



## Ugochi Ohuabunwa, MD

*chief, geriatrics service line,*  
Grady Health System

### Background

Older adults account for 38% of hospital admissions and 49% of hospital days. Rates of hospitalization are twice as great in patients over age 85. Hospitalized older adults face multiple hazards in the hospital. Data shows that 50% of hospitalized older adults suffer from complications related to hospitalization. About 42% lose the capacity to perform more than one basic activity of daily living (ADL) at discharge. Up to 23% of these patients do not recover in six months and data has also shown that 17% are dead within six months. Up to 23.3% of these older adults who suffer functional decline are unable to return home and require nursing home placement. Up to 67% of older adults with delirium may go unrecognized. Delirium has been associated with increased morbidity and mortality, institutionalization, longer length of stay and readmission. Up to 25-30% of hospitalized older adults are malnourished. Malnutrition is an independent risk factor for mortality and a strong negative predictor of clinical outcomes.

In view of these staggering numbers that suggest ongoing poor outcomes for hospitalized older adults, the challenge has been to ensure that evidence-based care processes are implemented to address these major contributors to adverse outcomes among older adults. With current demographic reports showing that Atlanta is America's No. 1 rapidly aging city and that the U.S. 65-plus population is expected to nearly double over the next 30 years, it became more imperative for our health care system to build processes of care to address our aging populations' needs and in addition, address those identified contributors to poor outcomes among older adults.

### Approach

The Age-Friendly Health Systems (AFHS) Initiative developed by the of The John A. Hartford Foundation and the Institute for Healthcare Improvement, in partnership with the American Hospital Association and the Catholic Health Association of the United States, provides four evidence-based elements of

high-quality care, known as the "4Ms," to all older adults at every interaction within health systems. The framework addresses the hazards of hospitalization that contribute to poor outcomes including Mentation — delirium, depression, dementia; Mobility — functional decline; Medication — adverse medication reactions;

What Matters — identifying and incorporating patient and family goals in their care. We adopted this framework to build care processes to address these hazards of hospitalization. In addition to the 4Ms, we added a fifth M — Malnutrition — in view of the fact that our patient population with multiple social determinants

of health risk factors is at high risk for malnutrition. In addition, we also added “Mal-care” transitions as part of our initiative to ensure that at discharge, our patients are properly plugged into the health care system for follow-up and community-based resources to address their social needs. **Figures 1-3** highlight care processes that we developed to address the 4Ms + Malnutrition + Mal-Care Transitions and the timeline for implementation which has been achieved. In addition, we developed outcome measures to evaluate the effectiveness of implementation.

## Outcomes

The AFHS framework has been successfully implemented in the inpatient setting at our health system with the following results:

- The building of a team consisting of leadership of various departments: Nursing, Rehabilitation Services, Pharmacy, Nutrition, Public Relations, Senior Services, Nursing Informatics, Business Intelligence and a Senior Advisory Board. This team has been instrumental in the development of care processes

and engagement of staff in implementation of these care processes. The team also has oversight to monitor outcomes.

- Development of screening tools and care processes that focus on eliciting and incorporating patients’ goals in all the other Ms – Mentation activities, Mobility, Medications, Nutrition, Transitions of Care.
- The building of flowsheets and documentation templates in the electronic medical records (EPIC) as shown in **Figure 2**.
- The building of a workbench to monitor compliance with screenings and care plan implementation.
- The building of a dashboard to monitor outcomes data.
- Training of several staff, including nurses, nurse techs and unit secretaries, on the Age-Friendly Framework Care Processes. **We have successfully trained 78 staff at this time and will continue to train staff as we disseminate the AFHS framework to each unit.**
- Implementation of the developed care processes.
- **Six hundred and eighty-one patients have received care so far with the AFHS framework at Grady Health System. We are currently evaluating outcomes in these patients.**

