Non-ICU Delirium Screening

An Approach When There is No Guideline

American Delirium Society Webinar
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Objectives

1. Discuss the importance of non-ICU delirium screening

2. Provide a systematic approach to implementing at your hospital

3. Review MUSC's non-ICU delirium screening program

Considering delirium and COVID-19

A change in mental status is an important clinical sign

Delirium may be an important manifestation in frail elderly patients

Clinical environment (everyone in PPE) may be more disorienting

More shared rooms and more chaos = more difficult to implement non-pharmacologic interventions

Management may change if concurrent use of medications like hydroxychloroquine and azithromycin

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Why screen for delirium outside the ICU?

Routine monitoring for delirium is a guideline-level standard of care in the ICU

- High prevalence and incidence
- Substantial associated morbidity and mortality

Delirium often persists after stepping down from critical care

Morbidity and mortality still significant in non-ICU setting

- 1.5-fold increase in mortality
- Persistent loss of independence

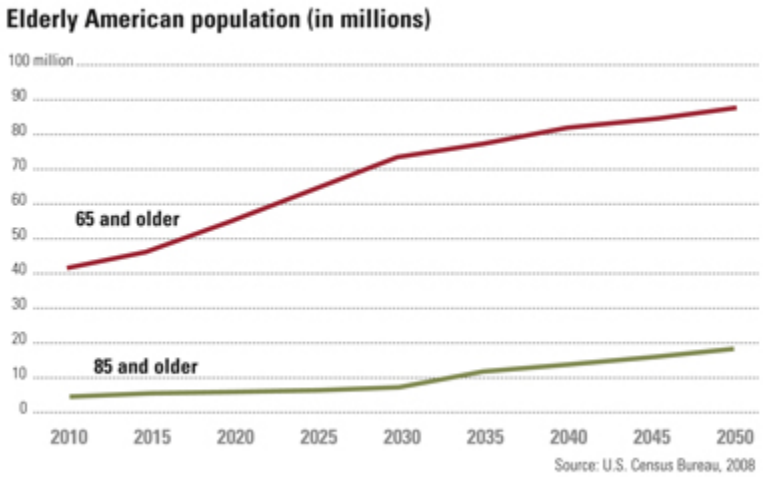
Why screen for delirium outside the ICU?

Common problem particularly in the elderly

13% of all adult patients admitted to our hospital

Patients > 65 yo comprise 13% of the population but 40% of hospital admissions

Patients > 85yo comprise 1.3% of the population but 9.2% of hospital admission



Healthcare Cost and Utilization Project Facts and Figures 2008. Statistics on Hospital-Based Care in the United States. Agency for Healthcare Research and Quality (AHRQ). http://www.hcup-us.ahrq.gov/reports/factsandfigures/2008/section1_TOC.jsp.

Missed Diagnosis

Many factors contribute to missed diagnosis

- Fluctuating nature of illness
- Subtle subtypes: hypoactive
- Communication barriers between staff
- Inadequate use of delirium assessment tools
- Lack of conceptual understanding
- Similarity to and often mistaken with dementia
- Concern that making the diagnosis won't make a difference

El Hussein M, Hirst S, Salyers V. Factors that contribute to underrecognition of delirium by registered nurses in acute care settings: a scoping review of the literature to explain this phenomenon. J Clin Nurs 2015;24:906–15.

Missed Diagnosis

Study of 303 elderly (median age 72) patients who presented to the ED, 25 (8.3%) had delirium.

- 1 in 4 were identified by the emergency room physician
- Of the 16 who were admitted to the hospital, only 1 recognized by admitting physician
- Majority of these patients had hypoactive delirium

Study of 710 elderly (mean age 83) patients admitted to medical unit. 110 (15.5%) had delirium by validated screening tool.

- 28% of these patients were identified by clinical team in acute hospital setting

Han JH, Zimmerman EE, Cutler N, et al. Delirium in Older Emergency Department Patients: Recognition, Risk Factors, and Psychomotor Subtypes. *Academic emergency medicine* :2009;16(3):193-200.
Collins N, Blanchard MR, Tookman A et al. Detection of delirium in the acute hospital. Age Ageing 2010;39:131–5.

