Partnering with Private Pediatricians

BASIC Monthly Teams Call
March 21st, 2022
Call Overview

• Face-to-Face 2022
• BASIC Data Review
• Partnering with Private Pediatricians
• Shelly Shallat, MD: Strategies to engage private pediatricians
• Laura Cronin, MSN, RNC-NIC: Implementing BASIC at Hinsdale Hospital
• Wrap Up
2022 OB & Neonatal Face-to-Face Meetings
Obstetric May 25, 2022
Neonatal May 26, 2022

2022 ILPQC 10th Annual Conference
Thursday, October 27, 2022

Registration Opening April 4th, 2022
## Neonatal Day Face-to-Face Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| 8:15 – 8:45 am | Welcome & overview- Looking to our QI Community with Renewed Strength to Achieve Success in 2022  
Leslie Caldarelli, MD; Justin Josephsen, MD |
| 8:45-9:30am    | Recovering from the Pandemic: The Role of Civility and Community                           
Gaurava Agarwal, MD |
| 9:30-9:40 pm  | Break                                                                                     |
| 9:40 – 9:55 am | The Challenge of Increasing Maternal OUD Rates in Illinois; Continuing our MNO-Neonatal work  
Leslie Caldarelli, MD; Justin Josephsen, MDs |
| 9:55 – 10:40 am | Bringing parents alongside us in our QI Journey                                            
LaTovia Rouse, CD(DONA) |
| 10:40 – 10:55 am | The Right Antibiotics, Right Babies, Right Amount of Time: Going for the Gold in October  
Leslie Caldarelli, MD; Justin Josephsen, MDs |
| 10:55 – 11:15 am | QI Awards                                                                                 |
| 11:15 – 12:30 pm | Virtual Storyboard Review & Lunch                                                          |
| 12:30 – 1:15 pm | BASIC Hospital Teams Panel Share Real-World Approaches                                      
BASIC teams to collaboratively share strategies |
| 1:15 – 1:25 pm  | Break                                                                                     |
| 1:25 – 2:00 pm  | Breakout Session 1: Small Group Key Topic: Discussions on Implementation Strategies        
Co-facilitated by IL perinatal network administrators, educators, and Neo providers  
- 36 is the new 48: Moving to a 36-hour rule-out  
- BASIC Clinical Culture Change: Leveraging Education, Debriefs, and Data  
- “We only see a few babies”: Making your data work for you  
- Strategies to get the most out of the ILPQC Data System  
- Implementation strategies for Early Onset Septic Risk Assessment in newborns <35 weeks  
- MNO-Neonatal Sustainability: Optimizing Coordinated Discharge Plans  
- Taking the first steps to bring parents alongside us in our QI journey |
| 2:00 – 2:05 pm  | Break                                                                                     |
| 2:05 – 2:40 pm  | Breakout Session 2: Small Group Key Topic: Discussions on Implementation Strategies        
Co-facilitated by IL perinatal network administrators, educators, and Neo providers  
(See above sessions) |
| 2:40 – 2:45 pm  | Break                                                                                     |
| 2:45 – 3:00 pm  | Wrap-up, evaluation, and raffle: Going for Gold with BASIC and what’s next for neonatal teams?  
Leslie Caldarelli, MD; Justin Josephsen, MD |
Neonatal Day Breakout Sessions

- 36 is the new 48: Moving to a 36-hour rule-out
- BASIC Clinical Culture Change: Leveraging Education, Debriefs, and Data
- “We only see a few babies”: Making your data work for you
- Strategies to get the most out of the ILPQC Data System
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- MNO-Neonatal Sustainability: Optimizing Coordinated Discharge Plans
- Taking the first steps to bring parents alongside us in our QI journey
Face to Face Preparation

- Registration opens April 4th, 2022 - share save the date with your provider and nursing colleagues!
- Email info@ilpqc.org to join the planning committee or help facilitate a breakout session by March 25th

Get involved

- Make sure all data Baseline-March 2022 is entered in REDCap by May 2nd, 2022
- Review BASIC QI Recognition award criteria

Data and Awards

- Fill out storyboard and send to info@ilpqc.org by May 11th

Storyboards

- Submit a photo of your hospital QI team to info@ilpqc.org by May 11th to be in the running for a raffle!

