused on geriatric assessments and planning and managing the ED-to-home care transition will improve health outcomes, provide patient-centered alternatives to acute hospitalization for older adults with complex medical and psychosocial needs, and be cost-effective.

Recognizing the need for such care, programs are now starting throughout the country.²⁰ The Geriatric Emergency Department Innovations in care through Workforce, Informatics, and Structural Enhancements (GEDI WISE) project, which is supported by a Centers for Medicare and Medicaid Services Health Care Innovation Award (1C1CMS331055-01-00), is an example of such a program with initial implementation at three US emergency departments.²¹ Further research, however, is needed to determine whether such geriatric EDs can achieve the triple aim of (1) better health care; (2) better health; and (3) lower total costs of care for Medicare beneficiaries. Of particular consideration will be the need to evaluate the mutual effect these alternative

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models of care (that is, medical homes; managed care plans; accountable care organizations; and organized efforts such as geriatric EDs and the reimbursement policies associated with these programs) have on the quality and cost-effectiveness of care.²² Research is also needed to understand the generalizability of these approaches. Geriatric-specific modification costs and their effect on the general patient population must be weighed with the potential for benefit.

Similarly, geriatric observation or transitional units are being developed to address the needs of older adults. Use of an observation unit would theoretically permit a lengthier ED workup to complete diagnostic testing and care coordination, to facilitate patient transitions back to the community while avoiding a hospital admission.²³ For the general population, observation units have demonstrated cost savings by averting inpatient hospitalizations.²⁴ The use of geriatric observation or transitional units will likely have a similar financial effect, and preliminary data from such units with emergency-based comprehensive geriatric assessment teams are demonstrating an early impact in the form of reduced admission and readmission rates.²⁵

Although the intensity of services required for these assessments in both geriatric EDs and observational units may be greater than the typical rapid emergency evaluation, it is hoped that such “up-front” emergency costs might reduce overall total costs of care. Focused efforts during the ED visit to assess for special geriatric care needs and improve care coordination by an interdisciplinary team consisting of case managers, social workers, pharmacists, or specialty consult services, or all of these team members, in concert with the patients and their caregivers, will improve transitional care. This approach may prove

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to be cost-effective in reducing total costs of care through improved health care coordination (and patient health outcomes) by getting patients back to their primary care providers in outpatient community settings and averting hospital admissions, hospital readmissions, and ED revisits.

Models using telemedicine, community paramedicine, and transitional care management can improve community-based emergency care. Telemedicine programs are one option for rendering acute care without the need for transport to the ED. Telemedicine uses health information technology for clinical care when distance and time separate the patient and health care provider, thus expanding high-quality acute care options especially to those in more remote locations. In pediatrics, patient-to-provider telemedicine for acute illnesses is feasible, acceptable, effective, and efficient.^{26,27} Telemedicine-enhanced acute care is generally feasible and acceptable and can also reduce ED visits for nursing home residents.²⁸⁻³⁰ An ongoing telemedicine trial for independent and assisted living community residents, the vast majority of whom are older adults, has shown feasibility and acceptability by patients and providers. Studies, however, have yet to demonstrate the effect on outcomes or costs.³¹

Community paramedicine includes ambulance-based emergency medical services (EMS) providers who are integrated into the health care system and deliver services based on local need.³² These providers can evaluate patients and their problems in the context of their homes. Community paramedicine programs have been developed to address a wide range of needs: treating patients without transport to an ED; identifying and referring patients during emergency 911 responses who have unmet needs; identifying frequent users of prehospital services and emergency care to prevent unnecessary use; and preventing readmissions.³³ Unfortunately, no out-

comes-based studies have been performed to identify the effect or the cost-effectiveness of these programs.

EMERGENCY DEPARTMENT-BASED SERVICE ENHANCEMENTS Probably driven by the knowledge that approximately 25 percent of older adults discharged from the ED return to hospitals within thirty days, optimizing transitions of care back to the community is receiving increasing attention.^{34,35} Managing these interdisciplinary transitions, however, will remain challenging, especially because care coordination upon discharge will require patient follow-up.³⁶ Inadequate care transitions are not unique to emergency care and are substantial drivers of impeded recovery, increased adverse drug events, and increased rehospitalization rates.³⁷⁻³⁹ Nursing home patients are a particularly challenging population because essential information, such as the reason for transfer, advance directives, and baseline and functional status, is often lacking.⁴⁰ For the purpose of developing efficient transitional care programs, studies are being performed to better understand the barriers to and facilitators of optimal postemergency care in these patients.³⁶

In an era of ubiquitous electronic health records (EHRs), smart phones, tablets, and transcontinental Internet access, health information exchange offers another solution to facilitate information transfer to and from EDs to long-term care facilities and other inpatient and outpatient settings.⁴¹ To properly support high-quality geriatric emergency care, older patients' EHRs must include easy access to and exchange of information regarding baseline and current functional status, cognitive status, fall risk, pertinent illness and medication lists, caregiver contact information, and advance directives.

Policy makers should focus efforts on facilitating technology, or at least data transfer, and minimizing Health Insurance Portability and Accountability Act (HIPAA)-related impediments to patient information exchange. Reliable information exchange requires a paradigm shift in goal-directed communication strategies, especially during transitional periods of patient handoffs between services. Benefits of remote access include more comprehensive gathering of patient information, shared understanding of patient care plans, and more efficient and convenient review of transactional narratives and patient care coordination. Risks include less verbal exchange and the failure to convey subtle patient information because of the presumed review of a patient's EHR.⁴²

We believe that such innovations expand the traditional role of the emergency care system beyond merely the clinical treatment of the acute

25%

Return within 30 days

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illness to more fully address and facilitate biomedical and psychosocial factors surrounding the acute illnesses of older patients. Addressing these factors early while patients are on or even en route to the “front porch” will likely optimize emergency care to be more patient centered, effective, efficient, and cost-effective.

The Challenge Ahead

Coupled with the anticipation of more medically complex patients’ seeking emergency care, patients of all ages should anticipate potential gridlock with worsening crowding as EDs and hospitals today face closures amid rising patient volumes. Challenges include the training of emergency and interdisciplinary workforces on the need for such paradigm shifts in emergency care. Many existing geriatric protocols and models of care require research and validation in the emergency setting.^{43,44} Future research prioritization and policy initiatives will need to focus on safe, efficient, and pragmatic solutions to incorporate these innovations and evaluating whether or not they improve patient outcomes and are efficient in reducing total costs of care.

Transforming emergency care to focus on the needs of older adults will require more thorough

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patient assessments, evaluations, and treatments and the initiation of much-needed care coordination, possibly increasing ED lengths-of-stay and the immediate costs of emergency care. These investments, however, should be viewed with the prospect of pivotally improving patient health outcomes and facilitating optimal shared decision making while reducing admissions, ED revisits, and overall care costs. The aging population will challenge hospitals to reinvent the role of the ED in the broader health care system. ■

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