Non-ICU Delirium Screening is Necessary

Delirium is common problem

Routing screening can improve diagnosis

Monitor for change of mental status during the hospitalization

Improve quality of care, by paying more attention to our confused and vulnerable patients

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Important Things to Consider

Why should your hospital be screening for delirium?

Who will be your champions? Where do you begin?

Who will do the screening and which tool to use

What happens when result is positive?

What will you measure?

Finding your hook and your home

What are your hospital's "sore spots"?

*May be your pilot unit's goals first

Cost, length of stay, falls?

Age friendly health systems?

Quality improvement project

Who will be your champion(s)

Need an interprofessional and multidisciplinary team

For screening:

- Nursing leadership
- Physician: hospitalist, psychiatry

For intervention:

- PT/OT
- Pharmacy
- Volunteer services

Which tool to use?

Questions to ask (and answer)

- Who will be doing it?
- And how long will it take?
- Is there a tool already being used (CAM-ICU)?
- How often?
- Whom will you screen?

Choosing a tool

Practical and user friendly

Ideally lending off something already in place

Approved by pilot unit staff

Where to pilot?

A unit familiar with your champions

Manageable but scalable…start small

Where your need is most obvious (back to your hook)

Anticipate months of piloting

Solicit feedback (is this helpful? Time measurement?)

