Roughly 85% of Americans aged 65 and older suffer from at least one chronic condition, and more than half have two or more chronic conditions, reports the Centers for Disease Control and Prevention (CDC). Combined with the projected jump in the 65-plus population from 56 million in 2020 to 83.7 million in 2050, it all adds up to a long-term, ongoing increase in the number of senior patients visiting hospitals, ambulatory care facilities, and physicians’ offices.

Behavioral health care and human services facilities, both residential and outpatient, also are affected by the aging of the population. And although nursing care centers, assisted living communities, and home care agencies are already geared toward older adults, these organizations could be caring for an exploding number of very elderly individuals in the coming decades. “The environment of care, as well as the care-delivery system, needs to meet the needs of and help mitigate the challenges faced by older Americans,” notes Leah Hummel, CHFM, CHC, an engineer in The Joint Commission’s Standards Interpretation Group.

Formed to prepare health care facilities to better serve the burgeoning senior population, the Age-Friendly Health Systems Initiative is a collaborative enterprise sponsored by the Institute for Healthcare Improvement (IHI) in partnership with the John A. Hartford Foundation, the American Hospital Association, and the Catholic Health Association of the United States. The initiative organizes the most important elements of high-quality senior care into a set of interrelated, evidence-based “4Ms”:

- What Matters
- Medication
- Mentation
- Mobility
“Older adults are showing up in the health care system just by virtue of aging, with a complexity of needs that don’t always align with how a health system is organized,” says Leslie Pelton, Vice President, IHI, and lead for Age-Friendly Health Systems. “We recognized that there are never going to be enough geriatricians. We need a replicable set of care interventions that would have a positive impact on the health and care of older adults and on the health system. We’re learning with our health systems what you have to do with the physical space in a health care facility to enable those interventions to happen with older adults.”

**What Matters**

An age-friendly facility should align care with each older adult’s specific health-outcome goals and care preferences by asking the patient what matters most, documenting it, and sharing that information across the care team. An easy way to begin that process in hospital settings is by adding whiteboards and markers to patient rooms or changing how existing whiteboards are used, says Pelton. These dry-erase boards can be used as “what matters” or “all about me” boards, she explains. The boards may include questions for patients to respond to, such as the following:

- What makes me happy?
- What jobs have I had in my life?
- What things do I like to do when I’m at home?
- What are my favorite foods?

Putting this kind of patient information on a whiteboard visible to all the other care team members who come into the room ensures that they can use it to engage with the older adult.

When care providers and facilities staff know what matters most to older individuals, they may be able to modify health care spaces accordingly—for example, through a change in furnishings, decor, and/or entertainment options (such as providing a source of music or WiFi access in a patient’s or resident’s room)—to promote better health outcomes. In addition, staff can make recommendations for modifying the home environment to better meet the older individual’s needs. Often simple solutions such as moving a bed across a room or placing a small side table by a convenient but unused wall outlet (for charging a mobile phone or tablet) can yield big results.

**Medication and Mentation**

Across care settings, if medication is necessary, it should be age friendly and preferably not interfere with what matters to the older adult, the individual’s mobility, or his or her mentation (mental activity). Unfortunately, delirium (sudden confusion about time and place) affects up to a third of hospital patients aged 70 and older, and it can occur in any health care setting. In older adults, delirium is a common side effect of medications and a symptom of urinary tract infections, sleep deprivation, dehydration, and many other conditions that are especially likely to afflict the elderly.
“There’s no pill to cure delirium, but physical environment fixes can help,” says Diana Anderson, MD, MArch, ACHA, an architect and physician who is a geriatric neurology fellow at VA Boston Healthcare System. She suggests that maximizing nonpharmacological strategies, such as windows that provide natural light or physical environments that support the family’s presence for comfort and reassurance, can make delirium less likely.

During the COVID-19 pandemic, the number of family members who can visit hospitalized patients or care recipients in residential facilities—or accompany an elderly patient to an appointment—has been drastically limited. Once the need for social distancing is over, having furniture arrangements that promote family interactions with the care recipient, for example, could help mitigate against delirium.

Knowing what matters to a patient enables care providers to interact in a more meaningful way with that individual, which can help counteract disorientation, observes Pelton. This is particularly true in acute care settings, in which older patients may not remember where they are or why they are there. “When a member of the care team can help older adults by having a conversation about what matters to them, it orients them to their life outside the hospital, which has a positive effect on preventing and managing delirium,” she says. This physical environment definitely plays a role in facilitating such conversations, according to Pelton.

**Mobility**

According to the World Health Organization, 20%–30% of older people who fall suffer moderate to severe injuries such as bruises, hip fractures, or head trauma. But preventing falls by ensuring that older adults move safely every day whenever possible—to maintain function and do what matters to them—may mean rethinking some traditional approaches, Pelton explains.

For example, many health care facilities have a falls prevention committee. Some forward-thinking health care organizations, however, have converted their falls prevention committee into a safe mobility committee, the goal of which is to encourage patients to ambulate, says Pelton.

“Most hospitals, by good design, get very focused on preventing falls and injuries,” she notes. “But not having patients ambulate makes falls more likely. You can use [available] resources to help older adults ambulate.” For instance, she knows of one hospital that created an “age-ercise” room where older adults could come together and safely exercise with an instructor.