QI Team Photo

Save the Date
## Face-to-Face 2022 Neonatal Storyboard Template

<table>
<thead>
<tr>
<th>&lt;Hospital Logo&gt;</th>
<th>&lt;Hospital Name&gt;</th>
<th>ILPQC 2022 Neo Storyboard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Hospital &amp; QI Team Overview</strong></td>
<td><strong>3. BASIC Data</strong></td>
<td><strong>4. BASIC Strategies</strong></td>
</tr>
<tr>
<td>Fill in BASIC QI Team &amp; Roles.</td>
<td>Share data on progress towards achieving BASIC measures. Please use graphic when possible.</td>
<td>Describe specific strategies for implementing key BASIC structure measures.</td>
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<tr>
<td><strong>5. MNO-Neo Sustainability</strong></td>
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<tr>
<td>Share your MNO-Neo Sustainability Data &amp; Plans.</td>
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 Instruction sheet available too!

- BASIC QI Team and Roles
- Biggest accomplishments this year & what are you looking forward to working on in the last 6 months of the year
- Data & progress towards achieving BASIC measures
- Strategies for implementing key BASIC structure measures
- MNO-Sustainability Data & Plans
Update on BASIC Progress
BASIC Data Collection Updates

• We are listening to you!

• Working have updated the newborn data form to **remove** questions that may be **time consuming** to collect and less directly tied to achievement of initiative aims including:
  • Maternal risk for EOS questions
  • Newborn antibiotic prescribing rationale
  • Additional criteria

• We have updated the paper data form and hid questions on the REDCap data form.

• 10 of 40 (25%) questions were removed.

• Please reach out with any questions!
BASIC QI Recognition Awards

• All structure & patient-level data entered for Baseline-March 2022 due May 2nd, 2022, at Midnight

• Key Structure Measures "In Place":
  • Standardized Family Education Process
  • EOS Risk Assessment Protocols for ≥35 and <35 Newborns
  • Standardized Dosing Guidelines
  • Antibiotic Discussions/Time Outs Protocol
  • Standardized Automatic Stop Order Process

• Achievement of process and outcome level measures (Based on Jan – March 2022 data)
  • ≥80% of neonatal/pediatric providers and nurses educated
  • 20% reduction (or absolute rate of ≤4%) in newborns ≥35 weeks who receive antibiotics
  • 20% reduction in newborns with a negative blood culture who receive antibiotics for >48 hours
  • ≥80% of newborns with the anticipated duration of antibiotic course discussed by clinical team (antibiotic time out)
  • ≥80% of newborns with an automatic stop order entered into the medical chart

F2F Award Criteria:
- Data complete
- Structure measures in place
- At least 3 process/outcome measures achieved
BASIC Data Review: Structure Measures

Going Well:

>35 Risk Assessment Protocol: 77% In Place
<35 Risk Assessment Protocol: 73% In Place
Standardized Dosing Guidelines: 87% In Place

Need to Focus On:

Antibiotic Time Outs: 60% In Place
Automatic Stop Orders: 60% In Place
Family Education: 50% In Place
Healthcare Team Education: 56% In Place
Progress towards achieving BASIC: ≥35 ABX Prescribing

ILPQC BASIC Initiative: Percent of newborns ≥35 weeks who received antibiotics within 72 hours of life
All Hospitals, 2021-2022

- Antibiotic Rate ≥35 Weeks
- Goal
Progress towards achieving BASIC: EOS Risk Assessment

Percent of newborns with a risk assessment tool/algorithm used and documented to evaluate risk for early onset sepsis
All Hospitals, 2021-2022

- ≥35 Weeks Rate
- Goal
- <35 Weeks Rate
Progress towards achieving BASIC: Family/Caregiver Education

Percent of parent/families of all newborns provided education on antibiotics, EOS, and treatment plan for newborn antibiotics and EOS
All Hospitals, 2021-2022

- ≥35 Weeks Rate
- Goal
- <35 Rate

Baseline 2020, Jan-21, Feb-21, Mar-21, Apr-21, May-21, Jun-21, Jul-21, Aug-21, Sep-21, Oct-21, Nov-21, Dec-21, Jan-22
Progress towards achieving BASIC: ABX Time Out

