BASIC Teams Call: Overview of ≥35 Risk Assessments for Early Onset Sepsis (EOS)

January 18, 2021
1:00 – 2:00pm
Call Overview

• Housekeeping Items
• BASIC Data Overview & FAQs
• ≥35 Risk Assessments for EOS Overview
  – Kenny Kronforst, MD, MPH, MS; Lurie Children’s Hospital
• ≥35 Risk Assessment Tools & Resources
• QI Corner: 30-60-90 Day Plans
• Next Steps
HOUSEKEEPING ITEMS
# 2021 BASIC Webinars

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</table>

Register for all upcoming webinars here: [https://northwestern.zoom.us/meeting/register/tJcpc-qppjMpHdWBNEO8WJsLjfDDUz9ucmt2](https://northwestern.zoom.us/meeting/register/tJcpc-qppjMpHdWBNEO8WJsLjfDDUz9ucmt2)
BASIC Readiness Survey

• The BASIC Readiness Survey is **LIVE**

• Why this is important for you to complete?
  – Helps you identify current barriers and opportunities
  – Helps ILPQC know how best to support you
  – Helps identify leaders in the various components of the BASIC initiative to help

• Link to complete here: [https://redcap.healthlnk.org/surveys/?s=WNRAREP88P](https://redcap.healthlnk.org/surveys/?s=WNRAREP88P)

• Please work with your BASIC QI team to complete by this Friday **January 22, 2021**
BASIC DATA OVERVIEW AND FAQS
Vision: ILPQC hospitals, regardless of perinatal level or past experience with implementing newborn antibiotics initiatives, will implement best practices to provide: the right antibiotics to the right babies for the right duration

AIMs:
• Decrease by 20% (or absolute rate of 4%) the number of newborns, born at ≥35 weeks who receive antibiotics
• Decrease by 20% the number of newborns with a negative blood culture who receive antibiotics for longer than 36 hours
**AIMS**

By June 2022, ILPQC Hospitals will:

A. Decrease by 20% (or absolute rate of 4%) the number of newborns, born at ≥35 weeks who receive antibiotics

B. Decrease by 20% the number of newborns with a negative blood culture who receive antibiotics for longer than 36 hours

---

**Primary Drivers**

- Implement QI infrastructure
- Monitor & share transparent antibiotic data
- Initiate timely and appropriate antibiotics
- Administer and de-escalate antibiotics
- Deliver equitable care

**Change Ideas**

- Create multidisciplinary antibiotic stewardship QI team
- Educate healthcare team on best practices
- Educate and support partners and family

- Coordinate with IT to implement reporting system
- Review transparent data and debrief with providers

- Standardize risk assessment for early onset sepsis (EOS)
- Communicate with OBs to share maternal risk for EOS
- Implement protocols for serial assessment with response to worsening status

- Consistently obtain blood cultures
- Partner with inpatient lab to process blood culture results
- De-escalate therapy based on culture and sensitivity results
- Implement pharmacy protocols to assure appropriate use
- Standardize dosing guidelines and order sets
- Implement process to discuss antibiotic duration and course
- Implement automatic stop order processes

- Provide training and education on social determinants, cultural sensitivity, and implicit and explicit bias
- Develop QI efforts to ensure care to eliminate disparities
- Identify social determinant needs of families and link to resources
- Implement process to assist families after discharge

*Version 12.28.2020*
## BASIC Data Collection

### Patient-level Data

**Data Collection Instructions:**
- Please collect data on all newborns of all gestational ages receiving any intravenous (IV) antibiotics within the first 72 hours of life.
- Exclude newborns requiring surgical procedures or antibiotics for surgical prophylaxis within the first 72 hours of life.
- If a newborn that receives any intravenous (IV) antibiotics within the first 72 hours of life is transferred, the receiving hospital will submit data on the newborn and should request from the transferring hospital any information pertinent to completion of the data form.
- Data will be submitted monthly for all newborns born that month who meet the following definition. Data should be submitted by the 15th of the month for the previous month.

