

Background

MaineHealth is the largest health care organization in Maine. Maine Medical Center (MMC), a part of MaineHealth, owns and operates one facility in Portland, the state's largest city.

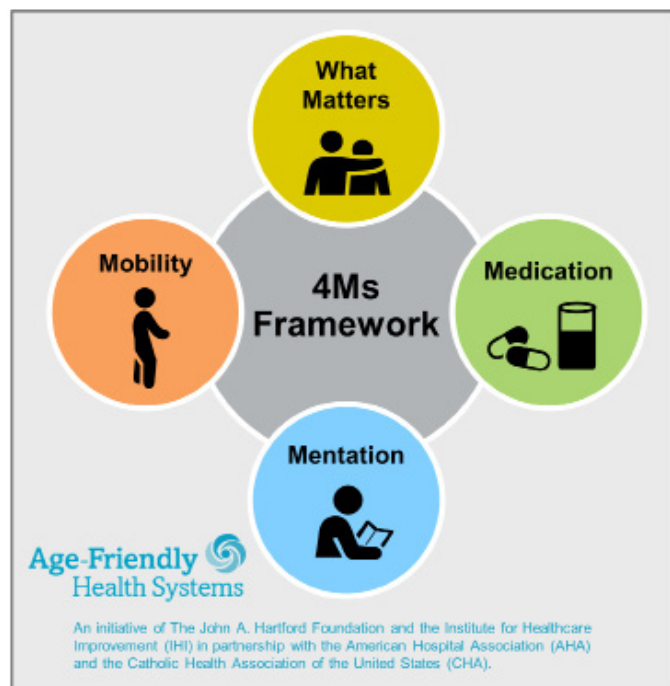
According to the US Census Bureau, Maine's population is the oldest in the nation, with approximately 20 percent of residents ages 65 years and older as of 2018. In FY2019, MMC saw almost 13,000 patients in that age group.

MaineHealth was already focused on improving care for older adults when their leaders saw the opportunity to get involved in 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 initiative aligned perfectly with their goals, and in 2018, MaineHealth joined the Age-Friendly Health Systems Action Community.

Approach

As a member of the Action Community, MaineHealth committed to providing age-friendly care, defined as evidence-based care for older adults that reliably implements the "4Ms": What Matters, Medication, Mentation, and Mobility (see Figure 1).

The work started small, in a geriatrics program (The Hospital Elder Life Program) at Maine Medical Center. "We knew that we were doing a lot of the 4Ms already," said Molly Anderson, Manager of Geriatrics Programs at MMC. But the 4Ms framework helped them build on the work that was already



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

underway. "In geriatrics we hear the 4Ms and we get it and it makes a lot of sense to us," said Anderson. "It's a really great framework to be able to describe [the work] to other people."

Since starting in the geriatrics program, the MMC team has spread the 4Ms approach to two other units in the hospital: cardiology and trauma. "They all have different gaps and different priorities, and different cultures," Anderson noted.

The following overview describes MMC's activities related to each of the 4Ms.

What Matters

The staff in the MMC geriatrics program were confident that at some point they asked older adults about what mattered to them, but they did not have a consistent, reliable system for tracking the process and documenting the answers. The 4Ms framework helped them to establish such a system. In their electronic health record (EHR), they included a phrase prompting the team member to ask the patient, “What matters most to you here in the hospital? What matters most for your overall healing?” Answers are documented in a consult note that is then accessible to all members of the care team.

“People were not used to having this question asked of them explicitly,” Anderson recalled. At first they would often give answers like, “I want to get out of here, I want to go home. I want to stay out of the hospital.” Team members were retrained to probe further, asking for additional clarification: “What is it that you’re doing at home that makes you want to stay out of the hospital?” Older adults had a range of answers: one was a caretaker for his spouse; another mentioned a pet.

One gentleman mentioned that he went ballroom dancing every week with his wife. The provider let his care team know, and they looked at how his medications might affect mobility. They ultimately referred him to a program called Matter of Balance.

When the 4Ms framework was spread to the other units, they adapted them in various ways. The trauma team, for example, developed a template to use in conversations about goals of care — to ask what matters if the patient’s clinical course does not go in the way they hope it will. They put this template in the EHR to ensure that it is used consistently and that the answers are documented.

Medication

One of MaineHealth’s major goals in Medication is to minimize the prescription of sleep aids, which are considered risky for older adults. In this effort, they encourage alternative, non-pharmacological approaches to help with sleep, such as guided relaxation, white noise machines, headphones, earplugs, and avoiding daytime naps. They also try to be sensitive to individual needs and preferences. “If somebody is a night owl,” said Anderson, “let them be a night owl.” It all comes back to What Matters, she said. “What does this patient do at home when they can’t sleep? Some patients

might like herbal tea, but for others that might keep them up all night using the bathroom.”

Adjusting the timing of medication administration, so that it does not occur in the middle of the night, can also help. Finally, in an example of how the 4Ms are mutually reinforcing, regular mobility during the day can help enormously with sleep. “As much and as safely as [older patients] can be up and moving, the better they’re going to sleep, the faster they can get out of the hospital,” Anderson noted.

