Checklist for Designing a Geriatric Treatment Room in the Emergency Department

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Checklist for Designing a Geriatric Treatment Room in the Emergency Department

The geriatric population is defined as adults who are 65 years of age and older. More than 40 million Americans fall into this category according to the 2010 U.S. Census, and the percentage of adults who are 85 and older is growing at three times the rate of the general population. In the emergency department (ED), geriatric patients account for 43 percent of hospital admissions. These older adults typically present with greater challenges for care, resulting in a 20 percent longer length of stay in the emergency department than the population at large. Geriatric patients often:

- Require 50 percent more laboratory and imaging services.
- Have multiple medical co-morbidities.
- Are taking multiple medications.
- Exhibit complex physiological changes.
- Require social services for discharge planning.

These facts make it clear that emergency departments have an important role in delivering care to geriatric patients. Accordingly, health care organizations across the country are striving to develop new ED models that are better suited to this patient population.

EDs that provide geriatric-appropriate design accommodations improve the standard of care for this patient population. As well, health care organizations benefit from implementing geriatric

design accommodations because doing so helps them better allocate resources and improves admission and readmission rates. Further, geriatric-friendly design decreases iatrogenic complications and the resulting increased length of stay and decreased reimbursement.

The physical design of an ED treatment room for geriatric patients should focus on the physical environment and equipment required for their specific needs. The design should consider modifications that promote safety, comfort, mobility, memory cues, and visual and auditory perception. Although a defined space within an ED or a separate ED for geriatric patients may be beneficial, most hospitals and freestanding emergency facilities could effectively implement a program in which any ED treatment room can be made geriatric-friendly.

The checklist below was created to provide a quick reference resource, with rationale for each recommendation, for designing emergency department treatment rooms that meet the specialized needs of older adults. It can also be used to conduct a quick evaluation of patient care locations in an existing emergency department or facility. For more information on designing geriatric-friendly care accommodations, see the resources cited at the end of this document.

Designing a Geriatric Treatment Room

CHECKLIST

Physical Element or Condition	Features and Characteristics	Rationale
Treatment Room		
Space considerations	☐ Exam or reclining chair with sturdy armrests	▶ Increases comfort for vertical patients (chair) ▶ Facilitates transfer process ▶ Decreases: —Fall risk during patient maneuvering —Severity of a fall
	☐ Geri chair that converts to a gurney	
	☐ Bed or gurney that lowers to seating height	
	☐ Clearance for turning wheelchair or other equipment	▶ Provides space for: —Wheelchair/walker-dependent patients needing transfer assistance —Temporary placement of patient-specific equipment ▶ Reduces obstacles and tripping hazards
	☐ Comfortable seating for visitors	▶ Provides comfort for caregiver or family member who may also be geriatric
	☐ Secure place to store personal belongings	▶ Protects property and relieves anxiety
	☐ Commode at bedside	▶ Provides immediate toileting option ▶ Minimizes fall risk
	☐ Monitoring equipment	▶ Allows monitoring of patient status
	☐ Patient lift	▶ Improves staff and patient safety
Means for patient privacy	☐ Privacy curtain in multiple-patient bays	▶ Facilitates communication between patient and staff ▶ Decreases likelihood patients will: —Withhold portions of their medical history —Refuse part of physical exam
	☐ Private treatment rooms ☐ Blinds, shade, frosting, or curtain in treatment room door to shield patient from hallway traffic	

Physical Element or Condition	Features and Characteristics	Rationale
Treatment Room, *continued*		
Patient control of environment	☐ Adjustable thermostat	▶ Increases comfort and sense of control for patients who: —Have reduced thermal response —Are more sensitive to temperature fluctuation
	☐ Access to warming blankets	
	☐ Dimmable lighting	▶ Increases patient's: —Visual acuity —Day/night awareness —Comfort —Sense of control ▶ Decreases patient's: —Sensitivity to glare —Sleep disturbances
	☐ TV remote with large buttons that are easy to operate	▶ Increases ease of use by older adults with decreased visual acuity and manual dexterity
	☐ Nurse call device with large, easy-to-operate buttons	
	☐ Ability to listen to music and choose programming without disturbing others	▶ Decreases patient's: —Anxiety —Heart rate —Blood pressure
Toileting		
Toilet room	☐ Private or shared toilet room, conveniently located and accessible from the corridor	▶ Increases patient's: —Comfort —Functional independence
	☐ Walker/wheelchair-accessible toilet facilities	▶ Provides maneuverability for wheelchair- or walker-dependent patient
	☐ Clearance for second person to assist	▶ Allows family or staff member to assist patient ▶ Reduces falls
	☐ High toilets, at least 18 inches	▶ Increases patient safety ▶ Minimizes fall risk
	☐ Grab bars	
	☐ Non-slip/non-glare floors	
	☐ Auto-flush toilets	▶ Increases ease of use ▶ Accommodates those with decreased manual dexterity
	☐ Levered door handle instead of knob	
	☐ Paper towel and toilet paper dispensers that don't require pulling hard to get paper	