Many other fall prevention and mobility-promoting strategies require only modest modifications to the existing environment of care. These measures, which can also improve older patients’ mood and relieve anxiety, can be used in all health care settings:

- **Flooring.** Nonslip flooring is preferred, with transitions between individual flooring types clearly indicated. “With a senior population, flooring choices should consider color and contrasts between different flooring materials,” says Hummel, who is a registered architect. “The vision issues that seniors have are
unique to them compared with younger patients. Patients can walk up to a transition and because of poor vision think that it’s a step, and they end up falling.”

Anderson says flooring patterns may also be a factor in safe mobility. “I was in an ACE [acute care for elders] unit designed for a geriatric population, and every person was in their room. The corridor in the hallway had a stripes pattern, and the geriatricians told me the floor pattern may have been contributing to the patients’ immobility. With the way the brain changes during dementia, the stripes might be interpreted as a stairway, which can be scary to walk on,” she says.

Lighting. “Light levels are really important for seniors who have decreased vision as a result of their age,” says Hummel. “And especially for patients in the hospital for a long time, daylight is really important because it messes with circadian rhythm if they don’t have access to natural daylight.”

Older adults’ eyes also have a more difficult time adjusting to changes in lighting intensity, notes Sarah Markovitz, a principal with the architectural firm NBBJ, so lighting transitions should be as subtle as possible. Where that’s not possible, such as at entrances through which older individuals move from bright sunlight into a building and vice versa, providing seating just inside and outside the doors gives senior patients a place to sit down while their eyes adjust to the new lighting.

Handrails. Long hallways throughout a facility should be equipped with handrails, with plenty of places for resting along the way (keeping in mind the corridor clear width requirements specified in The Joint Commission’s “Life Safety” chapter). The Americans with Disabilities Act (ADA) has specific requirements for handrails and grab bars in accessible rooms, says Hummel, but “patient rooms really need to go well beyond what’s required by the ADA because of the unique needs of the senior patient,” she says.

Related Environment of Care Requirements

Standard EC.02.06.01
The [organization] establishes and maintains a safe, functional environment.

Note: The environment is constructed, arranged, and maintained to foster patient safety, provide facilities for diagnosis and treatment, and provide for special services appropriate to the needs of the community.

Element of Performance (EP) 1: Interior spaces meet the needs of the patient population and are safe and suitable to the care, treatment, and services provided.

EP 11: Lighting is suitable for care, treatment, and services.

Standard EC.02.06.05
The [organization] manages its environment during demolition, renovation, or new construction to reduce risk to those in the organization.

EP 1: When planning for new, altered, or renovated space, the [organization] uses one of the following design criteria:

- State rules and regulations
- Guidelines for Design and Construction of [Hospitals; Outpatient Facilities; or Residential Health, Care, and Support Facilities], 2018 edition, administered by the Facility Guidelines Institute and published by the American Society for Healthcare Engineering (ASHE)

When the above rules, regulations, and guidelines do not meet specific design needs, use other reputable standards and guidelines that provide equivalent design criteria.
For example, the ADA requires only 10% of patient rooms and toilets to be accessible in general hospitals. And in long-term care facilities, including nursing homes, only 50% of resident bedrooms and toilet rooms are required to be accessible. “Organizations need to consider the mobility challenges of their entire patient population and make efforts to provide things like handrails, grab bars, and maneuvering clearances in areas where they may not be required by the ADA,” Hummel emphasizes. “Occupational therapists can assist with the selection and placement of grab bars in toilet rooms to help with patient transfers.”

**Wayfinding.** With health care facilities relocating some patient areas during the COVID-19 pandemic, and then later returning the areas to their usual functions, accurate signage is more important than ever for older patients. Signage needs to be consistent and uncluttered, with floor levels and department names using the same terminology throughout the facility, says Hummel. There should be a strong contrast between the print and the sign background and between the sign and the background to which it’s attached. Signage placement is important, too: “Clear wayfinding should be designed with appropriate lighting on it, and at the right eye level,” says Markovitz.

**Noise abatement**

Quiet is essential for all patients but especially for older adults because they may have hearing issues. A noisy environment can prevent older adults from understanding what caregivers are telling or asking them, and high levels of different background noises can cause anxiety and confusion.

“We need to get rid of the cluttered noise,” says Markovitz. “Having enclosing walls that provide good acoustic isolation and sound-absorbing walls and ceilings is helpful, and so is reducing the number of alarms and buzzers that patients can hear.” In addition, some facilities may be able to reroute carts and deliveries to separate pathways so they’re not going back and forth in front of patient rooms.

**Arthritis mitigation**

For adults older than 65, roughly one in two men and two in three women have arthritis, of which there are more than 100 types, reports the Arthritis Foundation.\(^5\)

All health care settings should incorporate physical environment features that take into account the joint pain and stiffness that afflict senior populations. Some suggestions include the following:

- Chairs in waiting rooms, examination rooms, and patient or resident rooms should have arms.
- An examination room should have a nonslip step stool to facilitate getting onto and off of the exam table.
- In residential settings, a nonslip stool with handles can help care recipients get into and out of bed.
Open shelving is more accessible to individuals with arthritis than are cabinets and drawers with small knobs or handles.

Consider smart technology such as voice-activated faucets, when feasible.

The solutions described in this article are just the beginning of the physical environment modifications needed to make health care settings more age friendly.

References