Percent of all newborns receiving antibiotics with the anticipated duration of antibiotic course discussed by the clinical team (antibiotic time out)

All Hospitals, 2021-2022

Percentages: 0% - 100%

- ≥35 Weeks Rate
- Goal
- <35 Rate
Progress towards achieving BASIC: Automatic Stop Order

Percent of newborns receiving antibiotics with an antibiotic automatic stop time order entered into the medical chart
All Hospitals, 2021-2022
Progress towards achieving BASIC: ≥35 ABX Discontinued

Percent of Newborns ≥35 weeks with any antibiotic continued past 48 hours from a negative blood culture result,
All Hospitals, 2021-2022

- No, Antibiotic stopped at ≤36 hours
- Yes, antibiotic continued past 48 hours
- No, antibiotic stopped at >36 and ≤48 hours
- Unknown
- Goal

Baseline 2020 to Jan-22
Progress towards achieving BASIC: <35 ABX Discontinued

Percent of Newborns <35 with any antibiotic continued past 48 hours from a negative blood culture result,
All Hospitals, 2021-2022

- Green: No, Antibiotic stopped at ≤36 hours
- Yellow: No, antibiotic stopped at >36 and ≤48 hours
- Light Green: Yes, antibiotic continued past 48 hours
- Yellow-Green: Unknown
- Red: Goal
The BASIC Roadmap: Checking Progress

We use QI Award criteria to understand where the collaborative is at with achieving initiative goals. As of December 2021...

- 54 of 82 (66%) of BASIC teams have submitted at least all Baseline & and 2021 data for either patient or structure measures
- 30 of 82 (37%) of BASIC teams have submitted all Baseline & and 2021 data for either patient or structure measures

Among the 30 teams with all data submitted:
- 10 (33%) have all 6 key structure measures in place
- 20 (66%) have at least 1 of the measures in place
- 29 (97%) have >80% education for providers & nurses
Partnering with Private Pediatricians
Engaging Pediatricians key steps

1. Education on the importance of antibiotic stewardship

2. ILPQC BASIC initiative key aims and measures

3. What is the role of the private pediatrician in antibiotic stewardship?
1. Educate on the Importance of Neonatal Antibiotic Stewardship

- Antibiotics are essential in fighting infections in newborns, but wide variations in antibiotic prescribing for newborn infections can lead to unnecessary or prolonged antibiotic exposure resulting in short- and long-term adverse outcomes such as:
  - Separation of parents and baby
  - Reduction in breastfeeding and increase in formula supplementation
  - An increase in longer term chronic conditions including asthma, allergies, and obesity
  - Antibiotic resistance
  - **Impaired development of the intestinal microbiome**
2. Share the Aims of the BASIC Initiative

- Decrease the number of newborns born at ≥35 weeks who receive antibiotics
- Decrease number of newborns with a negative blood culture who receive antibiotics for longer than 36 hours

**Right Antibiotic** for the **Right Baby** at the **Right Time**
3. Role of the Private Pediatrician

- Be informed about current evidence-based guidelines regarding antibiotic stewardship
- Know assessment tool methodology used at the hospital
  - Categorical Risk Assessment
  - NEOSC
  - Enhanced Observation
- Use NEOSC for every baby and follow recommended guidelines
- Utilize order sets and tools, including automatic stop time, to assist in appropriate antibiotic administration
- Educate all parents and caregivers
Standardizing Parent/Caregiver Education Process

How can we make sure EVERY parent and caregiver is receiving adequate education on why their baby is getting antibiotics?

- Have parent education handout printed and readily available on the unit in both English and Spanish
- Post QR code to parent education video in the nursery for easy access
- Utilize current patient education tools (e.g. IPad) to share parent education videos in both Spanish and English
- Document education and use of specific educational materials in the EMR
New ILPQC Tool to Engage Private Pediatricians!