Physical Element or Condition	Features and Characteristics	Rationale
Storage Provisions		
Mobility devices	☐ Wheelchairs, walkers, and other walking aids and devices	▶ Accommodates the multitude of medical and ambulation assistive equipment often needed by geriatric patients
Other equipment and supplies	☐ Body-warming devices/warm blankets	▶ Provides ready support for patient needs
	☐ Fluid warmer	
	☐ Non-slip mats/socks	
	☐ Bedside commodes	
	☐ Elevated toilet seat	
	☐ Hearing aids, hearing aid batteries, hearing amplifiers (pocket talkers), earplugs, and/or headphones	
	☐ Vision aids such as magnifier or glasses to magnify	
	☐ Monitoring equipment	
	☐ Respiratory equipment, including a fiber-optic intubation device	
Architectural Details		
Corridors	☐ Non-glare lighting focused on wayfinding cues	▶ Decreases: —Patient and visitor confusion —Rate of falls and near falls
	☐ High-contrast large font signage	▶ Decreases anxiety ▶ Improves: —Readability —Wayfinding
	☐ Doors in colors that contrast with walls	▶ Assists wayfinding
	☐ Exit doors and out-of-bounds areas camouflaged by using the same color on doors and walls	▶ Reduces: —Unwanted use —Wandering
Doors	☐ Doors fitted with lever handles rather than round knobs	▶ Increases ease of use ▶ Accommodates those with decreased manual dexterity

Physical Element or Condition	Features and Characteristics	Rationale
Architectural Details, *continued*		
Handrails	☐ Handrails in colors that contrast with the floor and the wall	▶ Helps older adults with visual impairment locate the handrails
	☐ Non-abrasive finish on walls behind handrails	▶ Prevents abrasion injuries to knuckles
Noise control	☐ Private treatment room	▶ Reduces patient: —Anxiety —Confusion ▶ Improves communication with caregivers
	☐ Acoustically enhanced drapes for multiple-patient bays	
	☐ Sound-absorbing materials for flooring, ceiling tiles, walls, curtains	▶ Supports seniors' decreased ability to hear high-frequency ranges and increased sensitivity to loud sounds
	☐ Quiet equipment: ▪ Wheeled equipment ▪ Paper towel dispensers ☐ Alarm management ☐ Overhead paging systems with volume controls ☐ Earplugs or headphones	▶ Reduces environmental noise
Surfaces		
Flooring and wall bases	☐ Non-skid floor surfaces	▶ Reduces fall risk
	☐ Matte or non-glossy no wax finish floors	▶ Eliminates glare ▶ Reduces falls
Walls	☐ Contrasting colors for baseboard and wall	▶ Defines floor edge visually to assist in ambulation
Color and pattern	☐ Use of colors at the warm end of the spectrum (oranges, yellows, and reds)	▶ Responds to seniors' decreased ability to differentiate cool colors (blues, greens, and purples)
	☐ Avoidance of bold patterns with dominant contrasts or flecking patterns	▶ Reduces: —Excess visual stimulation or appearance of vibration, which can exacerbate confusion and cause vertigo —Misperception of patterns as obstacles or objects to avoid while walking

Physical Element or Condition	Features and Characteristics	Rationale
Furnishings		
Furniture	☐ Exam/reclining chairs with sturdy armrests	▶ Increases patient comfort ▶ Reduces pain ▶ Facilitates transfers
	☐ Gurney with an extra-thick or pressure-redistributing foam mattress	▶ Lowers risk of skin breakdown ▶ Reduces pain
	☐ Gurney or bed that lowers to enable patients to easily stand for safe transferring	▶ Reduces fall risk
	☐ Soft, moisture-proof, easily cleanable upholstery with no surface joints or seams	▶ Protects fragile skin ▶ Reduces surface contamination linked to health care-associated infections
Accessory	☐ High-contrast large clocks	▶ Improves readability
Electrical Systems		
Lighting	☐ Night-lights in bathrooms and doorways with motion sensors	▶ Facilitates wayfinding ▶ Minimizes fall risk
	☐ Soft light (170-watt incandescent with ultra-high diffusion coating) or exposure to natural light	▶ Improves recovery times
	☐ Even and well-diffused lights such as type T5 or type T8	▶ Reduces glare
	☐ Simultaneous use of multiple light sources, combining direct lighting (e.g., ceiling-mounted fluorescents) with indirect lighting (e.g., high-pressure, floor-standing up-lights or covered lamps with a diffuse reflector shining down)	▶ Increases lighting for older adults, who require three to four times more light than the general population for visual clarity
Support for communication devices	☐ Convenience outlet to charge cell phones ☐ Extra cell phone charging cords	▶ Facilitates staff and patient communication

Resources

American College of Emergency Physicians, American Geriatrics Society, Emergency Nurses Association, and Society for Academic Emergency Medicine. *The Geriatric Emergency Department Guidelines* (2013).

Parke, Belinda, and Kathleen Friesen. *Code Plus Physical Design Components for an Elder Friendly Hospital*, 2nd ed, (Fraser Health, 2015).

Senior Friendly Hospitals, Regional Geriatric Program of Toronto. "Senior Friendly Hospital Toolkit," accessed January 25, 2018, *http://seniorfriendlyhospitals.ca/toolkit.*

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Kathryn Gallagher, MS, RN, BSN, NE-BC, is a clinical liaison with the Department of Real Estate, Design and Construction at the University of Pennsylvania Health System. As a member of the team currently designing a new hospital pavilion for Penn Medicine, she serves as the voice of the patient and the clinical and non-clinical staff. She facilitates engagement with staff, patients, and the community for Penn Medicine design projects from the beginning of the design process through occupancy with the goal of creating facilities that provide not only excellent clinical care but the highest quality of safety and satisfaction for patients and staff. Ms. Gallagher began her nursing career with the University of Pennsylvania Health System as a clinical nurse in a variety of critical care units and subsequently worked in nursing administration for several years. She holds a Master of Science in Strategic and Organizational Leadership and is a member of the Nursing Institute for Healthcare Design and the American Organization of Nurse Executives. Ms. Gallagher was a member of the FGI 2018 Health Guidelines Revision Committee.