Leveraging our Resuscitation Data to Improve Patient Care in Neonates

Stony Brook Children's

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Pediatric Residents, Neonatal Fellows, Neonatal Nurse Practitioners and Attending Physicians
Families and NICU staff

BACKGROUND

In 2012 our Neonatal Intensive Care Unit (NICU) participated in the Vermont Oxford Collaborative. Delivery room management was one focus of the collaborative. Our resuscitation data confirmed that we had opportunities for improvement in deliver room management; specifically briefing, debriefing, team composition and communication with families.
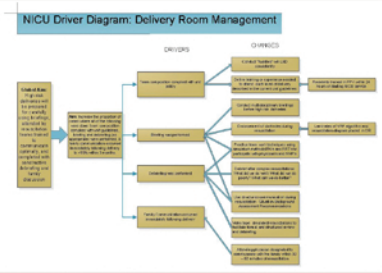

METHODS AND IMPLEMENTATION

Utilizing multiple PDSA cycles we were able to successfully standardize our practices and improve patient outcomes in our NICU.

- Neonatal Resuscitation training (NRP) is required of all clinical staff.
- Working with a nursing staffing matrix, the unit was able to assign a dedicated nurse 24/7 to the delivery room.
- A skills lab was created in the NICU for procedural training of residents.
- An interdisciplinary NICU team participates in 1-2 mock codes per month using standardized patients in our simulation center with certified simulation instructors.
- A delivery room triage algorithm identifying required team members based on clinical criteria with Levels I–IV, was developed and disseminated to NICU and L&D.

- Portable resuscitation bags with standardized contents and location are used for all delivery room codes.
- Resuscitation team diagrams were placed on each warmer to facilitate team roles.
- The resuscitation team is identified during the unit brief at the beginning of each shift in addition to safety huddles attended by L&D and NICU clinical staff to review pending deliveries including staffing adequacy and high risk patients.
- Briefing and debriefing are required for all delivery room calls.
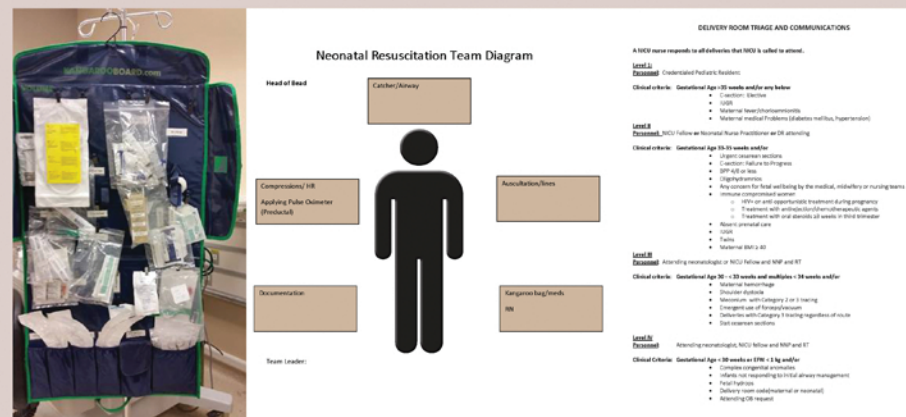
RESULTS

The Delivery Room triage algorithm empowered nurses to request an appropriate staff mix based on the clinical status of the patient. Clearly defining and assigning roles improved efficiency of the team. Safety huddles and unit briefs improved communication and increased confidence levels. As a result our NICU recently received the Silver Achievement Award from the American Heart Association and presented during the April 8th, 2015 American Heart Association webinar **"Leveraging Your GWTG-Resuscitation Data To Improve Patient Care and receive recognition"**. In addition Stony Brook Children's is listed in the **GWTG Recognition Ad** in the **US News & World Report's 100 Best Hospitals** in the America 2015 edition. The award reflects 12 consecutive months at 85% or higher compliance on the resuscitation achievement measures. The implementation of the changes mentioned has standardized our resuscitation efforts, improved the efficiency and skill of our team and increased staff satisfaction.
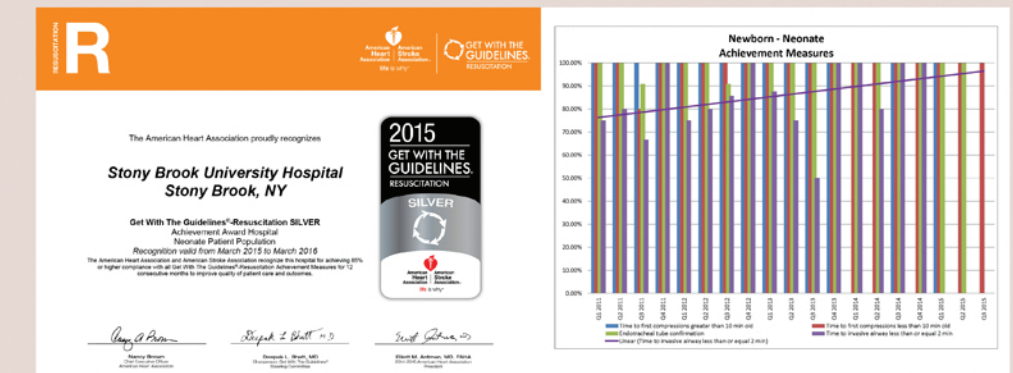
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