

OPQC Neonatal Key Driver Diagram

Eliminate late onset (>72 hours) bacterial blood stream and CSF infections in infants in Ohio NICUs

SMART Aim: In one year we will reduce late onset (>72 hours) blood stream/CSF infections in infants 22-29 weeks gestational age by 50% in Ohio NICUs.

Appropriate and safe use of central lines

Excellent hand hygiene

Culture of quality and safety

Protect infant's skin integrity

Maintain optimal nutritional level

Appropriate and safe use of endotracheal tubes

Prior to insertion, assess: is catheter really necessary?

Insertion Bundle
 Excellent Hand Hygiene
 Use of maximal sterile barriers
 Appropriate use of CHG or PI for site preparation
 Dedicated team for placement and maintenance
 All supplies required should be available at the bedside prior to catheter insertion
 Insertion checklist utilized
 Staff empowered to stop non-emergent procedure if sterile technique not followed

Catheter Maintenance Bundle
 Excellent Hand Hygiene
 No iodine ointment used
 Daily Assessment if line is necessary
 Review dressing integrity and site cleanliness daily
 Use "closed" systems for infusion, blood draws & medication administration
 Assemble and connect infusion tubing using aseptic or sterile technique.
 Configure tubing consistently for each type of vascular access device
 Scrub needleless connector using friction with either alcohol or CHG for at least 15 sec. prior to entry. Allow surface to dry prior to entry
 Use pre-filled flush containing syringes wherever feasible
 Staff empowered to stop procedures if sterile technique not followed
 Perform investigation and analysis of each CABS
 Competent trained personnel to perform specialized maintenance activities
 Education for all staff caring for catheters
 Spread maintenance practices to off unit service areas

Knowledge & Awareness

- Coaches
- Educate *all* staff
- Skills labs
- "secret" observers
- Data feedback

Proximity & Availability of Supplies
 Personal Hygiene
 Daily Scrubbing
 Hand Washing Indications & Technique
 "See and speak" re: hand washing
 Routine Surveillance

Quality
 Collect and report outcome data—display on unit!
 Benchmark unit results with other units
 Exchange best practices with other units
 Evaluation of root causes and common causes of all BSI ASAP
 See and speak culture

Handling protocols
 Safe use of tape and other adhesives
 Appropriate and safe peripheral line use
 Reduce the number of skin punctures