In addition, an MMC pharmacist, working with the cardiology and trauma teams, assembled two teaching modules, one on the risks of sleep aids and the other on the risks of polypharmacy. The pharmacist gave recorded presentations, which all of the nurses and providers were assigned to watch. If not for COVID-19, they probably would not have recorded the presentations; the fact that they did was a silver lining of the pandemic. Now these recordings are available for others to watch as well, which will be helpful as the age-friendly work spreads throughout the system. “This highlights the interdisciplinary approach we took to education around high-risk medications for older adults,” said Anderson. “The feedback from nursing is that they feel more confident in their communication with providers overnight to decrease use of higher-risk sleep aids.”



Mobility

Mobilizing patients can be a labor-intensive process, often requiring two people to help one patient. For situations where not enough staff members are available, MMC invested in sit-to-stand equipment (also called standing and raising aids), which enables patients to transfer out of bed to a standing position with assistance from one person rather than two.

They also stepped up their assessment efforts. A policy was already in place to conduct the Bedside Mobility Assessment Tool (BMAT) every 12 hours, but they implemented a key performance indicator (KPI) to ensure it was being documented consistently. In the ED, every patient receives a falls risk assessment. On the trauma unit, an RN and provider started doing a falls risk assessment together at the bedside.

The team worked with a physical therapist to create an alert in the EHR around mobility. There are multiple places in the EHR to document mobility, by different team members, so the physical therapist worked to ensure that the alert was pulling from all of these locations in the record. A red diamond appears if there has been no documented mobility in more than four hours, and a green circle appears if mobility has occurred. The team also implemented a mobility status check every four hours. A big part of the work, according to Anderson, was “just making it part of the culture.”

The trauma unit found Mobility more challenging, because their patients were injured and often couldn't walk. So they had to adapt their expectations. “OK, well if they can't walk, let's make sure they're up in the chair,” said Anderson. “We meet people where they're at.”

Mentation

The geriatrics unit has been implementing the Confusion Assessment Method (CAM) since 2012. When the MMC team joined the Action Community, they set an aim to track adherence to CAM administration and increase documentation. In inpatient units, they are currently implementing a KPI that the CAM will be completed 90 percent of the time. This is their institutional goal. A clinical nurse specialist for geriatrics now audits the CAM for these two units to ensure that it is being completed accurately. She then reports her findings to unit educators.

Education for staff is a key part of this effort. A clinical nurse specialist for geriatrics developed educational materials in the form of posters and pamphlets, outlining the role of different staff. In addition, the team developed a delirium education video, which nurses are assigned to watch.

To track progress in adhering to all of their 4Ms activities, the MMC team utilizes both a dashboard and a scorecard. A dashboard, Anderson explained, is more of a “flash in time” — for example, “Right now, does every patient have a BMAT? You can follow up in the moment.” A scorecard, by contrast, is “more like a report card.” You can look at data over a designated time period and it shows how they are doing over time for key measures related to 4Ms.

Outcomes

MMC has seen remarkable impact in the units that have adopted the 4Ms, as evidenced by the results below.

- **Medication:** Reduced administration of high-risk medications by 5 percent on the trauma unit and by 8 percent on the cardiology unit.
- **Mentation:** Increased the percentage of patients with documented daily CAM from 50 percent to 74 percent on the trauma unit, and from 88 percent to 94 percent on the cardiology unit.
- **Mobility:** Increased documented daily BMAT from 52 percent to 77 percent on the trauma unit, and from 91 percent to 93 percent on the cardiology unit. On the trauma unit, total number of yearly falls decreased from 23 to 4 (and none with injury).



Lessons Learned

The MMC team has learned some key lessons from their work as part of the Age-Friendly Health Systems Action Community. According to Dr. Emily Carter, a geriatrician who is a leader in the work, it was important to listen to staff in all four units to make sure that the 4Ms implementation was not perceived as a top-down initiative. “We have to provide a framework,” she said, and then ask, “How can we make some of these changes, and what would be meaningful change for your patients?”

Anderson notes that lack of baseline data can feel like an obstacle, but she encourages health systems not to let that hinder them. “You probably have a good feeling for where your gaps are. Don’t let data be a barrier to getting started.”

It’s also important to find a champion, or multiple champions. “We kind of knew people who were a little bit interested in geriatrics,” said Anderson. “We engaged those people to be our champions so they could disseminate the excitement among their peers and colleagues.” It’s also been invaluable to have core age-friendly champions — such as Anderson and Carter — monitoring the work and making connections, ensuring that innovations underway are not staying in silos.

Next Steps

The MMC team plans to further spread the 4Ms to two medical-surgical floors, the emergency department, and urgent care. Over the longer term, they aim to spread successful age-friendly protocols and workflows to additional facilities at MaineHealth.

The outcomes data they have collected will be essential to further spread, noted Anderson. “We can show people, ‘Look, we started here and ended here. If they can do it, you can do it.’”

The Institute for Healthcare Improvement is grateful to the MaineHealth/Maine Medical Center team who devoted their time and passion to this work. Specifically, we would like to thank Molly Anderson and Emily Carter, MD, for their leadership in the adoption of the 4Ms at MaineHealth 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