

Hospital & QI Team Overview

Hospital OB/NICU Services Overview

- Urban hospital downtown Chicago
- Perinatal Administrative Referral Hospital with advanced Maternal-Fetal Medicine Program
- 2400 Deliveries in 2020
- 72 bed level 3 NICU
 - 856 NICU admissions in 2020
 - 93 very low birth weight (VLBW) infants

Our BASIC Quality Improvement Team

- **Andrew Berenz**, MD: Interim Co-Medical Director, Neonatal ICU
 - **Laura Seske**, MD, MS: Director of Quality Improvement, Neonatal ICU
 - **Kim Carmignani**, MSN, RNC-NIC, PCN, NEA-BC: Unit Director – NICU
 - **Adelaide Caprio**, MSN, APN, ACCNS-N, RNC-NIC: Neonatal Clinical Nurse Specialist
 - **Kristen Welsh**, Pharm D: NICU Pharmacist
 - **Betty Vu**, MD: Pharm D
 - **Colleen Nash**, MD: Pediatric Infectious Disease
 - **Raymond Garay**, APN: Neonatal Nurse Practitioner
 - **John Overby**, BSN, RNC-NIC: Interim NICU Educator
- Nursing Student Data Entry Specialists:
- **Kate Lustbader**
 - **Maggie Schwegel**
 - **Madeline Nissen**
 - **Emma Martinez**

BASIC QUALITY INITIATIVE AT RUSH

Baseline Data

- Collected Quarter 4 Baseline Data including October – December 2020 for ALL infants who received Antibiotics in the first 72 hours of life.
 - Approximately 120 deidentified patients were entered into REDCap Database.
- Automatic Stop Time for antibiotics in EMR was already in place prior to start of BASIC program.
- Discussion of duration of treatment with antibiotics was and remains a standard practice among care providers in the NICU & Newborn Medicine service lines.

Readiness Survey

- Hospital EMR is EPIC – allows for data pull to streamline data entry.
- Labs, IV placement and antibiotic initiation is timely and allows for bonding time with parents, initiation of antibiotics within first hour of life and administration of antibiotics in-room with parent.
- Gaps identified include:
 - Kaiser Neonatal Early-Onset Sepsis Calculator not yet available through EPIC EMR for the Rush System.
 - Standardized Risk Assessment Tool is not consistently documented in EMR for mom or baby.

EMR Implementation

- Plans to implement the following strategies in EMR:
 - Kaiser Neonatal Early-Onset Sepsis Calculator
 - Standardized note template to integrate “Risk Assessment” for all infants
 - Standardized discussion and documentation of infants who required prolonged duration of antibiotics

Opportunities

- Standardized education about EOS for all families.
- Evaluation of antibiotics given in the absence of risk factors other than prematurity when delivery occurs purely for maternal indications.
- Further analysis of Social Determinants of Health and outcomes related to newborn sepsis

QI Tools in use

- Rush utilizes the IHI PDSA Quality Improvement Methodology.
- Data are reviewed monthly at the NICU Quality Improvement Meeting.
- Relevant data are shared with the Well-Newborn Service.