Stanford Health Care

**Institute *for* Healthcare Improvement**

Background

Stanford Health Care in California encompasses the new Stanford Hospital, outpatient clinics in Redwood City and Palo Alto, the Stanford South Bay Cancer Center, and primary care offices throughout the Bay Area, as well as virtual services.

In October 2016, Stanford Health Care joined 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. Becoming an Age-Friendly Health System means providing evidence-based care to older adults that reliably implements the "4Ms": What Matters, Medication, Mentation, and Mobility (see Figure 1).

The Stanford Health Care Inpatient Geriatric Medicine team has long been devoted to providing the best possible care to hospitalized older adults. They recognized that becoming an Age-Friendly Health System created an opportunity to improve reliable use of evidence-based care in their high-risk inpatient population. In addition, they realized that the innovations they piloted, if successful, could then be spread across the whole system.

For the Stanford Health Care team, being part of the national Age-Friendly Health Systems movement enabled them to:

- Access a community of experts in process improvement and other health system teams that were implementing the 4Ms to improve age-friendly care;

- Design and measure key processes based on the 4Ms framework; and

- Build internal support from key stakeholders and resource allocation from hospital teams of various disciplines.
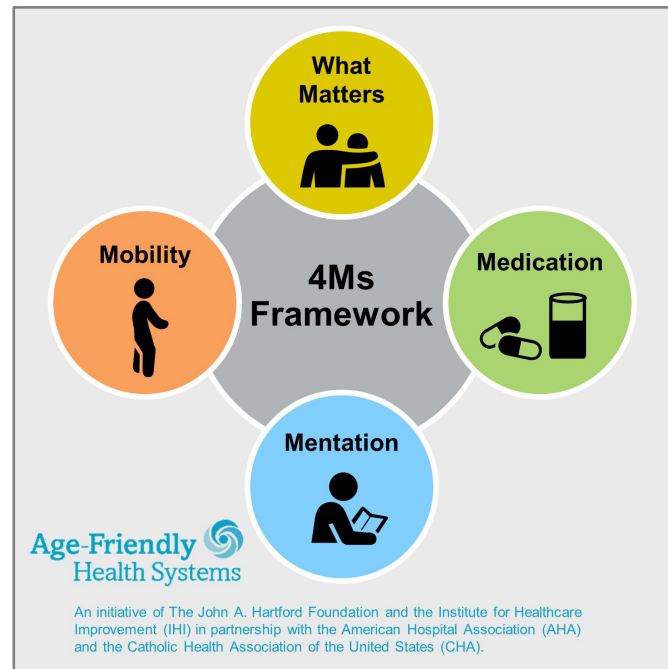
For related work, this graphic may be used in its entirety without requesting permission. Graphic files and guidance at ihi.org/AgeFriendly

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

Approach

Leaders selected the geriatric trauma service as the pilot site because older adults on the service tend to have high resource needs, are likely to suffer from frailty, and many have already experienced a fall. For all of these reasons, the cost of caring for the population is relatively high. As a result, this patient population seemed to offer a potentially high payoff for increasing reliable practice of the 4Ms. "It was sort of a natural synergy with our work," said Dr. Ankur Bharija. "We were working with a high-risk geriatric trauma population already, and it seemed like a natural partnership to improve the care in this population even more through the age-friendly work."

The team started by setting a measurable and time-bound goal: *To improve the consistent delivery of the "4Ms care bundle" from 60 percent to 80 percent in the geriatric trauma population from November 2018 to November 2019*.

