The Geriatric ED

Specially outfitted EDs accommodate elderly patients, though expense is an issue

Picture this scenario. You have taken your 90-year-old father to the emergency room at 4 p.m. following a fall. Considering his comorbidities, multiple prescriptions and mild cognitive impairment, his health is probably more complicated than that of others in the waiting area. But since his medical conditions do not require immediate medical intervention, he ends up in the middle of the queue.
You wait … and wait. The doctors and nurses are busy, and they’re doing the best they can. If the ED is at capacity and he needs to be seen right away, they can adapt and make room – even in a hallway – to address concerns quickly and safely. But if his evaluation is not completed by 8 p.m. and you determine he’s in no condition to wait any longer, you might take him home and make a note to call his primary care doc first thing in the morning.

Had this occurred in a geriatric ED, things might have played out differently. Recognizing that a 90-year-old is more vulnerable than younger patients, the staff may have been able to rapidly usher your father into an area specifically designed for elderly patients. Instead of conducting standard triage, they would view his fall and ED visit as an “unfortunate opportunity.” They know that when a 48-year-old person falls, it’s most likely an event, whereas when a 90-year-old does, it’s a syndrome. So they would check his medications, cognitive abilities and balance. A social worker would assess his nutritional status, the quality of care and attention he is receiving at home, and whether or not he needs additional social resources.

“I am an emergency physician, and I’m proud of doctors and nurses who work in the emergency room,” says Kevin Biese, M.D., FACEP, associate professor of emergency medicine and geriatrics at University of North Carolina at Chapel Hill. “This isn’t about them not doing a good job. They do amazing work every day in very challenging settings. This is about opportunities to redesign systems to better meet the needs of vulnerable older adults.”

A greater awareness of the geriatric patient’s needs and a structured program can help change that system.

By 2014, the American College of Emergency Physicians (ACEP), the Emergency Nurses Association, American Geriatrics Society and Society for Academic Emergency Medicine had teamed up to create guidelines for a geriatric ED. Four years later, ACEP launched a voluntary accreditation program, classifying GEDs as level 1 (gold), level 2 (silver), or level 3 (bronze), based on staffing, care processes, education, physical environment, and specialized equipment.

Requirements begin with demonstrating that the participating emergency department includes both a physician and nurse on staff with specialized geriatric training, meets environmental criteria such as easy patient access to water and mobility aids, and has a geriatric quality improvement initiative.

Today approximately 250 emergency departments in the country have GED accreditation. As of February 2021, 13 of them had achieved Level 1 accreditation.

“We’re thrilled with the progress,” says Dr. Biese, who chairs ACEP’s accreditation committee. “It speaks to the eagerness of our colleagues in emergency medicine to do a better job for vulnerable older adults, and to the need for a structured approach to accomplish that.

“We’re just getting started. There are more than 5,000 emergency departments in the country. At the end of the day, our goal isn’t to get every one of them accredited, but certainly to create more awareness of the special needs of geriatric patients and to help our colleagues meet those needs.”

**Demographics**

Between 2000 and 2010, the population 65 years and over increased at a faster rate than the total U.S. population, according to the 2010 Census. The population 85 and older is growing at a rate almost three times the general population. In the U.S., an estimated 10,000 baby boomers turn 65 every day, says ACEP.

This demographic shift brings challenges to healthcare systems, as older adults visit EDs at higher rates than non-seniors, often present with multiple chronic conditions, are at increased risk from polypharmacy, and suffer from complex social and physical challenges, according to ACEP. Seniors make contact with the healthcare system at many points, though perhaps none as frequently and significantly as the emergency department.

The expertise which an ED staff can bring to an encounter with a geriatric patient can meaningfully impact not only the patient’s condition, but also the decision to use relatively expensive inpatient modalities or less expensive outpatient treatments. More accurate diagnoses
and improved therapeutic measures can expedite and improve inpatient care and outcomes, help providers determine which older adults are likely to benefit from hospitalization versus outpatient care, and can guide the allocation of resources towards a patient population that, in general, uses significantly more resources per event than younger populations.

The vast majority of geriatric EDs are not physically separate from traditional EDs, says Biese. “It’s hard to wrangle up [millions of dollars] to build a geriatric ED. We don’t want that to be a barrier. Of the 250 accredited EDs, only a handful have a separate space for older adults. But they are all making progress to improve care for vulnerable older adults.”