Share appreciation, data, feedback often

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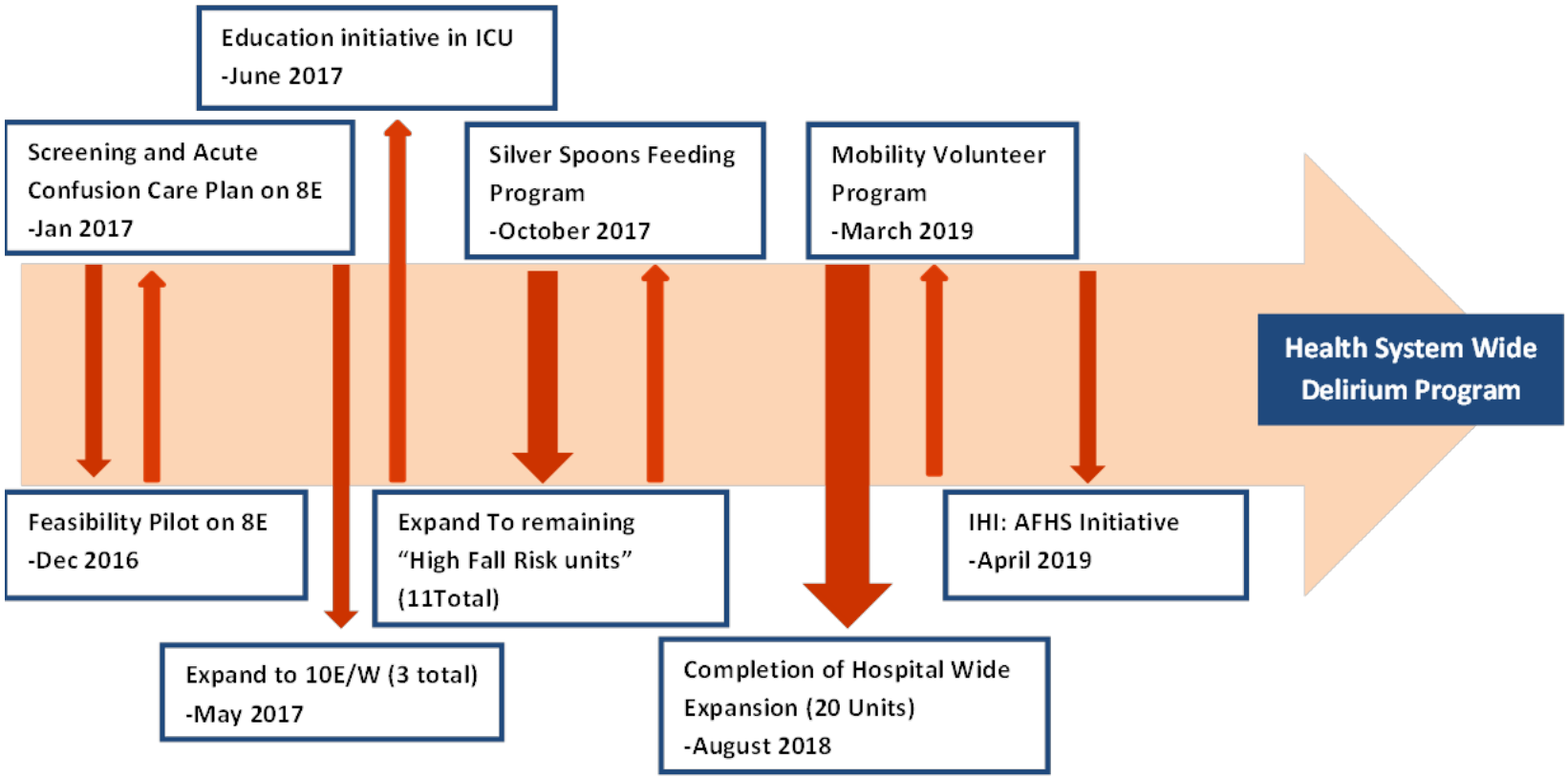
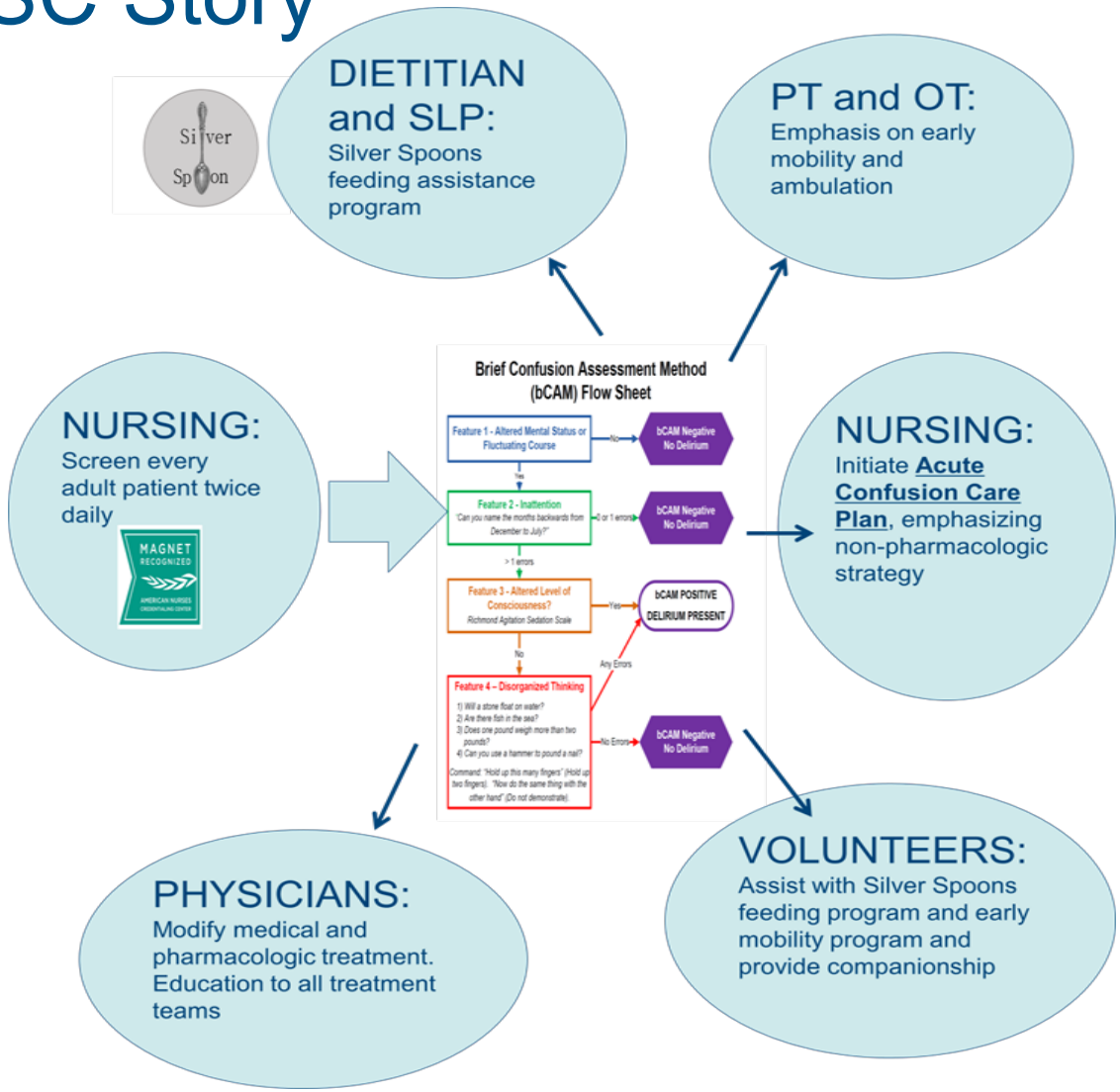
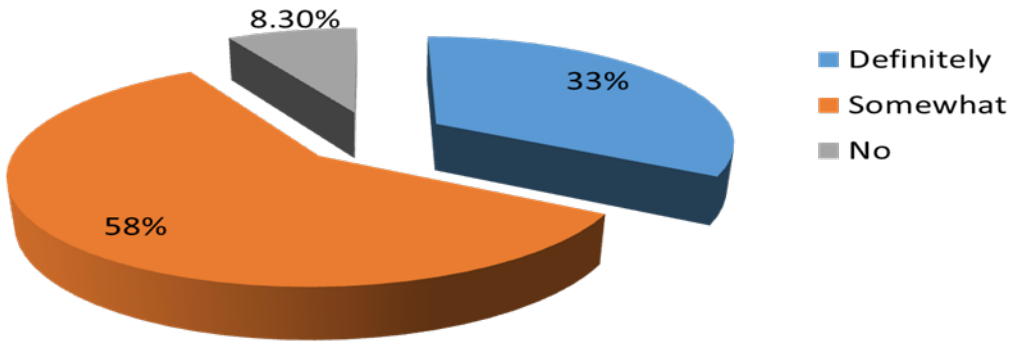
The MUSC Story