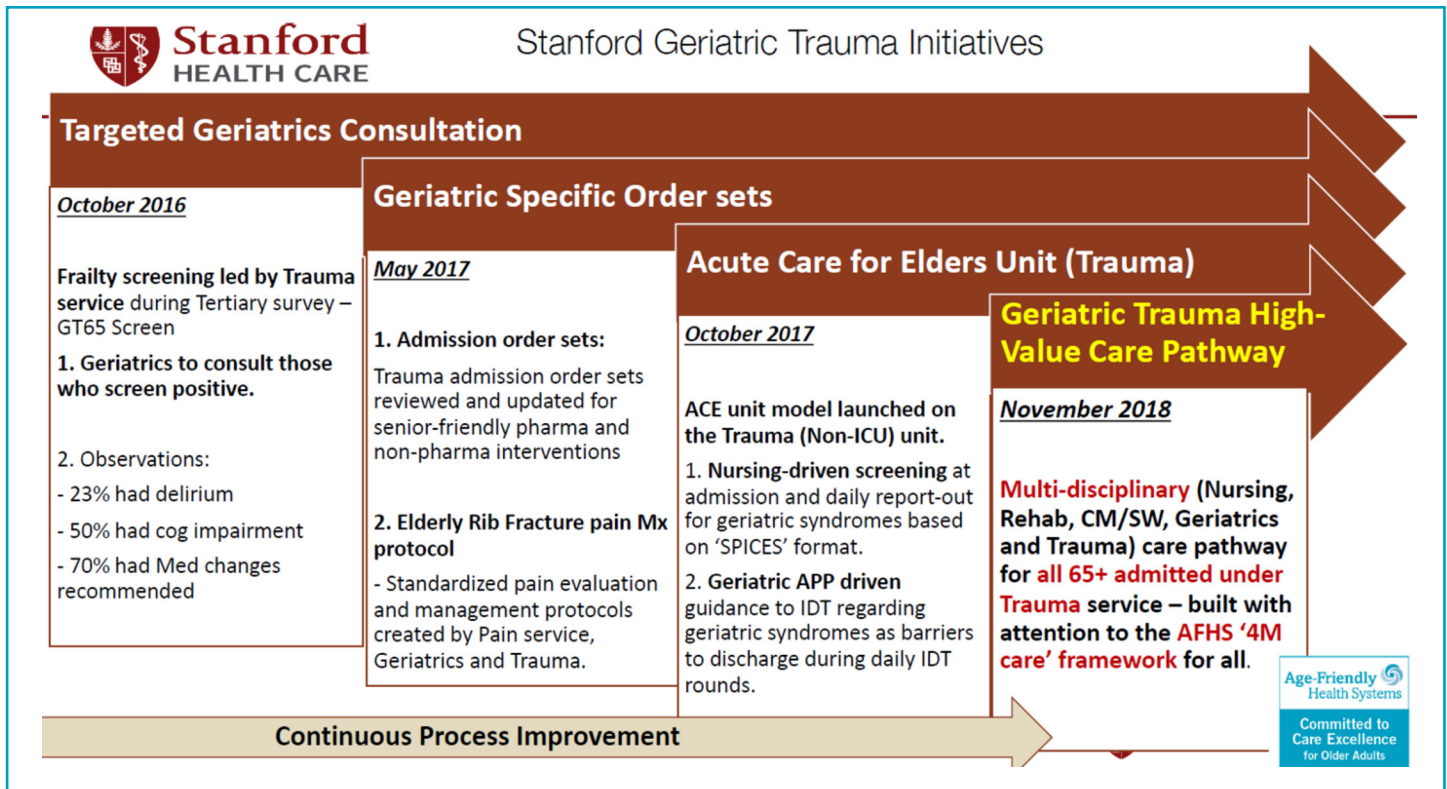To achieve this goal, they implemented a four-phase approach as shown in Figure 2 and described below.

Figure 2. Stanford Health Care Approach to Consistently Deliver 4Ms Care to the Geriatric Trauma Population

- **Adopt Screening for 4Ms:** The first step was to practice reliably screening for the 4Ms with older adults who come into the trauma service — approximately 300 per year. Initially, they focused on ensuring that trauma team clinicians screened for geriatric issues upon admission, which allowed them to address the 4Ms upstream. Over time, they have shifted to interdisciplinary screening by nursing, rehab, and geriatric medicine service. Nursing focuses on Mentation, rehab focuses on Mobility, and the geriatric medicine service on Medication and What Matters. The goal is to complete the screenings, even though they might not all take place at the same time, within 24 hours of admission for each patient (within 48 hours for What Matters).

- **Build Geriatric-Specific Order Sets in the EHR:** The team collaborated with the electronic health record (EHR) team to review all order sets through a geriatric lens. "There was opportunity to be more intentional in our care of older adults by optimizing the EHR," said Ann Mitchell, RN, MSN, CNS, CMSRN, Interim Director of Professional Practice and Clinical Nurse Specialist–Age-Friendly Health Systems/NICHE at Stanford Health Care. The team implemented enhancements in the EHR based on the 4Ms, said Mitchell, "which could then be scaled across the enterprise." They focused on pain evaluation and management protocols, sleep promotion, bowel regimen, and more.

- **Pilot Acute Care for Elders Unit:** Stanford piloted an Acute Care for Elders (ACE) unit within the trauma unit where care is organized around the 4Ms. In late 2017 through the summer of 2018, they piloted interventions informed by the 4Ms, including nursing-driven screens at admission, proactive attention to geriatric syndromes, and activating interdisciplinary services. They also introduced an interdisciplinary round, including physical therapists, occupational therapists, social workers, geriatricians, nursing staff, and dieticians, where everyone can hear about the geriatric syndromes and concerns. A volunteer-driven "friendly-visitor" program was also piloted, to pay attention to Mentation and What Matters. "We were thrilled to see the program's impact, and how well it was received by the institution and the volunteer services," said Nannette Storr-Street, RN, MS, AGCNS-BC, Clinical Nurse Specialist in Geriatric Medicine at Stanford Health Care and the lead for the initiative. "The program is now serving as a model for scaling similar volunteer-driven programs system-wide."

