

Improving Mobilization Orders in Critically Ill Pediatric Patients as part of PICU Up!<sup>™</sup> implementation in a rural, academic, combined PICU

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#### BRODY SCHOOL OF MEDICINE VIDANT HEALTH

## **Background / Introduction**

- Prolonged immobilization in critically ill patients leads to increased ICU length of stay
- PICU UP!<sup>TM</sup>, a bundled intervention to create a culture of mobility within the PICU
  - safe and feasible
  - facilitated the formal involvement of PTs and OTs in the care of critically ill children
  - increased mobilization activities of critically ill children



## **Collaborative Team Members**

- Cindy Keel, PICU Nurse Practitioner Leader
- Bill Novotny, PICU Physician Champion
- John Kohler, Physician, Children's Hospital Quality
- PICU Up!<sup>™</sup> Team Members



#### **AIM Statement**

# To decrease the time to PT referral for critically ill pediatric patients in the PICU by 20% within 3 months

## How Will We Know This Change Is An Improvement?

VIDANT HEALTH

A sample of 20 PICU admissions will be evaluated monthly to determine the average time from admission to physical therapy consult while monitoring for a decrease in this measure over time.



#### **Baseline Data**

- Baseline data was collected from January 2018-April 2018
- 20 patients were randomly selected for sampling

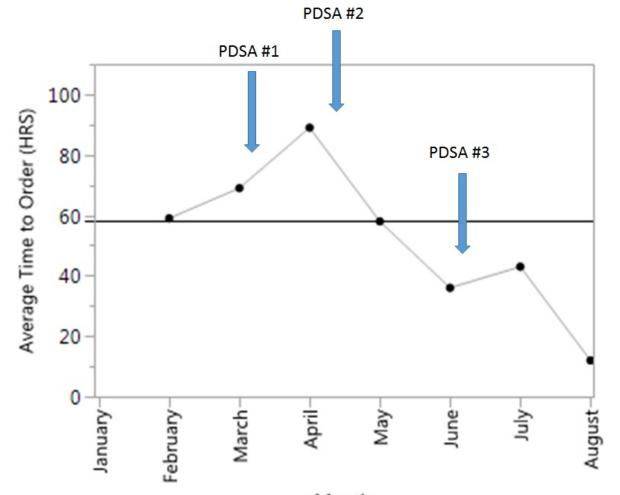
Month	# Admissions	Sampling %	% Sampled with PT order	Average time to order (h)
January 2018	57	35%	0%	-
February 2018	59	34%	25%	59
March 2018	60	33%	10%	69
April 2018	53	38%	25%	89

#### Improvement Strategies Employed

- PDSA #1: barrier survey to PICU multidisciplinary staff to assess perceived barriers to getting PICU patients active
  - Survey was sent via RedCap
  - We wanted to ensure we were aware of what concerns and questions the staff had about PICU patient mobilization
- **PDSA #2**: Safety Timeout completed daily by the APP
  - PT Consults by Day #3 were explicitly called for on form
  - This was an active intervention to get the PT consult done sooner
- PDSA #3: Educational bulletin board about passive range of motion activities in critically ill pediatric patients
  - This was selected to continue to focus staff on mobilization to continue success



## Outcomes



Month

# Challenges Encountered in QI Process

- Keeping up program momentum and having the team remain engaged can be challenging in a stressful ICU environment.
- Changing culture involves much more than providing information, it's changing mindsets which takes time and lots of effort.

## Lessons Learned Through QI Efforts

- It is key to gather a multidisciplinary team to make improvements
- Asking questions about barriers to implementation adds insight into where project interventions can be directed
- Targeted quality improvement interventions can improve early referral to multidisciplinary providers as part of a global unit initiative to improve mobilization in critically ill pediatric patients

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# Next Steps

- PT/OT involved within 3 days of PICU admission on most patients
- Increase multidisciplinary staff education with use of PICU Up!<sup>™</sup> mobilization and delirium screening online modules
- Begin utilizing PICU Up!<sup>™</sup> Levels on every PICU patient who meets criteria
- Optimize sedation practices to allow for targeted SBS score

- Promote sleep hygiene
- Routinely perform spontaneous breathing trials
- Minimize restraint use
- Improve utilization of pediatric delirium screening tools
- Communication boards/devices for all patients needing them
- Data collection





# Questions?

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