University of Alabama Hospital

Institute for Healthcare Improvement

Background

The University of Alabama (UAB) Hospital, a major teaching hospital with 1,157 licensed beds, is the third largest public hospital in the US, providing patients with a complete range of primary and specialty care services.

Starting in 2008, when UAB launched its Acute Care for Elders (ACE) unit, the hospital has been dedicated to providing age-friendly care. In 2018, UAB leaders heard about Age-Friendly Health Systems, an initiative of the Institute for Healthcare Improvement (IHI) and The John A. Hartford Foundation, in partnership with the American Hospital Association and the Catholic Health Association of the United States. The UAB leaders immediately knew they wanted to be involved. "We'd been working toward this goal of being age-friendly for a decade," said Kellie Flood, MD, Associate Chief Medical and Quality Officer for Geriatrics and Care Transitions at UAB Hospital. "We were thrilled to get in the first Action Community cohort."

Approach

The Age-Friendly Health Systems movement defines age-friendly care as evidence-based care for older adults that reliably implements the "4Ms": What Matters, Medication, Mentation, and Mobility (see Figure 1).

UAB's ACE unit had already done a great deal of work on three of the 4Ms — Medication, Mentation, and Mobility — before they joined the Age-Friendly Health Systems Action Community. The 4Ms provided a useful framework for building on that progress and for incorporating What Matters as well.

The first step was to form an implementation team. "We have a formalized structure," said Flood. "A whole team dedicated to this, recruiting for this." In addition to Flood, the team comprises three NICHE (Nurses Improving Care for Healthsystem Elders) coordinators and a program manager. The team also includes other interprofessional team representatives — for example, from rehab, care transitions, and pharmacy — to lead initiatives targeting the 4Ms.

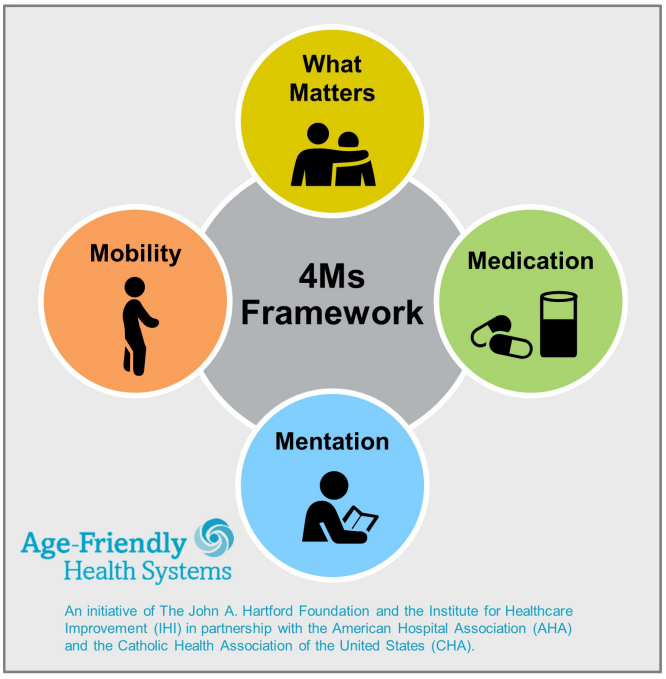

Figure 1. 4Ms Framework of an Age-Friendly Health System

The team regularly reports back to the health system's senior leaders in order to keep them engaged. "We package up our progress reports and take them on the stakeholder road show," noted Flood. "It's fun for us and the frontline staff to present our work to the senior leaders who have funded us and entrusted us with implementing age-friendly care. It's a win-win."

The following overview describes how UAB has approached each of the 4Ms.

What Matters

UAB already had robust programs in place for palliative care. Conversations about preferences for end-of-life care relate to What Matters — although What Matters also goes beyond end-of-life care to include all of the older adult's health outcome goals and care preferences. "What Matters is one of the most challenging," said Flood. There are workflow issues in terms of how to integrate those conversations into care. But the UAB team has begun to experiment: an ACE coordinator has been asking patients What Matters and documenting the answers in notes. They have also been testing different ways to phrase the question.

Medication

For the Medication component of the 4Ms framework, the team started by creating flags for some of the higher-risk medications for older adults, such as antihistamines and sedatives. In the electronic health record (EHR), they introduced pop-up flags for patients ages 65 and older that not only provide warnings, but also suggest safer alternatives, making the EHR alerts more actionable and useful.

The ACE unit holds a daily team meeting that includes a pharmacist. Together, the team scans the medication list for every older adult, looking for opportunities to prescribe lower doses or to discontinue a medication altogether.

Flood and the team expanded on this work by partnering with the hospital's surgical services. For example, they worked with orthopedic surgeons on an orthopedic surgery order set for older adults, identifying high-risk medications and considering alternatives. Most recently, they worked with urogynecology and gynecology surgeons to adjust their order sets. Afterward, based on some pilot data, the use of inappropriate medications for older adults appeared to decline significantly.

"Partnering with our surgeons has been one of the highlights of our age-friendly journey. It's such a win-win for everyone, including the patients," said Flood. "I think the key [to the partnership] is we don't go in and tell a group of GI surgeons or orthopedic surgeons what to do," Flood continued. "We're all working toward the same goal, so we develop the age-friendly improvement strategies together."

