## 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



# Save the Date!

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

### 2022 OB & Neonatal Face-to-Face

VIRTUAL

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

	ILPQC 2022 Neonatal Face-to-Face Meeting	12:30 – 1:15 pm	BASIC Hospital Teams Panel Share Real-World Approaches
8:15 – 8:45 am	Welcome & overview- Looking to our QI Community with Renewed Strength to Achieve Success in 2022	1:15 – 1:25pm	BASIC teams to collaboratively share strategies  Break
	Leslie Caldarelli, MD; Justin Josephsen, MD	1:25 – 2:00 pm	Breakout Session 1: Small Group Key Topic Discussions on Implementation Strategies
8:45-9:30am	Recovering from the Pandemic: The Role of Civility and Community  Gaurava Agarwal, MD		- 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
9:30-9:40 am	Break		Strategies to get the most out of the ILPQC Data System     Implementation strategies for Early Onset Sepsis Risk Assessment in newborns <35
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		weeks  MNO-Neonatal Sustainability: Optimizing Coordinated Discharge Plans  Taking the first steps to bring parents alongside us in our QI journey
9:55 – 10:40 am	Bringing parents alongside us in our QI journey	2:00 – 2:05 pm	Break
10:40 – 10:55am	LaToshia Rouse, CD(DONA)  The Right Antibiotics, Right Babies, Right Amount of Time: Going for the Gold in October	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)
	Leslie Caldarelli, MD; Justin Josephsen, MDS	2:40 – 2:45 pm	Break
10:55 – 11:15am 11:15 – 12:30 pm	QI Awards  Virtual Storyboard Review & Lunch	2:45 – 3:00 pm	Wrap-up, evaluation, and raffle: Going for Gold with BASIC and what's next for neonatal teams?
11.15 – 12:50 pm	virtual Storyboard Neview & Luiicii		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
- Implementation strategies for Early Onset Sepsis Risk Assessment in newborns <35 weeks</li>
- MNO-Neonatal Sustainability: Optimizing Coordinated Discharge Plans
- Taking the first steps to bring parents alongside us in our QI journey





 Registration opens April 4th, 2022- share save the date with your provider and nursing colleages!

Save the Date

#### Get involved

•Email info@ilpqc.org to join the planning committee or help facilitate a breakout session by March 25th

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

Data and Awards

#### Storyboards

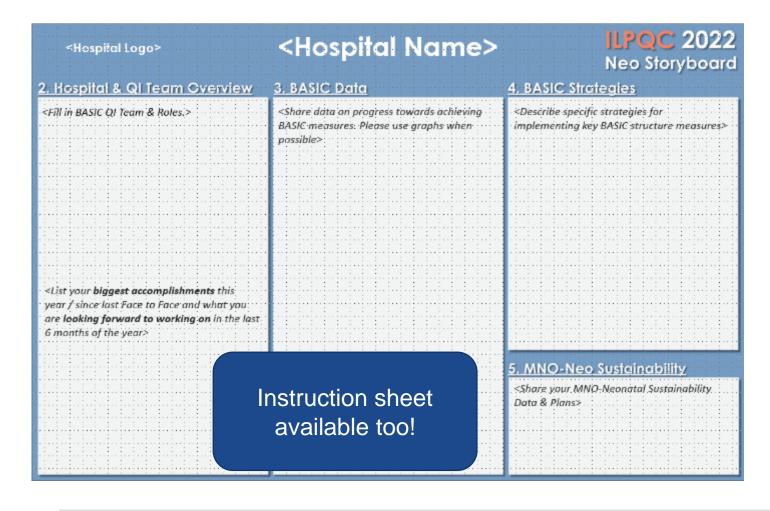
•Fill out storyboard and send to <a href="mailto:info@ilpqc.org">info@ilpqc.org</a> by May 11th

•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

## Face-to-Face 2022 Neonatal Storyboard Template





- 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 <u>remove</u> questions that may be <u>time consuming</u> 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</li>
  - Standardized Dosing Guidelines
  - Antibiotic Discussions/Time Outs Protocol
  - Standardized Automatic Stop Order Process

#### **F2F Award Criteria:**

- Data complete
- Structure measures in place
- At least 3 process/outcome measures achieved
- 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