## 4Ms + Framework at Grady

5Ms	Tools and Methods to Assess/Implement 5Ms	Outcome Measures (Performance Dashboard)
<b>What Matters</b>	<ul style="list-style-type: none"> <li>• What Matters Questionnaire in Epic</li> <li>• Goals of Care Discussion</li> <li>• Advances Directive Discussion</li> <li>• Virtual Connection w/ Family, Set Up in Epic MyChart</li> </ul>	<ul style="list-style-type: none"> <li>• When You Left The Hospital</li> <li>• Overall Rating of the Hospital</li> <li>• Understanding Your Care When You Left The Hospital</li> <li>• Referral for Community Resources</li> </ul>
<b>Medication</b>	<ul style="list-style-type: none"> <li>• BEERS Med on ACE Tracker at admission, daily and at discharge</li> <li>• Best Practice Advisory (BPA) in Epic for providers to avoid use of Beers meds</li> </ul>	<ul style="list-style-type: none"> <li>• Decreased TLOS &amp; Readmissions</li> <li>• Decrease in adverse medication events</li> </ul>
<b>Mentation</b>	<ul style="list-style-type: none"> <li>• AWOL Delirium Risk Assessment Tool</li> <li>• Six-Item Screener</li> <li>• NU DESC done every 12 hours</li> <li>• PHQ2</li> </ul>	<ul style="list-style-type: none"> <li>• NUDEC Delirium Score</li> <li>• Track Use of Restraints</li> <li>• Use of Delirium Medication</li> <li>• Decrease in Functional Decline</li> </ul>
<b>Mobility</b>	<ul style="list-style-type: none"> <li>• Track Get Up and Go Screening Tool at admission, daily and at discharge</li> <li>• Track Activity Level daily</li> <li>• Mobilize Patient</li> </ul>	<ul style="list-style-type: none"> <li>• Increased Mobility</li> <li>• Decrease in HACs: FWI, Pressure Ulcers, CLABSI, CAUDI</li> <li>• Higher percentage discharge to home</li> </ul>
<b>Malnutrition</b>	<ul style="list-style-type: none"> <li>• Nurse Screens for Malnutrition at Intake: patient is eating, well hydrated - form in Epic</li> <li>• ASPEN Guidelines</li> <li>• Dietician Assessment: Malnutrition Risk &amp; Food Insecurity</li> <li>• Assess Nutrition Needs/Food Access prior to Discharge</li> <li>• Open Hand Referral</li> </ul>	<ul style="list-style-type: none"> <li>• Decreased TLOS &amp; Readmissions</li> <li>• Decrease number and financial impact of harmful events</li> </ul>
<b>AFHS Network</b>	<ul style="list-style-type: none"> <li>• Tablet Use</li> <li>• Referral for Community Resources</li> <li>• Transitions of Care Referral</li> </ul>	<ul style="list-style-type: none"> <li>• Improved Telehealth Follow Up</li> <li>• Understanding Your Care</li> <li>• Referral for Community Resources</li> </ul>

Figure 1



Figure 2

Figure 3



## Lessons Learned

### Important lessons learned include:

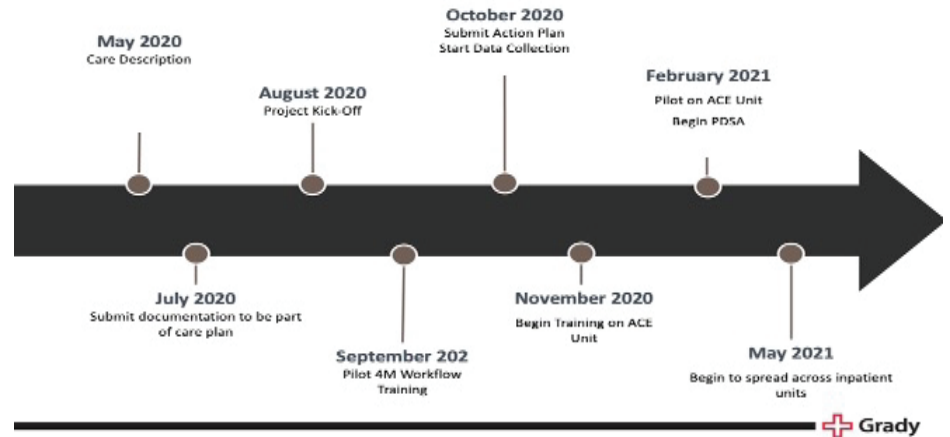
- 1 Engaging hospital leadership to ensure buy-in and support for implementation of care processes.
- 2 Building a team that includes leaders from various departments to promote staff engagement.
- 3 Having nurse champions on each of the units to monitor compliance through staff audits, provide education and feedback to staff, and be a resource for staff on the unit. The Geriatric Resource Nurse model from the NICHE program is a great approach to help promote implementation of the AFHS framework in the inpatient units.
- 4 Having nurse tech champions on each of the units to promote mobility, mentation activities, and optimal nutrition and hydration in line with patients' goals.
- 5 Creating opportunities for communication of the care plan among team members

through whiteboards in patients' rooms and patients' charts in the electronic health record.

- 6 Creating opportunities for communication of the care plan among team members through interdisciplinary (IDT) rounds **where the 4Ms screening results for each patient are reported to the interdisciplinary team members and the elicited patient's goals for the day are communicated. The care plan for the day is also discussed. We have found these IDT rounds very helpful in not only communicating the care plan, but also discussing the patients' discharge plans, appointment scheduling and determination of community resource needs to ensure optimal transitions of care.**

## AFHS Timeline

Figure 4



## Next Steps

### The next steps for us are:



Dissemination of the AFHS framework through all the Medical-Surgical and Intermediate Care Units in a stepwise approach.



Dissemination of the AFHS framework in the Emergency Department. Our go-live date for implementation of the AFHS framework within our Emergency Department Observation Unit (Clinical Decision Unit) is Sept. 1, 2021 (see [Figure 4](#)).



Implementation of the AFHS framework within our outpatient clinics.