### Hospital-level Data

**IL & PQC BASIC Monthly Structure Measures Data Collection Form**

#### REDCAP Study Identifiers
1. **Record ID:** (automatically generated)
2. Hospital ID Number: ________

#### Data Monitoring, Transparency, and Stewardship Infrastructure
- Total number of newborns born at ≤35 G/7 weeks gestation this month that had a blood culture drawn within 72 hours of birth? (Option: 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%)
- At the end of this month, cumulative proportion of neonatal/pediatric nurses educated on neonatal antibiotic stewardship best practices and equitable care (Option: 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%)

### Monthly Newborn Data Form

1. **Data Collection Instructions:**
   - Please collect data on all newborns of all gestational ages receiving any intravenous (IV) antibiotics within the first 72 hours of life.
   - Exclude newborns requiring surgical procedures or antibiotics for surgical prophylaxis within the first 72 hours of life.
   - If a newborn that receives any intravenous (IV) antibiotics within the first 72 hours of life is transferred, the receiving hospital will submit data on the newborn and should request from the transferring hospital any information pertinent to completion of the data form.
   - Data will be submitted monthly for all newborns born that month who meet the following definition. Data should be submitted by the 15th of the month for the previous month.
BASIC Monthly Patient-level Data Collection

- Please collect data on all newborns of all gestational ages receiving any intravenous (IV) antibiotics within the first 72 hours of life.
- Exclude newborns requiring surgical procedures or antibiotics for surgical prophylaxis within the first 72 hours of life.
- If a newborn that receives any intravenous (IV) antibiotics within the first 72 hours of life is transferred, the receiving hospital will submit data on the newborn and should request from the transferring hospital any information pertinent to completion of the data form.
Baseline Data Collection

Baseline Data Collection (Patient & Hospital)
  • (Oct, Nov, Dec 2020) due January 31st

If you missed our BASIC Data Calls
  • recordings are available at https://ilpqc.org/basic2021/

REDCap
  • REDCap access has been granted to those identified when you submitted your BASIC team roster
  • If you have edits to those who need access, please email dweiss@northshore.org
When and how often to submit the data

<table>
<thead>
<tr>
<th>Data Collection Form(s) Name</th>
<th>Monthly Patient-Level Measures</th>
<th>Monthly Hospital Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who/what are we collecting data on?</td>
<td>Newborns of all gestational ages receiving antibiotics within 72 hrs of life</td>
<td>Track your QI systems changes: patient and provider education, protocol implementation, mapping resources, process flow etc.</td>
</tr>
</tbody>
</table>

Baseline Time Period | October – December 2020 (Quarter 4) |
Baseline Due Date | January 31, 2021 |
Prospective Data Collection Start | January 1, 2021 |
Prospective Data Due Date | January 2021 due February 28th, 2021 15th of the month for future months |
BASIC Data Submission Status
76 Teams Currently Participating

<table>
<thead>
<tr>
<th>Month</th>
<th>Teams Reporting Patient Data</th>
<th>Teams Reporting Hospital Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (Q4 2020)</td>
<td>25 teams (508 newborns)</td>
<td>9 teams</td>
</tr>
<tr>
<td>January 2021</td>
<td>5 teams (7 newborns)</td>
<td>0 teams</td>
</tr>
</tbody>
</table>

Please contact us if you need help getting started with reviewing and entering your data.

Hospital Measures are critical to track your overall ABX rate and facilitate your systems changes for improvement!
BASIC FAQs
Send ILPQC your Questions!

• Guidance for this initiative is that antibiotics are not given after the 36th hour if cultures are negative at hour 36 hours.

• The timing for discontinuing antibiotics is based on the time the blood culture was drawn, not the time the first dose was given.