- **Develop the Geriatric Trauma High-Value Care Pathway:** The team also formalized a high-value clinical pathway from presentation to the emergency department (ED) through to discharge — that is, a standardized process of care that a geriatrician would normally recommend. The goal was "to look at the patient's journey as soon as they arrive to the ED," said Bharija. "Looking at that patient journey through the lens of the patient, the family caregiver, all the providers that are going to come in contact with them — how can we integrate the 4Ms upstream much earlier?" To answer this question, a large steering committee was formed, whose members include Patient and Family Advisory Council members and clinicians from each discipline. Specific 4Ms-based interventions were co-designed for each phase of the hospital stay and beyond.

The team was also inspired by another health system in the movement, Kaiser Permanente, to develop an Age-Friendly Health Systems dashboard that provides a glimpse of the current key metrics for age-friendly care. The Stanford trauma service created a dashboard specifically for geriatric trauma. "Having the ability to measure our work through the Age-Friendly 4Ms care lens helped us validate the work in a variety of areas of quality and practice," said Bharija. A dashboard comprises specific metrics pulled from a variety of sources, and gives a bigger picture over time.

In order to scale the Age-Friendly Health Systems work across the Stanford health system, a governance structure is currently in development. "The purpose is to oversee development and comprehensive implementation by integrating the 4Ms across the system," said Mitchell.

"I hope that in the not-too-distant future older adults will find that anywhere they encounter our health system they will find our staff, services, and facilities are highly knowledgeable about and prepared to meet their unique needs, whether in the emergency department, operating room, clinic, or hospital ward," said Dr. Marina Martin, Section Chief of Geriatric Medicine and Clinical Associate Professor, Geriatric Medicine, Division of Primary Care and Population Health, Department of Medicine, Stanford Medicine. "This means making sure that all faculty, staff, and residents understand how older adults' bodies and lives change with aging, and how the 4Ms framework for health care helps address these changes."

Outcomes

The work at Stanford Health Care to improve age-friendly care for hospitalized older adults has produced impressive outcomes, as illustrated in the table below.

Outcome Measure	FY 2017	FY 2018	FY 2019
Length of stay (non-surgical)	4.55 days	4.13 days	4.1 days
Mortality (percentage)	5.8%	4.8%	2.5%
Time to first goals of care and advance care planning conversation	50 hours	38 hours	32 hours
Average time to first mobilization		48 hours	23 hours
HCAHPS (top box score for patient experience)	58.7	63.5	67.3
Delirium incidence	32%	34%	24%

Source: Stanford Health Care, February 2020 ("Friends of Age-Friendly Health Systems" presentation by Ankur Bharija, MD, Clinical Assistant Professor, Geriatric Medicine, Division of Primary Care and Population Health, Department of Medicine, Stanford Medicine)

Lessons Learned

The Stanford Health Care team emphasizes the importance of focusing on the 4Ms as a set while working deeply on each of the 4Ms. They recommend starting with What Matters because it informs the three other Ms.

In terms of engaging leaders, trainees, and colleagues at all levels, the team found that the 4Ms provided a focus. "A conversation about four things instead of 16 is a much easier conversation," said Mitchell. "The 4Ms make the conversation easier. It brings leadership and every discipline together. And it quite literally keeps the patient at the center with a What Matters whiteboard."

"The 4Ms framework has provided a very useful teaching tool as well for learners at all levels and from various disciplines, including residents, fellows, nursing and PA students, and more," said Dr. Matthew Mesias, Medical Director of the new ACE unit and Clinical Assistant Professor, Geriatric Medicine, Division of Primary Care and Population Health, Department of Medicine, Stanford University School of Medicine. "This is now being embedded in our new ACE unit and age-friendly learning modules."

Engaging colleagues from the Quality and Business Analytics Departments as well as the EHR team enabled Stanford Health Care to test and build a pilot program that can be spread. "We could not have done this without the right stakeholders," said Bharija.

Teams are also encouraged to be patient and reminded that change takes time. "Working with smaller groups and teams, changing microcultures and then building on that, we've learned a lot from our failures and have seen some wins," said Bharija. "That's a testament that it does take time, but it has paid off, in terms of improvement in both care and culture."

The Institute for Healthcare Improvement is grateful to the Stanford Health Care team who devoted their time and passion to this work. Specifically, we would like to thank Ann Mitchell, RN, CNS, Nannette Storr-Street, RN, AGCNS-BC, Ankur Bharija, MD, Matthew Mesias, MD, Marina Martin, MD, and Sandy Chan, LCSW, APHSW-C, for their leadership in the adoption of the 4Ms at Stanford Health Care 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