### 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

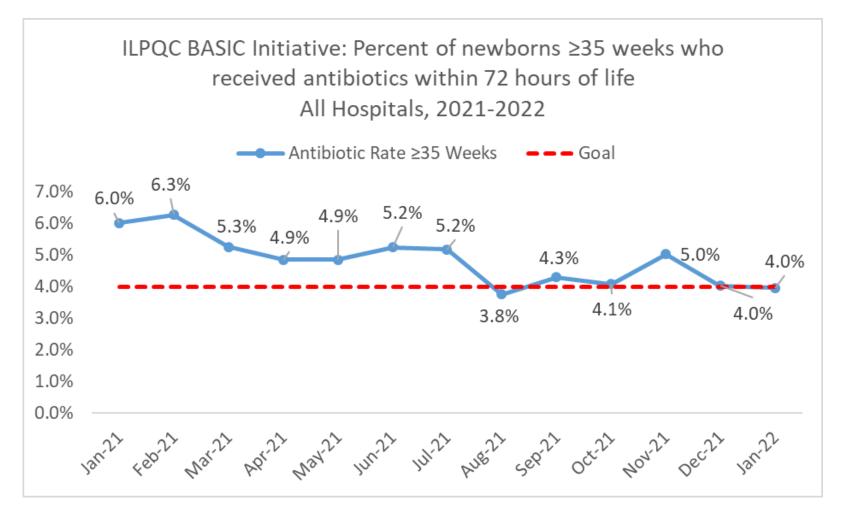
Automatic Stop Orders: 60% In Place

Family Education: 50% In Place

Healthcare Team Education: 56% In Place

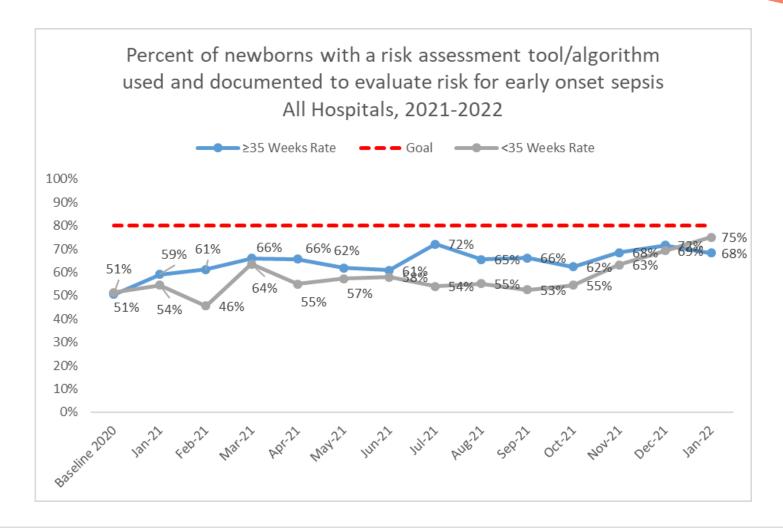
## Progress towards achieving BASIC: ≥35 ABX Prescribing





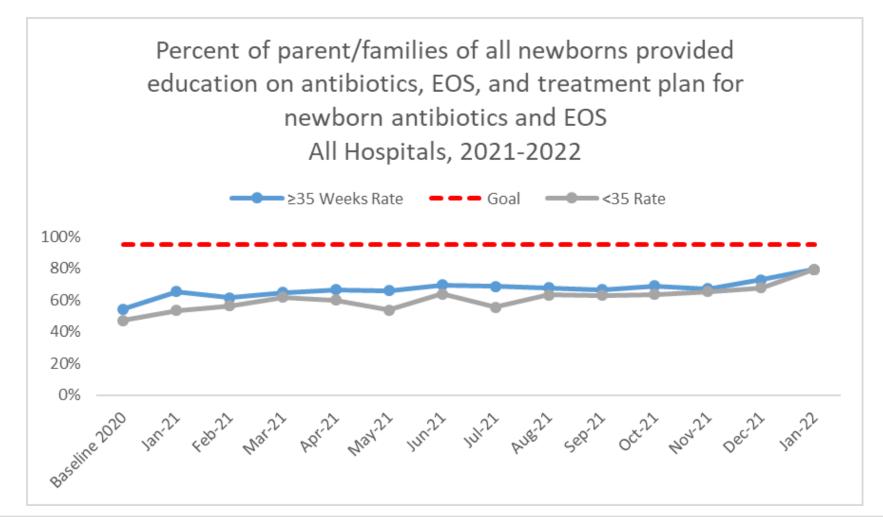
## Progress towards achieving BASIC: EOS Risk Assessment