• If your hospital team is entering data on transfer and cannot identify specific items from the transfer, please mark “Unknown” or 999 (for questions asking for numerical responses)

• Chorio diagnosis is determined by the Obstetrical team

• Documentation of maternal risk factors can be automatically populated into the newborn medical record

• Document Broad Spectrum Abx as the choice for patients who receive broad spectrum and GBS specific Abx
Overview of ≥35 Risk Assessments for Early Onset Sepsis (EOS)

Kenny D. Kronforst, MD, MPH, MS
Disclosure Statement

I have no actual or potential conflicts of interest to disclose in relation to this presentation.
Objectives

- Introduction to Early Onset Sepsis (EOS)
- Review of AAP Statement
- >35 Risk Risk Stratification Strategies
- Neonatal Early Onset Sepsis Risk Calculator
Early Onset Sepsis (EOS)

- Defined as growth of a pathogenic bacterial species in either blood or CSF culture obtained within 72 hours after birth
Early Onset Sepsis (EOS)

- Transmission
  - Ascending infection (term)- onset of labor, PROM
  - Intra-amniotic infection (preterm)- leads to labor, PROM (25%)
  - Transplacental

- Low-incidence, high-stakes condition
  - potential for significant morbidity and mortality
    - fulminant course
    - multisystem involvement
    - pneumonia > meningitis
    - mortality 5-50%
      - 2-3% among infants with EOS at ≥ 35 weeks
      - 30% at 25-28 wks, 50% at 22-24 wks
Risk Factors for EOS

**Maternal**
- Intraamniotic infection
- PROM
- GBS colonization
- Untreated maternal UTI
- Maternal fever
- Malnutrition
- STDs
- Race/low SES

**Neonatal**
- Prematurity- GA
- Low birth weight
- Clinical condition
Early Onset Sepsis (EOS)

• Overall incidence is 0.8 cases per 1000 live births
  • Inversely proportional to GA at birth
    • 0.5 cases/1000 infants ≥ 37 weeks
    • 1 case/1000 infants born 34 to 36 weeks
    • 6 cases/1000 infants < 34 weeks
    • 20 cases/1000 infants < 29 weeks
    • 32 cases/1000 infants 222-24 weeks

• Incidence declined due to evidence-based intrapartum antimicrobial therapy but impact of these not as obvious in preterm infants
• New guidance for evaluating risk of early onset bacterial infection in neonates (2018)
  • Epidemiology, microbiology, recommended empiric treatment

• Addressing dilemma of empiric treatment
  • Who, why, what, and how long?

Infants born at ≥35 0/7 weeks’ gestation can be stratified by the level of risk for EOS. Acceptable approaches to risk stratification include the following:

○ categorical algorithms in which threshold values for intrapartum risk factors are used;

○ multivariate risk assessment based on both intrapartum risk factors and infant examinations. The Neonatal Early-Onset Sepsis Risk Calculator\(^47\) is an example of this approach; and

○ serial physical examination to detect the presence of clinical signs of illness after birth. This approach may begin with a categorical or multivariate assessment to identify newborn infants who are at risk and will be subjected to serial monitoring, or this may be applied to all newborn infants.
• Birth centers should consider the development of local guidelines for EOS risk assessment and clinical management based on gestational age category and monitor guideline outcomes.

• For all infants, regardless of gestational age: When blood cultures are sterile, antibiotic therapy should be discontinued by 36-48 hours of incubation, unless there is clear evidence of site-specific infection.
Risk Stratification—PRETERM Risk Assessment

- Preterm neonates
  - Risk stratification strategies more complicated
    - 2/3 preterm births are associated with premature labor, PROM, and chorioamnionitis
    - Difficult to distinguish between infection and respiratory/systemic instability
  - Low versus higher risk for EOS
FIGURE 2
EOS risk assessment among infants born \( \leq 34 \) weeks' gestation. \(^a\) Intraamniotic infection should be considered when a pregnant woman presents with unexplained decreased fetal movement and/or there is sudden and unexplained poor fetal testing. \(^b\) Lumbar puncture and CSF culture should be performed before initiation of empiric antibiotics for infants who are at the highest risk of infection unless the procedure would compromise the infant's clinical condition. Antibiotics should be administered promptly and not deferred because of procedural delays. \(^c\) Adequate GBS IAP is defined as the administration of penicillin G, ampicillin, or cefazolin \( \geq 4 \) hours before delivery. \(^d\) For infants who do not improve after initial stabilization and/or those who have severe systemic instability, the administration of empiric antibiotics may be reasonable but is not mandatory.
Risk Stratification - LPT/TERM Risk Assessment

