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Abstract Title:

Enhancing Safety During Handoff in Neonatal Transport Using TeamSTEPPS

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Abstract Description:

BACKGROUND TeamSTEPPS is an evidence-based teamwork system developed by the Department of Defense's Patient Safety Program in collaboration with the Agency for Healthcare Research and Quality to improve patient safety and reduce medical error. SMART AIM The SMART aim was to minimize unplanned extubations and medication errors, by 100% within 12 months.

SETTING 95-bed regional and tertiary unit with a birth center for high risk pregnant mothers which has a neonatal/pediatric transport team that transports +190 patients per year. MECHANISMS Mechanisms included establishing a standardwork process, implementing a TeamStepps checklist, and implementing a Transport Debrief Form.

DRIVERS OF CHANGE Increased rates of medication errors, unplanned extubations and stated confusion and disarray between transport staff and NICU staff during patient hand off.

METHODS A multidisciplinary task force of physicians, respiratory therapists and nurses was tasked with this improvement project. The project timeline includes key tasks completed between 10/24/2018 and 1/20/2019.

MEASURES Outcome and process measures were collected and measured over time using run charts. Outcome measures were defined as rate of medication errors and unplanned extubations. The defined process measure was defined as time to complete handoff.

RESULTS The standard work and handoff designed using TeamSTEPPS strategies have resulted in improvements compared to baseline. Improvements were related to a structured and consistent method of handoff with clear role delineation. Of note, the interventions from this project have not demonstrated immediate impact on the overall unit incidence of adverse

events. During the testing phase, no infants had an unplanned extubation, and no infants has a medication error.

DISCUSSION Establishing a standard work and transport handoff for use on neonatal transport using TeamSTEPPS is an important step in creating a culture of safety. The staff continues to refine and reinforce their skills in the care of transported infants through TeamSTEPPS drills and team-based simulation. This unit continues to explore ways of implementing more TeamSTEPPS core concepts such as shared mental model. Transparency of data during and after the project helped to get staff buy-in, encouraged staff input and reduced resistance to testing change ideas. This unit and its transport team are committed to creating a culture of safety and reducing medical error. In addition to the incorporation of TeamSTEPPS strategies, current work in-progress include standard work implementation, specifically the hand off of an intubated patient. Acknowledgements The authors would like to thank the Project Team & Directors Shawna Simkins, RN, Antoine Soliman, MD