MANAGING ICU NEUROPSYCHOLOGICAL DELIRIUM (MIND): A QUALITY IMPROVEMENT PROJECT ACROSS PEDIATRIC INTENSIVE CARE SETTINGS

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Category: Quality, Cost, Value

Background
Delirium is as an acute, global brain dysfunction that is common, yet underappreciated in critically-ill pediatric patients. Although it is poorly understood, delirious patients have longer hospital stays, increased risk of mortality, and higher rates of post-traumatic stress syndrome. To address this problem, several screening tools have been developed to facilitate accurate diagnosis of delirium. In other institutions, their implementation has been shown to reduce the prevalence of delirium and improve overall outcomes.

Objectives
To characterize pre-intervention comfort levels of nurses and clinicians with delirium and to identify specific barriers to universal screening as a part of a broader QI project.

Methods
A 9-question pre-intervention survey was developed to assess comfort with the diagnosis, treatment, and management of delirious patients according to a Likert scale. In addition, one free response question was included to allow respondents to identify perceived barriers. This survey was administered to nurses and clinicians via an online platform (REDCap). All responses were analyzed according to frequency and compared between the 2 groups. Scaled responses were described as percentage of responses. For free responses, common themes were first identified and subsequently reported as percentage of all responses.

Results
A total of 214 surveys were completed. 67% of respondents (n=144) were nurses, and 33% (n=70) were clinicians. In both groups, the majority reported being slightly or extremely comfortable with identifying risk factors for delirium (74.6% of clinicians vs. 63.9% of nurses). Similarly, the majority in both groups reported comfort with diagnosis of delirium (60.6% of clinicians vs. 61.1% of nurses).
With respect to reported barriers, the common themes identified included environmental concerns, lack of general education, need for sedation, need for cultural change to prioritize delirium, lack of experience, and lack of a standardized protocol. In the clinician group, the top response was a need for education (44% of responses) followed by a need for cultural change (21%). Among nurses, environmental concerns were most commonly reported (25%) followed by a need for education (24%).

Discussion
Our survey demonstrates that there are multiple barriers to successful implementation of a delirium screening tool. While both nurses and clinicians self-report being comfortable with delirium in the PICU, both also report that the general lack of education is a major barrier to improving management. Understanding this baseline information will be an essential component to implementation of screening tools within our PICU.