• 3 approaches exist to identify infants at increased risk who are greater than 35 weeks gestation
  • No one strategy will identify all infants or avoid the treatment of a substantial number of infants who are uninfected
  • Recommendation is to include measures to monitor infants who are not initially identified and to minimize duration of antibiotic administration to infants who are uninfected
    • Local data, resources and structure
FIGURE 1
Options for EOS risk assessment among infants born ≥35 weeks’ gestation. A, Categorical risk assessment. B, Neonatal Early-Onset Sepsis Calculator. The screenshot of the Neonatal Early-Onset Sepsis Calculator (https://neonatalesepsiscalculator.kaiserpermanente.org/) was used with permission from Kaiser-Permanente Division of Research. C, Enhanced observation. a Consider lumbar puncture and CSF culture before initiation of empiric antibiotics for infants who are at the highest risk of infection, especially those with critical illness. Lumbar puncture should not be performed if the infant’s clinical condition would be compromised, and antibiotics should be administered promptly and not deferred because of procedure delays. b Adequate GBS IAP is defined as the administration of penicillin G, ampicillin, or cefazolin ≥4 hours before delivery.
Categorical Risk Factor Assessment

Prevention of Perinatal Group B Streptococcal Disease. CDC, 2010

- Require large NNT and results in overtreatment of well-appearing, asymptomatic infants
- At best pick up 50% of infected infants, but need to screen/treat 16% of all infants
- If you pair this approach with laboratory data,
  1) CBC has low specificity and sensitivity → about 25-35% of infants without infection have an abnormal CBC, 25-50% of infants with infection will have a normal CBC
  2) CRP - also not much value added → only 5-10% of infants with abnormal CRPs have proven infection AND though highly sensitive if normal x2 by 36 HOL, baby has ruled out anyways on clinical condition
Risk Assessment based on Infant Condition

- Infants who appear ill at birth and those who develop signs of illness over the first 48 hours are either treated empirically or further evaluated by laboratory screening
  - Does not account for neonatal or maternal risk factors
  - Initially well-appearing babies who develop EOS occur at a rate of 1/10,000 live births among term and LPIs
- Can be paired with categorial or multivariate risk assessment but relies on infant condition first
- Reduces antibiotic exposure but at a cost (frequent, universal, serial structured examinations, clear criteria for when additional evaluation/empiric treatment should be initiated, etc.)
Multivariate Risk Assessment

- Includes individualized synthesis of established risk factors and newborn clinical condition
- Develop predictive models for cultured-confirmed EOS based on data known at the moment of birth and evolving newborn condition during the first 6-12 hrs after birth (GA, highest maternal temp, GBS status, ROM duration, type and duration of IPA)
  - Used to develop the NEOSC with recommended clinical algorithms
**Neonatal Early Onset Sepsis Risk Calculator (NEOSC)**

1) What drives the neonatal score is maternal temperature and a baby’s clinical examination. **NO** treatment recommendation is given until the clinical exam is considered.

2) Advocates for close clinical monitoring with frequent vital signs and assessments.

3) Things change after about 24hrs and the tool becomes less reliable (personal communication Puopolo). At that point, it is important to consider postnatal exposures as a cause for infection, something that this tool does not consider.

