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Delirium Reduction Strategies For The Critically Ill

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Project: CICU - Reducing Delirium
Last Updated: 8/21/2017

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Problem/Impact Statement:

Delirium, an acute and fluctuating disturbance of consciousness and cognition, is a common manifestation of acute brain dysfunction in critically ill patients, occurring in up to 80% of the sickest intensive care unit (ICU) populations. Patients in the Cardiac Intensive Care Unit (CICU) at Maine Medical Center (MMC) are at high risk for developing delirium. Patients with delirium have longer hospital stays and lower 6-month survival than do patients without delirium, and preliminary research suggests that delirium may be associated with cognitive impairment that persists months to years after discharge. A literature search, root cause analysis, and a fishbone diagram have been developed to analyze and help to mitigate this high delirium rate, as previous initiatives to combat this problem did not make an impact.

Scope:

In scope: Clinical staff in CICU at MMC who care for patients at risk for developing delirium
Out of scope: Clinical staff not in CICU who care for patients at risk for developing delirium

Goal/Objective:

Overall Goal: Reduce the prevalence and severity of delirium in patients on CICU

KPI 1: 100% of the time, all eligible ventilated patients will be mobilized
 KPI 2: 100% of the time, eligible patients in CICU will have documentation of progressive mobilization

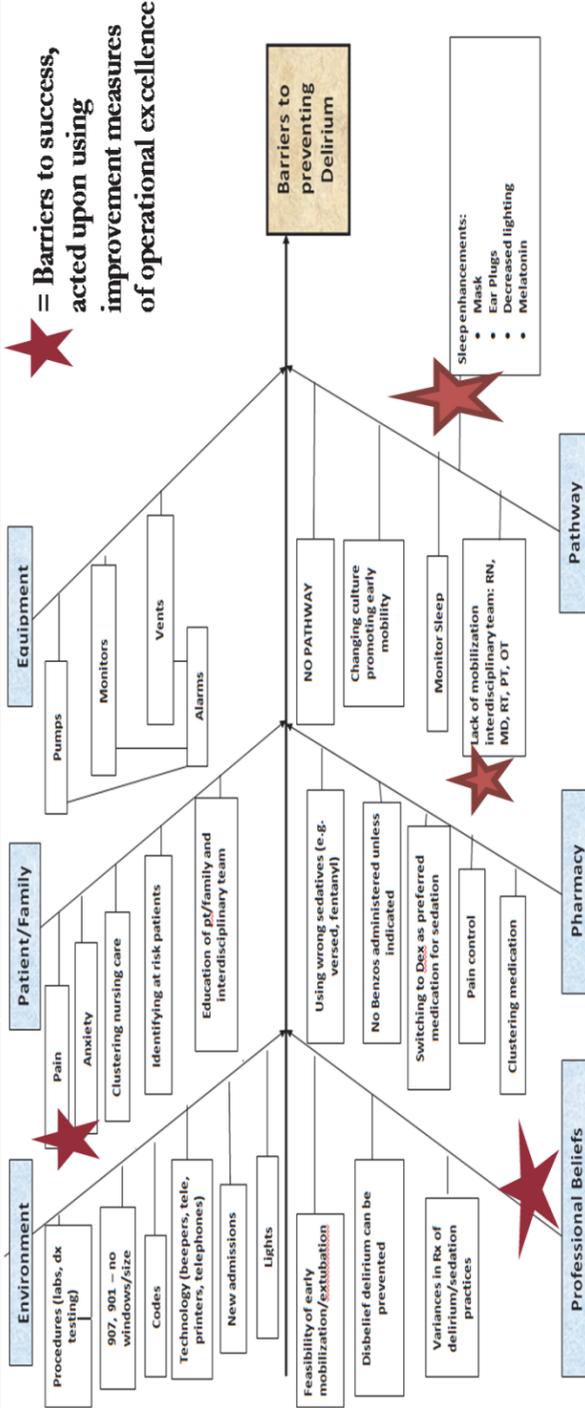
Baseline Metrics/Current State:

Definition: Delirium is defined as a disturbance of consciousness with inattention accompanied by a change in cognition or perceptual disturbance that develops over a short period of time (hours-days) and fluctuates over time.

Current state:
 -Staff were fearful that ventilated patients would have an adverse event in mobilized.
 -In CICU, many members of the healthcare team did not believe that delirium could be prevented.
 -The predominant view, in MMC as well as similar tertiary care centers, was that critically ill patients, especially those who are intubated and ventilated, are too ill to mobilize while ventilated.
 -Research suggests that early mobilization in patients in the ICU is extremely beneficial in reducing delirium.

Patients who are non-ventilated, but remain in CICU may not undergo adequate mobilization using current BMAT tool.
 • This calls into question the need for a new mobility tool, that can depict the standard progression of mobility in a consistent manner.

Root Cause Analysis:

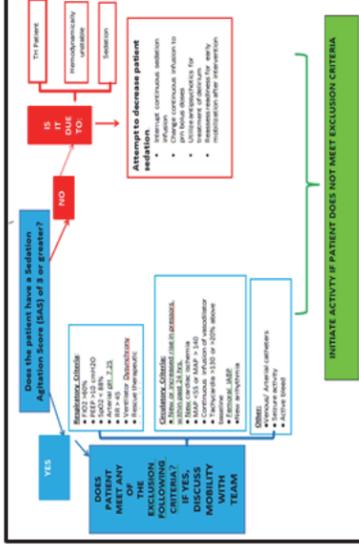


Countermeasures

Action	Owner	Due Date	Status
100% of time, all vent pts will have a SAS score =to > 3 will have a CAM assessment	June Chaves	6/6/2016	Complete
Distribute survey on staffs perception of early mobilization of ventilator pts	June, Marcia & Cathy	6/27/2016	Complete
Results of staff survey & education on early mobilization	June, Gil Fraser	7/16/2017	Complete
KPI 1: "100 % of the time, all eligible ventilated patients will be mobilized"	June Chaves	8/23/2016	Complete
Implement concurrent KPI, centered around providing the most quiet care environment possible	Jen Low & Tammy Corey	8/23/2016	Complete
Distribute 6 month f/u survey staffs perception of early mobilization	June Chaves & Alex Kowalewski	2/22/2017	Complete
KPI 2: "100% of the time, ALL eligible patients in CICU will have documentation of progressive mobilization"	June, Alex, Sam & Will	3/13/2017	Complete
Adapt Bedside Mobility Assessment Tool (BMAT) to ICU pt. population	Sam Canonico & Will Cheney	5/12/2017	Complete
Revised Bedside Mobility Assessment Tool (BMAT) to match the Epic mobility documentation flow sheet	Sam Canonico	6/27/2017	Ongoing

Outcomes

Development of the CICU Early Mobility Pathway:



BMAT for ICU Patients



Survey Questions

Survey Questions	Pre education	Post Education	% chg. to strongly agree
I believe the risk of unintended extubating is increased when patients are in a chair	13%	4%	-65%
I believe early mobilization of intubated patients decreases length of stay as well as incidences of VAP, DVT, and skin breakdown	48%	78%	64%
I am comfortable mobilizing an intubated patient out of bed to a chair	29%	45%	59%

Next Steps

- Reassess the validity of CICU's current Bedside Mobility Assessment Tool in other adult ICUs at MMC.
- Conduct a prospective study of the effect this KPI might have on decreasing duration of ventilation days as well as overall length of stay.