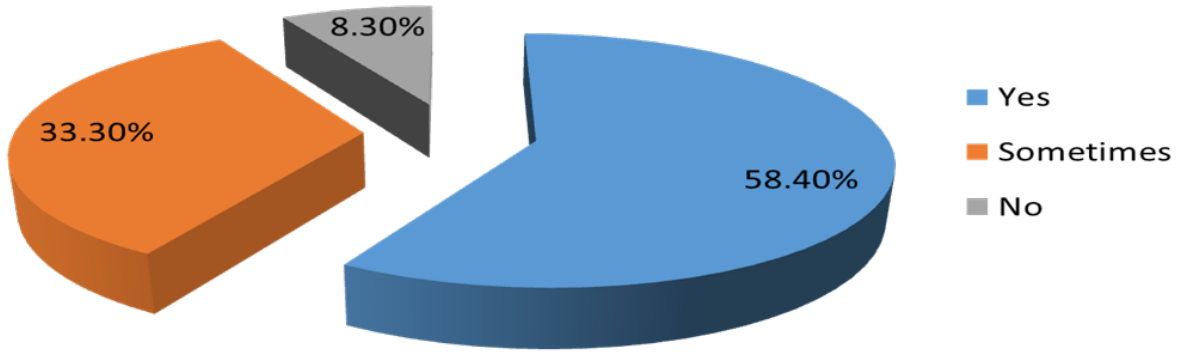
The MUSC Story



Do you feel you were able to identify more patients suffering from delirium than before knowing how to perform the CAM assessment



Did you do anything different for your patients now knowing that they were suffering from delirium?



