Facilitating Long-Term Improvement in ICU Delirium Outcomes through a Staff Nurse Led Program

The Problem
Delirium is increasingly recognized as one of the most important predictors of negative outcomes for patients in the ICU. It affects 60% to 80% of mechanically-ventilated patients and is associated with:
- 3-fold increase in mortality
- Increased ventilator days
- Increased ICU LOS
- Financial burden of up $16 billion dollars annually
- Despite attempts between 2010 and 2012 to implement a delirium screening program, assessment accuracy remained < 50% for highest risk patients
- In 2012 four staff nurses were selected to participate in the AACN CSI Academy which is a 16-month leadership and nursing excellence academy
- CSI designed and implemented a project that led to an improvement in assessment accuracy from < 50% to > 80% and a reduction in benzodiazepine use from 26% to < 10% in patients with delirium.

Aim/Goal
The purpose of this project was to determine the sustainability and long-term impact of a staff-led delirium improvement program on assessment accuracy, benzodiazepine use, sedation outcomes and length of stay. We compared 6-month of pre-intervention data collected between December 2012 and May 2013, and 6 months of post-intervention data collected between April 2014 to September 2014.

The Team
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The Interventions
- Facilitated staff engagement, empowerment, and accountability
- Facilitated bi-directional leadership from executive level down and from staff-nurse level up
- Developed infrastructure necessary to support program
- Developed and implemented multifaceted, multilevel, ongoing educational intervention
- Developed staff leaders to provide individual coaching on unit
- Empowered staff nurses to lead multidisciplinary delirium discussion
- Provided real-time auditing and real-time feedback

The Results/Progress to Date
- This project has resulted in sustained improvement in assessment accuracy for > 12 months
- Project has contributed to an average reduction in length of stay by 1.4 days and an attributable annual cost savings of $1,424,923

Lessons Learned
- Effective change requires leadership at all levels “from the bedside to the board room.”
- Sustained improvement in quality requires the development of a culture to support that work and depends on the ability to foster engagement, empower accountability in frontline staff
- Frontline staff bring a level of authenticity and credibility unique to their relationship as peers to fellow colleagues at the bedside
- Frontline staff are optimally positioned to lead quality improvement initiatives and organizational change when nurtured to develop essential skills, and when supported in their role as clinical leaders at the bedside

Next Steps/What Should Happen Next
- This work will be expanded to all critical care areas at BIDMC
- Develop Boston area delirium improvement consortium
- Identify opportunities for ongoing improvement

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