ROI
The cost-effectiveness of geriatric EDs appears to be widely accepted. A study in JAMA Network involved Medicare beneficiaries who visited one of two EDs – Mount Sinai Medical Center in New York City and Northwestern Memorial Hospital in Chicago – that implemented the Geriatric Emergency Department Innovations in Care Through Workforce, Informatics, and Structural Enhancements (GEDI WISE) program, sponsored by the CMS Innovation Center.

The researchers determined that the program was associated with lower Medicare expenditures, with total Medicare savings per beneficiary of $2,436 in the Mount Sinai cohort and $2,905 in the Northwestern Memorial cohort at 30 days after the initial ED encounter. This association remained statistically significant up to 60 days, with a mean savings per beneficiary of $1,200 in the Mount Sinai cohort and $3,202 in the Northwestern Memorial cohort.

But a few things still need to be ironed out before geriatric EDs are widely adopted, wrote Maura Kennedy, M.D., MPH, Department of Emergency Medicine at Massachusetts General Hospital and Harvard Medical School, in an accompanying editorial.

“Evidence that higher-quality models of care, such as GEDs, can reduce health care costs should catalyze the adoption of these models,” she said. This is more likely to happen when the savings generated benefit the entity shouldering the costs. However, in the GEDI WISE program, the savings went to the payer, in this case Medicare, while the costs of sustaining this intervention beyond the grant-funded period were borne by the hospitals.

“Asking hospitals to spend their own money to save Medicare money is unlikely to be sustainable. Growth of this care model requires that health care systems also benefit financially from the cost savings.”
What makes an ED a geriatric ED?

The list below is a suggested starting point for the design and equipping of a geriatric ED, per the American College of Emergency Physicians.

Furniture

- Exam chairs/reclining chairs may be more comfortable for geriatric patients, and they facilitate transfer processes.
- Furniture should be selected with sturdy armrests, and ED beds should be at levels that allow patients to rise more easily for safe transferring. (Some studies show that bedrails do not reduce the number of falls and may increase the severity of falls.)
- Extra thick/soft gurney mattresses decrease development of skin breakdown and decubitus ulcer formation.
- Upholstery should be soft and moisture-proof to protect the fragile skin of older patients. It should be selected to reduce surface contamination linked to healthcare-associated infections.
- Economic evidence supports early prevention of pressure ulcers in ED patients by the use of pressure-redistributing foam mattresses.
- Reclining chairs in the ED (instead of gurney beds) have been shown to reduce pain and improve patient satisfaction.

Special equipment

- Body warming devices/warm blankets.
- Fluid warmers.
- Non-slip-fall mats.
- Bedside commodes.
- Walking aids/devices.
- Hearing aids.
- Monitoring equipment.
- Respiratory equipment, to include a fiberoptic intubation device.
- Restraint devices.
- Urinary catheters, to include condom catheters. (Minimize risk of CAUTI.)

Visual considerations

- Soft lighting is recommended, but exposure to natural light has also been shown to be beneficial for recovery times and in decreasing delirium.
- Patients should have control of the lighting in their space so they can sleep when other lights are on.
- Light colored walls with a matte sheen and light flooring with a low-glare finish should be used to optimize lighting and reduce glare. Fixtures that bounce light off the ceiling or walls increase overall room lighting while glare can be reduced with the use of matte surfaces.
- Patterns that have dominant contrasts may create a sense of vertigo or even seem to vibrate for older adults. Some older patients may misperceive patterns as obstacles or objects (e.g., leaf patterns on flooring, which may be seen as real leaves).
- Monochromatic color schemes should be avoided. Similar colors look the same for those with poor vision. Instead, allow colors to contrast between horizontal and vertical surfaces.
- Older adults experience a decreased ability to differentiate cool colors (greens, blues) as opposed to warm colors (yellows, oranges). In poorly lit areas, yellow is the most visible. Orange and reds are attention-grabbing. Blues appear hazy and indistinct and may appear gray due to yellowing of the elderly patient’s lens.

Acoustics

- Private rooms or acoustically enhanced drapes facilitate better communication and decrease anxiety and delirium.
- Older adults have increased sensitivity to loud sounds. The use of sound-absorbing materials (e.g., carpet, curtains, ceiling tiles) may reduce background noise and can also increase patient privacy.
- Loud noise sources in the hospital (e.g., overhead paging, machines) should be reduced.
- Music can decrease anxiety, heart rate and blood pressure. Patients should be provided with a way to listen to music and choose their programming without disturbing others.
- An enhanced acoustical environment can also increase patient privacy and safety. One study performed in an ED found that patients in curtained spaces reported they withheld portions of their medical history and refused parts of their physical examination because of lack of privacy. None of the patients in rooms with walls reported withholding information.