They also partnered with an organization in Wisconsin to facilitate scanning the EHR for potentially inappropriate orders or administration of high-risk medications. "For 26 patients, it would take me an hour and a half to look into each of their electronic charts." With this tool, Flood notes, "I can now get all of that information for all of those patients in 30 seconds."

Mentation

The ACE unit has been working on delirium for years and they developed an effective system that is now in place hospital-wide. Now, every patient receives a cognition screening upon admission and is screened for delirium on every shift. The providers and staff have received educational training on delirium and every unit has its own delirium toolkit. To provide cognitive stimulation and relaxation, the toolkits contain items such as hearing amplifiers, teddy bears, coloring and puzzle books, and stress balls.

Mobility

UAB Hospital has a safe mobility team, with strong support from executive leadership. Since 2016, they carried out Plan-Do-Study-Act cycles (PDSAs), iterative testing of changes on a small scale, to implement strategies to improve mobility. One of their approaches involved coaching staff, which they first tried on an orthopedic surgery unit. The age-friendly team developed and delivered training on knowledge and skills to all interprofessional frontline staff working on that unit, including the use and interpretation of geriatric screens to improve mobility and reduce delirium.

The team created a mobility dashboard that each unit can use to track their own progress. After the initial training, the NICHE coordinators provided intensive coaching for three months for staff on the pilot units. The goal was continued learning in how to implement and sustain age-friendly care that did not require daily presence of a geriatrician — that is, for age-friendly care to be embedded into everyday workflows. They also worked with the hospital to add content regarding the importance of mobility to the hospital's existing falls prevention patient education materials.

Another step was to hire mobility techs. This is a new role whose sole purpose is to mobilize patients who may need more assistance than a family member can provide, but who don't need a licensed professional. The goal, said Flood, is "having everybody performing at their highest scope of practice."

Finally, one afternoon a week, the ACE unit has a "move and groove" event with a music therapist, which promotes mobility for older adult patients as well as enjoyment — although this activity has been suspended during the COVID-19 pandemic.

Outcomes

UAB Hospital has seen some striking outcomes as a result of the age-friendly work.

- **Mobility:** Given that a patient's mobility while in the hospital is affected by their baseline mobility level, and in an effort to compare similar data, the team first evaluated outcomes for older adult patients who were independent in basic activities of daily living prior to hospital admission. The UAB team noted statistically significant improvements after the 4Ms education and coaching was implemented. The percentage of hospitalized older adult patients who were getting up from bed to a chair rose from 50 percent to 66 percent; and the percentage who were walking in the hall increased from 27 percent to 42 percent. Similar improvements in mobility were also seen in all older adult patients regardless of baseline functional status.

- **Mentation:** After implementing the 4Ms work described above, positive delirium screens significantly decreased from:
  - 10 percent pre-intervention to 5 percent post-intervention overall
  - 18 percent pre-intervention to 8 percent post-intervention in medical patients

- **Medication:** The UAB team has seen a decrease in the percentage of older adult patients with BEERS criteria medications (i.e., potentially inappropriate medications for the elderly) ordered and administered from partnering surgical services. The most recent example comes from their newer work with the urogynecology and gynecology-oncology services in which there was a significant reduction in BEERS medications, from 38 percent to 12 percent.

Lessons Learned

Through this work, the UAB team has learned several key lessons. One is the importance of engaging stakeholders in such a way that they all own driving age-friendly care together, as one team. Flood advocates a "pull strategy rather than a push strategy." She noted, "[Stakeholders have] got to want it, it's got to be their idea to truly own sustained improvement."

This point relates to her advice about getting started. "It can seem overwhelming, so go where you're wanted." For example, when orthopedic surgery called, Flood's team shifted their plans to accommodate them. Moreover, "Don't tell your stakeholders what to do — go and listen to their pain points. They're going to say something that age-friendly care will fix. Readjust your framing to their pain points." Flood added, "The easy part is we all have the same goals: reduce falls, delirium, mortality, length of stay."

It's also essential to make it easy to do the right thing, said Flood. "The frontline staff has to be involved in determining what the change will be — because it has to fit in their workflow."

Flood noted that, like all improvement work, making care more age-friendly is a continuous process. "You always have to be on the lookout, double-checking that the processes you put in place are still in place." She added, "This is a lifelong journey, but it's also fun and rewarding. Be sure and celebrate your team and their successes along the way."

One of those successes was evident one day when Flood was the geriatrician on duty on the ACE unit, doing her charting in the same room as the "move and groove" session. "I was so uplifted by the music. I always find myself singing along," she recalled. Then suddenly she saw a younger woman, the daughter of one of the older adults, start to tear up. Flood went over to her and said, "Are you OK?" The daughter explained that her mother had just come from another hospital and had been downcast, uncommunicative, and barely mobile. Now she was dancing. She told Flood, "You guys have given me my mother back."

The Institute for Healthcare Improvement is grateful to the UAB Hospital team who devoted their time and passion to this work. Specifically, we would like to thank Kellie Flood, MD, Emily Simmons, MSN, RN, David James, DNP, MSHQS, RN, and Shari Harrell, MSN, RN, for their leadership in the adoption of the 4Ms at UAB and in the Age-Friendly Health Systems movement.

What Is an Age-Friendly Health System?

Becoming an Age-Friendly Health System entails reliably providing a set of four evidence-based elements of high-quality care, known as the "4Ms," to all older adults: What Matters, Medication, Mentation, and Mobility.

Visit: ihi.org/AgeFriendly