4) Not a screening tool but a risk estimator – provides additional information to aid in clinical judgement.
Neonatal Early Onset Sepsis Risk Calculator

**Estimating the Probability of Neonatal Early-Onset Infection on the Basis of Maternal Risk Factors**
Karen M. Puopolo, David Draper, Soora Wi, Thomas B. Newman, John Zupancic, Ellice Lieberman, Myesha Smith and Gabriel J. Escobar
*Pediatrics* 2011;128;e1155; originally published online October 24, 2011;
DOI: 10.1542/peds.2010-3464

**Stratification of Risk of Early-Onset Sepsis in Newborns ≥34 Weeks' Gestation**
*Pediatrics* 2014;133;30; originally published online December 23, 2013;
DOI: 10.1542/peds.2013-1689

**The Joint Commission Journal on Quality and Patient Safety**

Tool Tutorial
Development and Implementation of an Early-Onset Sepsis Calculator to Guide Antibiotic Management in Late Preterm and Term Neonates
Readers may submit Tool Tutorial inquiries and submissions to Steven Berman, berman@jtcsm.com.
Michael W. Kuzniewicz, MD, MPH; Eileen M. Walsh, RN, MPH; Sherian Ls, MS; Allen Fischer, MD; Gabriel J. Escobar, MD
Largest prospective implementation of calculator to date: 56,261 infants

Looking at well-appearing infants at birth → found 6 cases of culture-positive EOS
  • 5 of 6 (83%) had a LOW calculator score at birth (< 0.5 per 1000)
  • EOS was identified in these ‘low risk’ infants because of a change in their clinical presentation
## Calculator Safety

**KPNC: Readmissions for Positive Blood or CSF Culture in 1st week of life**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>N</th>
<th>Case</th>
<th>Rate per 1000 births (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CDC Guidelines</strong></td>
<td>95,275</td>
<td>5</td>
<td>0.05 (0.006-0.1)</td>
</tr>
<tr>
<td>(Jan 2010 – Nov 2012)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Learning Period</strong></td>
<td>52,815</td>
<td>1</td>
<td>0.02 (0.0 -0.06)</td>
</tr>
<tr>
<td>(Dec 2012 - June 2014)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EOS Calculator</strong></td>
<td>56,187</td>
<td>3*</td>
<td>0.05 (0-0.1)</td>
</tr>
<tr>
<td>(July 2014 –Dec 2015)</td>
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</tbody>
</table>

* None had maternal risk factors or were symptomatic on their birth hospital admission

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Calculator Advantages

• Fewer infants require evaluation with same proportion of cases identified

• Better discrimination of “risk”
  • Could allow birth centers to set locally appropriate thresholds for evaluation and empiric treatment

• Manipulation of objective data
  • Feasibly incorporated into EMR
  • Option to adjust initial prior probability if local EOS prevalence different from study prevalence
  • Relieves obstetricians of responsibility of deciding if “chorioamnionitis” present
  • Allows for consideration of clinical exam
Calculator Limitations

• Limited prospective study (time)
• Few cases of EOS in published studies
• Calculator does not incorporate laboratory data (low sen/spec)
• Local sepsis incidence rate may be variable
• Initially “well appearing” with a low EOS calculation infants may still deteriorate
• Differences in prenatal care/GBS screening, ability for pediatric follow up, or poor social support may require setting different risk thresholds for clinical interventions
Neonatal EOS Risk Calculator Summary

• No method for predicting EOS is perfect
• No substitute for clinical monitoring
• Calculator can be used to safely
  • Promote antibiotic stewardship
  • Decrease practice variability
  • Decrease NICU admission, separation of families
  • Improve breastfeeding rates, dec LOS (soft)
Implementation of the Sepsis Risk Calculator at an Academic Birth Hospital

Miren B. Dhudasia, MBBS, MPH, Sagori Mukhopadhyay, MD, MMSc, Karen M. Puopolo, MD, PhD
≥35 RISK ASSESSMENT
TOOLS & RESOURCES
≥35 Risk Assessment Tools & Resources

National Resources/Guidance:

- AAP: Management of Infants at Risk for Group B Streptococcal Disease (2019)
- Pediatrics: Management of Neonates Born at ≥35 0/7 Weeks’ Gestation With Suspected or Proven Early-Onset Bacterial Sepsis (2018)

Driver 2: Timely and Appropriate Initiation of Antibiotics:

- AAP Recommended Risk Assessment Tools
- Classification of Infant's Clinical Presentation from the Neonatal Early-Onset Sepsis Calculator
Options for EOS risk assessment among infants born ≥35 weeks’ gestation.