- This education/communication tool includes key information about the BASIC initiative and the role of the private pediatrician in antibiotic stewardship
- Make available in the newborn nursery for providers
- Use as just-in-time education
- Send out to private pediatrician offices
- Make to sure to communicate any specific processes to your hospital with your private pediatricians
Engaging Pediatricians in Nursery Quality Improvement

Shelly Shallat MD FAAP CLS
Medical Director of Newborn Nursery, Newborn Hospitalist, OSF Healthcare Children’s Hospital of Illinois
Newborn Nursery Resident Education Director, Clinical Assistant Professor of Pediatrics, University of Illinois College of Medicine Peoria
OSF St. Francis Medical Center Newborn Care
Peoria, Il

Newborn nursery
37 bed private-room unit
Central Nursery with 4 Level 2 beds
Approximately 2200 Admissions per year
Newborn Care is provided by newborn hospitalists (85% of admissions), outpatient pediatricians, and neonatologists

NICU
64-bed private-room unit
Level III NICU and a Level II Intermediate Care Unit
Approximately 800 Admissions per year
Newborn Care is provided by neonatologists and nurse practitioners

U of I College of Medicine Peoria
Pediatric residents and medical students
Neonatology and Pediatric Hospitalist Fellowships
Antibiotic Stewardship – October 2016

**Problem Statement**
Antibiotic administration to newborns is not without harm. Changes to the microbiome and negative effects from separating moms from babies result. CDC recommendations and current practice result in overuse of antibiotics. Antibiotics should be used judiciously.

**SMART AIM Statement**
To decrease: Antibiotic Usage Rate
From: 65
To: 50
By: December 2018
In: Newborns > 36 wks born at SFMC and admitted to the post partum unit (not NICU)

**Outcome Measures**
Antibiotic Usage Rate (Antibiotic Days/1000 Patient Days)
Readmission rates
NICU transfers with delayed recognition of sepsis
Antibiotic Stewardship - ILPQC

Newborn Nursery Antibiotic Usage Rate - u Chart

Team formation

EOS Guideline Re-education - Faculty and Residents

EOS Guidelines Updated to 2019 version

Monthly Feedback Initiated

New Providers Starting

BASIC Project started

71% Reduction in Antibiotic Use in Newborn Nursery

No increased readmissions or missed cases of sepsis
Start Up Plan

1. Team Development
   Pediatrician champion with Neonatology and Nurse Leadership for project development and PDSA cycles
   1. Buy-in
   2. Add Perspective
   3. Agree on common messaging
   4. Speak to their peers

2. Communication - Pediatrician champion to communicate project to pediatricians- gathers feedback
   1. Newborn Hospitalist group
   2. Rounding physicians
   3. Mode of Communication – meetings/email/hallway conversations
3. Standing Agenda item - REPEAT

1. Hospitalist/Newborn Committee meetings (Neos/Nurse leaders)/Pediatric Department meeting
   1. Minutes – incorporate graphs
   2. Email communications

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<tr>
<td>11:30</td>
<td>Reflection/Approval of minutes</td>
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<tr>
<td>11:30</td>
<td>NBC 2021 Goals Review</td>
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<tr>
<td>11:40</td>
<td>NBC 2022 Goals Plan</td>
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<td>11:40</td>
<td>Standing Reports</td>
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<td>11:40</td>
<td>COVID Vaccination Rates</td>
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<td>11:40</td>
<td>Census Level 1/Level 2</td>
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<td>11:40</td>
<td>Hepatitis C testing</td>
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<td>11:40</td>
<td>NICU Transfers</td>
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<td>Hyperbilirubinemia</td>
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<td><strong>Antibiotic Usage</strong></td>
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<td>Readmissions</td>
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<td>Vitamin K Refusal Rates</td>
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*Wednesday January 11th, 2022 Newborn Committee Agenda*
4. Separate the data from the NICU
5. Share data/outcomes of early adopters
6. Share balancing measures
7. Share directed data/feedback
Sustainability

6. Make the work the path of least resistance
   1. Order sets – embed rationale and tools
   2. Automatic stop times – abx
   3. ESC flowsheet in EMR – MNO
   4. Add Hepatitis B to nursing standing orders on admission with Vitamin K and Emycin

7. Keep talking about it

PROCESS!
ILPQC Pediatrician Engagement

- Survey who covers nurseries in Illinois
- Directly engage newborn hospitalists via ILPQC communications
- Neonatologists/Nurse leaders to collaborate/invite participation
- Depending on project – consider separating out Nursery from NICU in data
Hinsdale Hospital

Laura Cronin, MSN, RNC-NIC
Implementing BASIC at Hinsdale Hospital

Laura Cronin, MSN, RNC-NIC
Manager NICU/Pediatrics
Introduction

- Hinsdale Hospital NICU’s journey in antibiotic stewardship began back in late 2017. Seeking a QI initiative, the antibiotic stewardship team was created and consisted of the NICU educator, an antimicrobial pharmacist, a neonatologist, and group of new graduate NICU nurses that needed an evidence-based practice project.