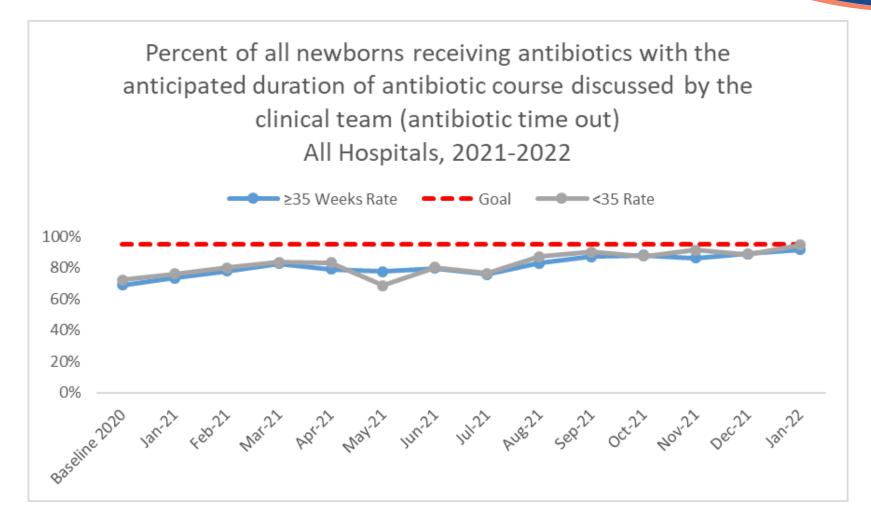
## Progress towards achieving BASIC: Family/Caregiver Education





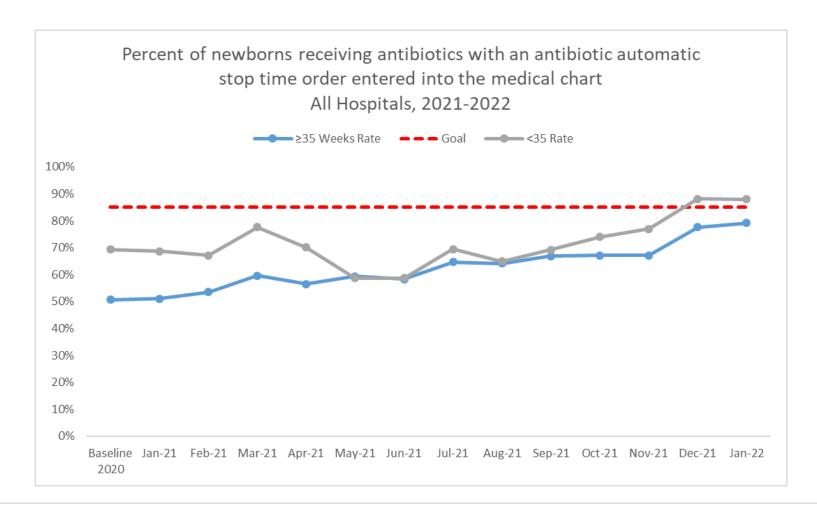
## Progress towards achieving BASIC: ABX Time Out





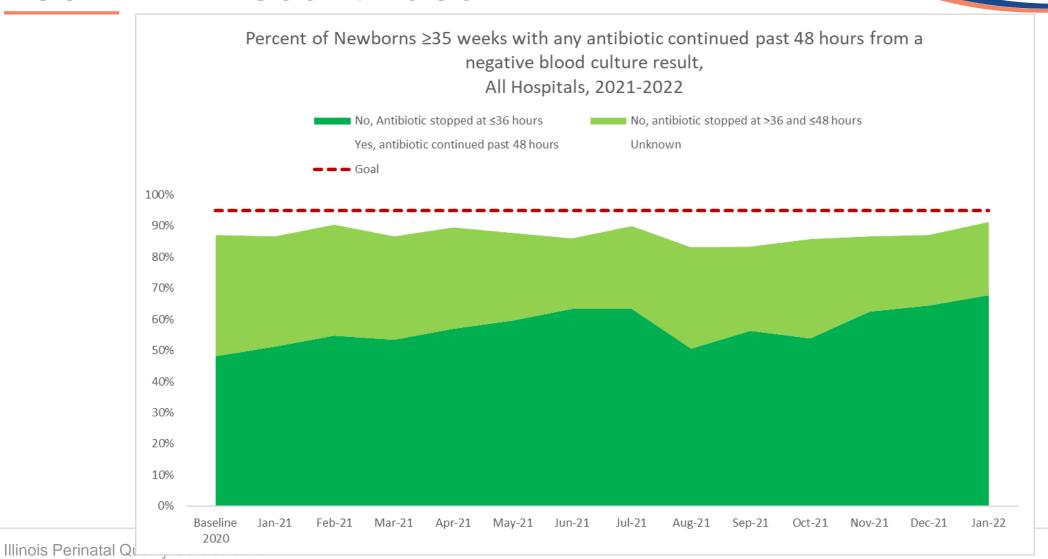
## Progress towards achieving BASIC: Automatic Stop Order