A: Categorical Risk Assessment
- Signs of clinical illness
  - Yes → Blood cultures
    - Empiric antibiotics
  - No
    - Maternal intrapartum temperature ≥38°C (100.4°F)
      - Yes → Blood cultures
        - Empiric antibiotics
      - No
        - GBS IAP indicated for mother?
          - No → Routine newborn care
          - Yes → Adequate GBS IAP given?
            - No → Clinical observation for 36–48 hours after birth
            - Yes → Routine newborn care

B: Neonatal Early-Onset Sepsis Calculator
- Incidence of Early-Onset Sepsis
- Gestational age
-Highest maternal antepartum temperature
- ROM (Hours)
-Maternal GBS status
-Type of Intrapartum antibiotics
- Blood cultures

C: Enhanced Observation
- Signs of clinical illness
  - Yes → Blood cultures
    - Empiric antibiotics
  - No
    - Maternal intrapartum temperature ≥38°C (100.4°F) or inadequate indicated GBS IAP?
      - Yes → Serial physical examination and vital signs for 36–48 hours
      - No → Blood cultures and empiric antibiotics if infant develops signs of clinical illness
    - No → Routine newborn care

Karen M. Puopolo et al. Pediatrics 2019;144:e20191881
BASIC Online Living Toolkit

Up to date resources all available online at https://ilpqc.org/basic2021/

If your team has any example resources, protocols, order sets and want to share, please email info@ilpqc.org!
>35 Assessment Tracking in ILPQC Data System

Monthly Hospital Measures

• Hospital has implemented standardized policies, protocols, and support tools to evaluate risk for early onset sepsis for newborns for ≥ 35 0/7 weeks gestation based on the AAP recommended risk assessment tools.

• Which AAP Risk Assessment Recommended tool(s) for ≥ 35 0/7 weeks gestation is (are) your team currently using? (Select all that apply)

Monthly Newborn Measures

When selecting newborns gestational age weeks ≥ 35 0/7:

• Was a risk assessment tool used and documented to evaluate risk for early onset sepsis (EOS)?
Risk Assessment for EOS <35 Weeks

• ILPQC has resources and strategies to support hospitals with implementation of AAP recommended risk assessment for <35 week newborns... stay tuned for upcoming webinars!
QI CORNER:
30-60-90 DAY PLANS
What is a 30/60/90 day Plan?

- Consists of high-level action steps to help set goals and strategize your QI team’s next 3 months.
- Lays out a clear course of action and helps create accountability

Why take the time to complete one?

- Helps break down your high-level goal into manageable next steps
- Easy to understand and for team members to know their responsibilities
- Moves your project to successful completion
Example: 30/60/90 day Plan

“Quality Collaborative Hospital”

- Level 2
- 250 births/month

Accomplishments

- Scheduled their 1st QI team meeting
- Have buy-in from administration
- Some providers are already using the Neonatal Early-Onset Sepsis Calculator
### Overall Goal:
Create process flow diagram to reflect your current process for antibiotic decision making and identify key opportunities for improvement

Complete once diagram is complete

### Tasks to Achieve Goal:

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss the current process with QI group</td>
<td>ALL</td>
</tr>
<tr>
<td>Sketch out the current process</td>
<td>Francis</td>
</tr>
<tr>
<td>Review and create final process to reference to determine next steps</td>
<td>James</td>
</tr>
</tbody>
</table>

### Overall Goal:
Perform 3-4 cycles of PDSAs to trial the Neonatal Sepsis Risk Calculator with multiple staff, multiple shifts, and patients.