- The first task for the team was to examine the NICU baseline data of positive cultures from 2015-2017. After reviewing the data, the team agreed to proceed with decreasing the rule-out sepsis period from 48 hours to 36 hours, resulting in one less dose of Ampicillin and one less dose of gentamicin for EOS at birth.

- The team instructed the neonatologists to use the Kaiser Permanente Newborn Sepsis Calculator and identify maternal risk factors to determine the infant’s risk for EOS. With these implementations, the NICU went from performing septic workups on 96.2% of patients admitted to the NICU to 83% of patients.

- Finally, with the QI initiative, the NICU saw 42.8% of all patients admitted to the NICU being treated with antibiotics for EOS, which was down from 56.8% of all patients.
Where are we now?

With the launch of the BASIC initiative, Hinsdale Hospital’s NICU is in a sustainability phase, which is to have a goal of less than 4% overall antibiotic rate. At this stage we no longer have the need for a robust team, so the BASIC team consists of the NICU educator, manager, and neonatologists.
QI Team

- Each month the NICU leadership team meets for our level III quality meeting. This meeting consists of the Director for Women and Children’s, the NICU manager, the NICU educator, pharmacy, and neonatology. During this meeting we discuss the QI projects that we are performing currently and suggest areas that we would like to focus on in the future.

- The NICU nurses recently relaunched their unit-based governance, which is empowering the bedside nurses to have a voice in what QI projects they would like to see implemented.
Parental Education

- We strive to be as paperless as possible in the NICU, so we currently do not handout an educational pamphlet on BASIC.
- We do educate every family that has a baby being treated for EOS on antibiotic use and the treatment plan. This is documented in the neonatologist’s note.
What about Private Pediatricians?

At Hinsdale for neonates, we haven't had to work hard at getting private pediatrician’s buy in on BASIC because we do not have neonates in MBU receiving antibiotic therapy. Every patient that meets criteria for treatment of EOS is transferred to the NICU.

However, our private pediatricians are involved in BASIC since our pediatric hospitalists created algorithms on clinical pathway for pediatric community acquired pneumonia, ED clinical and IP clinical pathway for pediatric skin soft tissue infection, ED and IP clinical pathway for pediatric UTIs. These algorithms are distributed to our ED and all private practice pediatricians on staff at the hospital.
Wrap-up and Next Steps
## Upcoming Call Schedule

<table>
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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>April 18, 2022, 2-3 PM</td>
<td>Integrating the NEOSC into the EMR</td>
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<tr>
<td>May 26, 2022</td>
<td>ILPQC 2022 Face-to-Face Meeting</td>
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Next Steps for BASIC

- Review Face-to-Face to-dos!
  - Registration Open April 4th
  - Submit QI Data by May 2nd
  - Submit QI Storyboard by May 11th
  - Submit team photo by May 11th (to be included in raffle!)

- Continue working towards goals to be achieved by Face-to-Face
- Review Structure Measures and Face-to-Face Award Criteria
- Continue with QI Team meetings and data sharing
Thanks to our Funders

In kind support:

IL & PQC
Illinois Perinatal Quality Collaborative

IDPH
Illinois Department of Public Health

I PROMOTE-IL
Innovations to Promote Maternal Health in Illinois

IDHS
Illinois Department of Human Services

AIM
Alliance for Innovation on Maternal Health

CDC
Centers for Disease Control and Prevention

NorthShore University HealthSystem

Northwestern Medicine
Northwestern University Feinberg School of Medicine

SAINT LOUIS UNIVERSITY

Ann & Robert H. Lurie
Children's Hospital of Chicago