National Quality Improvement Conference

Improving Delirium Management in Surgical Intensive Care Unit (SICU)

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Problem Statement

1. Delirium in ICU results in increased morbidity and mortality, motor, cognitive and functional decline, LOS in hospital & hospital costs.[1]
2. **66 to 84%** of delirium in its hypoactive form remains **unrecognized.** Early diagnosis of delirium improves the prognosis of patients.[2]
3. Delirium management in SICU was found to be fragmented, with many individual variations of practice across the multidisciplinary team. It is often overlooked, and of somewhat lower priority compared to other more urgent needs such as resuscitation.

References:
1. Brummel & Girard, 2013; Rivosecchi et al., 2015; Girard et al., 2010
2. Peterson et. al, 2006; Spronk, Rickerk & Rommes, 2009; Cerejeira & Mukaetova-Ladinska, 2011

Project Aim

To increase the percentage of patients (>/= 65 years old, SICU emergency admission) receiving **optimal delirium management*** from 17% to 80% within 6 months.

***Optimal delirium management** includes both timely detection (risk assessment within 24 hours SICU admission, accurate CAM-ICU use, delirium documented as current issue in notes) and structured delirium intervention (correct siting for multi-disciplinary delirium care, delirium prevention OR intervention).

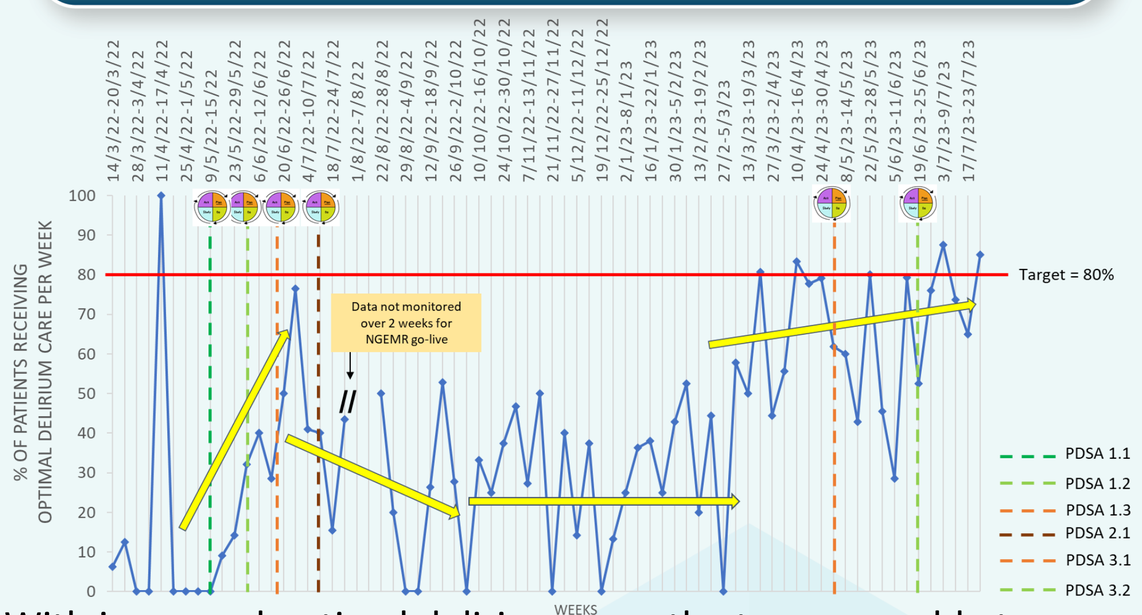
Lessons Learnt

- Delirium management requires a team effort and is a continuous process.
- There are important milestones to monitor that may change the direction of the project drastically.
- Within the PDSA cycles, problems identified need to be prioritized and solutions targeted in an orderly manner to effect change.
- There is value in monitoring for early detection and recognition of delirium as an issue to ensure patients receive appropriate and timely interventions while in SICU.

Potential Solutions

Causes	Interventions
Lack of awareness of roles in delirium management	▪ Establish and increase awareness via education. ▪ Streamline slides, add visual flow charts, briefings to SICU consultants, nursing roll call & briefings to Physiotherapy & Occupational Therapy department. ▪ Achieve consistency & standardization of delirium documentation for all family groups.
Inconsistent application of evidence based non pharmacology strategies	▪ Activity list to aid activity prescription. Increase rate of out-of-therapy engagement. ▪ Activity resource trolley in ward.
Delayed feedback to ground staff on optimal delirium care progress	▪ Establish daily data collection roster, prompt feedback when non-compliance detected. ▪ Develop visual cues as reminders.

Outcomes & Impacts



With increased optimal delirium care, the team was able to **reduce delirium duration by 1 day**. With shortened delirium duration, this would translate to less cognitive and functional decline.

GOOD OUTCOME:
Early delirium detection prompts earlier initiation of delirium management, and a possible increase in sedation-free periods to allow engagement.

$51,940
Total annual cost savings from reducing ICU stay (A Class)

Total annual cost savings from reducing duration of delirium
$44,255