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8-21-2017

# Delirium Reduction Strategies For The Critically Ill

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### Recommended Citation

Chaves, June; Canonico, Sam; Cheney, Will; Corey, Tammy; Fraser, Gil; Kowalewski, Alex; Low, Jen; Cardiac Intensive Care Unit; Pelletier, Haley; Palleschi, Cathy; Tyzik, Stephen; Nayak, Suneela; and Hanselman, Ruth, "Delirium Reduction Strategies For The Critically Ill" (2017). *Maine Medical Center*. 4.

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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

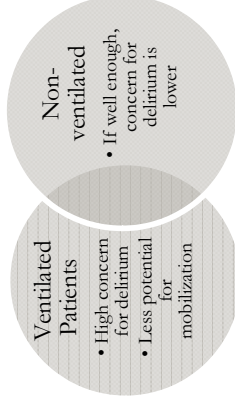
KPI 1: 100% of the time, all eligible ventilated patients will be mobilized  
 KPI 2: 100% of the time, eligible patients in CICU will have documentation of progressive mobilization

**Baseline Metrics/Current State:**

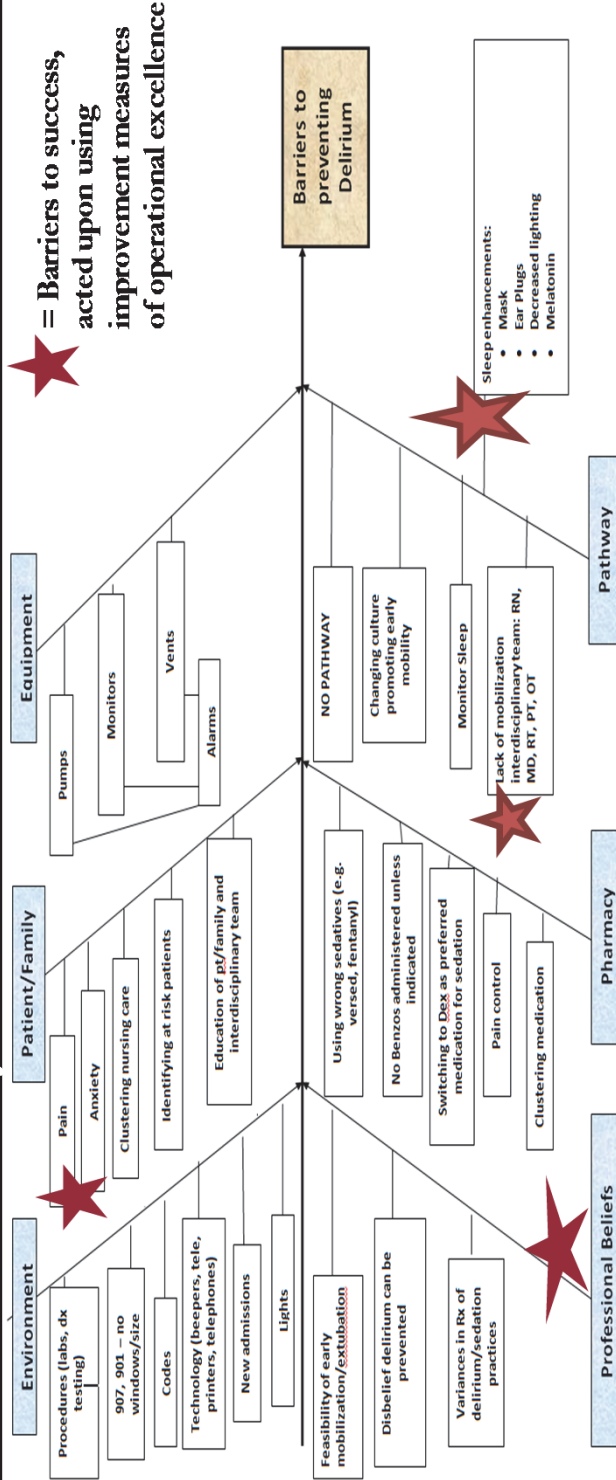
**Definition:**  
 Delirium is defined as a disturbance of consciousness with inattention accompanied by a change in cognition or perceptual disturbance that develops over a short period of time (hours-days) and fluctuates over time.

**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.

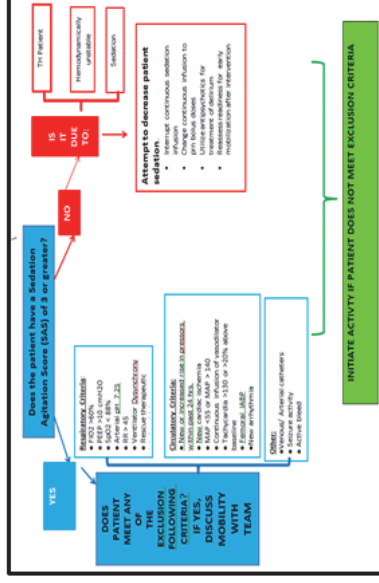


**Root Cause Analysis:**



**Outcomes**

Development of the CICU Early Mobility Pathway:



**BMAT for ICU Patients**



**Survey Questions**

I believe the risk of unintended extubating is increased when patients are in a chair  
 I believe early mobilization of intubated patients decreases length of stay as well as incidences of VAP, DVT, and skin breakdown  
 I am comfortable mobilizing an intubated patient out of bed to a chair

Pre education	Post Education	% chg. to strongly agree
13%	4%	-65%
48%	78%	64%
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.