Decreasing Unintended Extubation Rate in a Level IIIb NICU

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Problem

• Unintended extubation (UE) rate is a reflection of best practice of airway management in the neonatal intensive care unit (NICU)
• It is defined as UE/invasive ventilator days and is used in NICUs in the United States as a reflection of best practice

Goal

To reduce and maintain the UE rate to < 0.5 UE/100 ventilator days.

Choose 1: “Innovation”, “Strategy”, or “Intervention Design”

Part 1: Unintended Extubation Data Collection Tool
Define unintended extubation
• Not part of the plan of care
• No provider order

Identify priority data for ease of use and timely collection
✓ Date and time of unintended extubation
✓ Medical record number
✓ Activity during unintended extubation
✓ Manual ventilation required?
✓ Reintubation required?
✓ Resuscitation required?

• Educate staff on use of tool
• How are we going to create a culture change around unintended extubations

• Limit discoverability
  • Worked with med-legal
  • Survey is anonymous
  • User is taken out of the EMR and into RedCap

“Results to Date”

“Lessons Learned”

Key Lessons Learned
UE definition
Continue to question eligibility
Discussing vs. reporting

Midline positioning
Chart audits revealed ~50% compliance with a gradual decline over the project period
Both positive and negative feedback from staff

Post-UE debriefing
70% of all UEs were followed by a post-UE debrief
Several duplicate forms indicating both yes and no...

UE Event Form
Improved awareness of data reporting
No evidence to suggest missed UEs
Rise in duplicate entries

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