Interprofessional Approach at MUSC

Table 1: Interprofessional Approach to Delirious Patients			
Profession	**Role**	**Change in Practice**	**Impact**
Nursing	Screening and administration of care plan	Added screening tool	Enhanced focus on confused patient
Occupational and Physical Therapy	Response to positive screen	Increased awareness of patients mental status	Improved mobility
Dietitian and SLP	Train volunteers, provide consult for patient	Added training	Greater nutritional intake
Volunteer	Feeding protocol for CAM positive patient	Less administrative, more direct patient care	Increased companionship, mobility and nutrition
Physician	Primary provider	Improved awareness of patients mental status	Modify treatment plan and adjust medications

Utilization of Volunteers

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SILVER SPOONS: VOLUNTEER FEEDING ASSISTANCE FOR PATIENTS WITH DELIRIUM

Katelyn Ferguson; Kelley Martin, MPH, RDN, LD; Kelly Hedges, CDVS; Kristine Harper MSN, RN, NE-BC; Benjamin Kalivas, MD

OBJECTIVES

Establish a mealtime assistance program for patients with delirium.

Demonstrate that a volunteer feeding program is safe for delirious patients

Improve patient's nutrition and hydration status in hopes of reducing the duration and severity of delirium.

METHODS

In coordination with dieticians, speech language pathology and the Delirium Work Group at MUSC a feeding protocol was created

A training protocol was developed to utilize volunteers in an environment to provide safe and comfortable mealtime assistance

Nurses identified patients who would benefit, with priority to appropriate delirious (bCAM positive) patients and facilitated volunteers in assisting with meals and providing companionship

Data was collected on the number of meals fed, percent food and beverage intake, calories consumed, and the impact on nursing time and workflow

RESULTS

Six volunteers assisted with 16 meals

Over 470 minutes of total nursing time have been saved by this program with our volunteers saving on average 29 minutes of nursing time each meal.

Average age of patient was 59yo

Average Nursing Time Saved Per Meal	Average Caloric Intake Per Meal
29 minutes	405 cal

Average Percent Intake Per Meal	
Food	Beverage
57%	72%

CONCLUSIONS

Utilization of trained volunteers to assist with feeding of patients with delirium is safe.

By using volunteers to encourage intake at mealtime, we have been able to improve nutritional and hydration status of patients at high risk for deficiency due to disruption of mental state.

There can be significant improvement in nursing time spent in assisting with meals by utilizing a volunteer driven feeding program

This program has the potential to be instrumental in providing care for patients with delirium by improving oral caloric and fluid intake, and thus improving nutrition status and potentially impacting the duration and severity of the delirious episode

Silver Spoons is one piece of a interprofessional delirium management system at our hospital

REFERENCES

Edwards D, Carrier J, Hopkinson J. Assistance at mealtimes in hospital settings and rehabilitation units for patients (>65 years) from the perspective of patients, families and healthcare professionals: A mixed methods systematic review. International Journal of Nursing Studies. 2017; 46: 100-118.

Ahmed S, Leurent B, Sampson EL. Risk factors for incident delirium among older people in acute hospital medical units: a systematic review and meta-analysis. *Age and Ageing*. 2014; 43(3):326-333.

Tracking Success

Real-time and retrospective

Compliance with tool → important for directed feedback and program improvement

Outcomes: LOS, falls, restraint use

- Save bigger outcomes (mortality, readmission) for retrospective analysis

Interventions: order-set utilization, PT consults

Impact at MUSC

	# of Patients Screened	# bCAM Positive	% bCAM Positive	Delirium Dx in Chart
2017	10200	1227	12.0	777
2018	11404	1606	14.1	888
Total	21606	2833	13.1	1655

	Total Patients	Delirium Dx	Frequency (%)
Non-screening	170377	5165	3.03
Screening	21606	1655	7.17

Aiming for sustainability

Track outcomes and re-inforce success

Continued education

Integrate into training

Long- and short-term goals

Use momentum while and where you have it

Create a Delirium Workgroup/Council of Champions

Summary

Screening for delirium is an important means of improving care to all hospitalized patients

Implementation requires a large team of champions with goals aligned with the hospital

Finding a tool that can be quickly and easily integrated into the workflow and documentation is essential

Success and sustainability come from empowering all involved to make a difference and then measuring and recognizing the impact

Thank you to:

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For questions please use the Q&A feature