PDSAs are complete & data collected

### Tasks to Achieve Goal:

<table>
<thead>
<tr>
<th>Task</th>
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</tr>
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<tbody>
<tr>
<td>PDSA 1- trail with 1 RN, 1 pt &amp; MD on day shift</td>
<td>Francis</td>
</tr>
<tr>
<td>PDSA 2- trial with 1RN, 1 pt &amp; 1MD on NOC</td>
<td>Heather</td>
</tr>
<tr>
<td>PDSA 3-trail with 1 RN, 1 pt &amp; 1 MD on WK</td>
<td>Dr. Yu</td>
</tr>
<tr>
<td>PDSA 4- trail during an entire shift</td>
<td></td>
</tr>
</tbody>
</table>

### Overall Goal:
Work with ILPQC to set up a BASIC Grand Rounds Presentation for staff education to assist with launch

Grand Rounds is scheduled

### Tasks to Achieve Goal:

<table>
<thead>
<tr>
<th>Task</th>
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<tr>
<td>Reach out to ILPQC</td>
<td>Francis</td>
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<td>Work with admin to determine date</td>
<td>James</td>
</tr>
<tr>
<td>Complete paperwork and inform staff</td>
<td>Heather</td>
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</table>
What is a PDSA or sequential small test of change?

Putting a *small* change into effect on a temporary basis and *learning* about its impact.
The PDSA Cycle

Act
• What changes are to be made?
• Next cycle?
• Adopt, Adapt, or Abandon

Plan
• Hypothesis or Idea
• Questions and predictions
• Plan to carry out the cycle (who, what, where, when)

Study
• Complete the analysis of the data
• Compare data to predictions
• Summarize what was learned

Do
• Carry out the plan
• Document problems and unexpected observations
### Overall Goal:
Create process flow diagram to reflect your current process for antibiotic decision making and identify key opportunities for improvement

**30 DAY**

**Overall Goal:**
Perform 3-4 cycles of PDSAs to trial the Neonatal Sepsis Risk Calculator with multiple staff, multiple shifts, and patients.

**Tasks to Achieve Goal:**
1. PDSA 1- trial with 1 RN, 1 pt & MD on day shift
2. PDSA 2- trial with 1RN, 1 pt & 1MD on NOC
3. PDSA 3-trail with 1 RN, 1 pt & 1 MD on WK
4. PDSA 4- trail during an entire shift

**Responsible Party:**
- Francis
- Heather
- Dr. Yu

**30/60/90 day Plan**

**Example:**
Quality Collaborative Hospital Feb-April

<table>
<thead>
<tr>
<th>30 DAY</th>
<th><strong>Overall Goal:</strong></th>
<th><strong>Tasks to Achieve Goal:</strong></th>
<th><strong>Responsible Party:</strong></th>
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<tr>
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</tr>
</tbody>
</table>

**60 DAY**

**Overall Goal:**
Work with ILPQC to set up a BASIC Grand Rounds Presentation for staff education to assist with launch

**Tasks to Achieve Goal:**
1. Reach out to ILPQC
2. Work with admin to determine date
3. Complete paperwork and inform staff

**Responsible Party:**
- Francis
- James
- Heather

**90 DAY**

**Overall Goal:**
Complete once diagram is complete

**Tasks to Achieve Goal:**
1. Sketch out the current process
2. Review and create final process to reference to determine next steps

**Responsible Party:**
- Francis
- James

**Example:**
Grand Rounds is scheduled
Next Steps

✓ Work with your team to submit a BASIC Readiness Survey by 1/22/2021
✓ Work with your team to submit Baseline (Q4 2020) newborn & hospital data by 1/31/2020
✓ Start collecting January 2021 newborn and hospital data (submit by 2/28/2021)
✓ Work with your team to begin a 30-60-90 day plan
QUESTIONS & COMMENTS
Save the Date!
2021 OB & Neonatal Face-to-Face Meetings

Nurses, Providers, & Staff join us for an interactive day of collaborative learning for current ILPQC initiatives!

OB Teams: May 26, 2021
Neonatal Teams: May 27, 2021

More information coming soon!

Virtual Meeting

Illinois Perinatal Quality Collaborative
633 N. St. Clair, 20th Floor
Chicago, IL 60611

Northwestern Medicine
Feinberg School of Medicine
2021

Annual Conference

October 28, 2021
THANKS TO OUR FUNDERS

In Kind Support