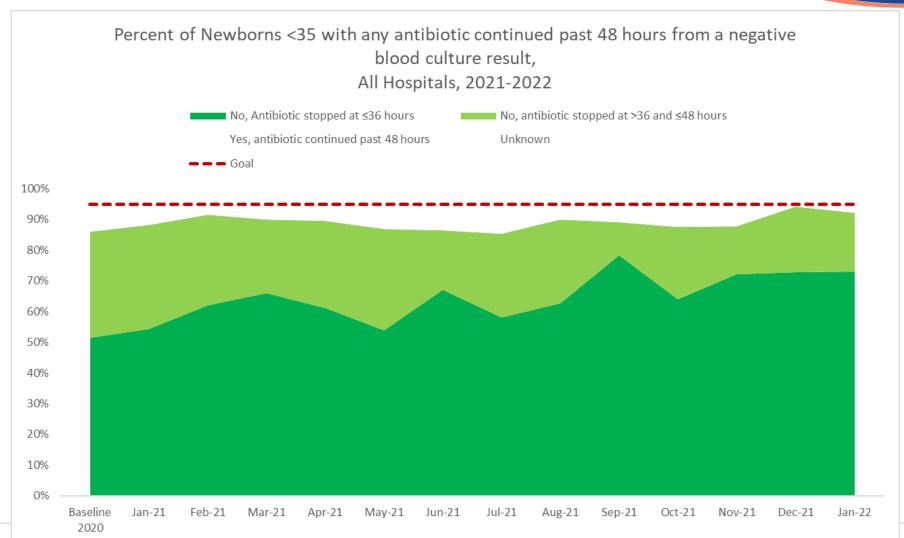
## Progress towards achieving BASIC: ≥35 ABX Discontinued





## Progress towards achieving BASIC: <35 ABX Discontinued





## 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 <u>all</u> 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

## ILG PQC Illinois Perinatal Quality Collaborative

### 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



#### **Babies Antibiotic Stewardship Improvement Collaborative (BASIC)**

#### PEDIATRICIANS IMPROVING ANTIBIOTIC USE TO HELP BABIES THRIVE

Your hospital is participating in the Illinois Perinatal Quality Initiative (ILPQC) statewide neonatal quality improvement initiative implementing current evidenced-based antibiotic guidelines from the CDC and AAP to provide the appropriate antibiotics, to appropriate newborns, for the appropriate length of time.



#### BASIC Initiative Aims:

Decrease by 20% 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 longer than 36hrs

#### Why Neonatal Antibiotic Stewardship?

Antibiotics are important in fighting infections in newborns, but wide variations with antibiotic prescribing can lead to unnecessary or prolonged exposure, resulting in adverse outcomes:

Separation of parents and baby

Reduction in breastfeeding and increase in formula supplementation

Antibiotic resistance

Impaired development of intestinal microbiome leading to increased risk of NEC

Increase in longer term chronic conditions including asthma, allergies, and obesity

#### WHAT YOU CAN DO!

- Connect with your hospital's BASIC QI Team and learn how to get involved.
- Stay informed with Current Evidence-Based Antibiotic Guidelines.
- . Know the Assessment Tools & Resources used at your hospital:
  - o Early Onset Sepsis (EOS) Risk Assessments
  - o Neonatal Early Onset Sepsis Calculator (NEOSC)
  - Enhanced Serial Observations
  - o Antibiotic "Time-outs" at 36 hrs
  - o Automatic Antibiotic Stop Time
- Educate Parents and Caregivers about EOS and antibiotic use.
- Access the ILPQC BASIC Toolkit for more resources (www.ilpqc.org/basic2021)

PEDIATRICIANS are vital to ACHIEVE THE GOAL of

RIGHT ANTIBIOTICS to the RIGHT BABIES for the RIGHT LENGTH OF TIME!

### OSF St. Francis Medical Center

Shelly Shallat, MD



# 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, II

#### **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



ARTICLE | JULY 01 2017

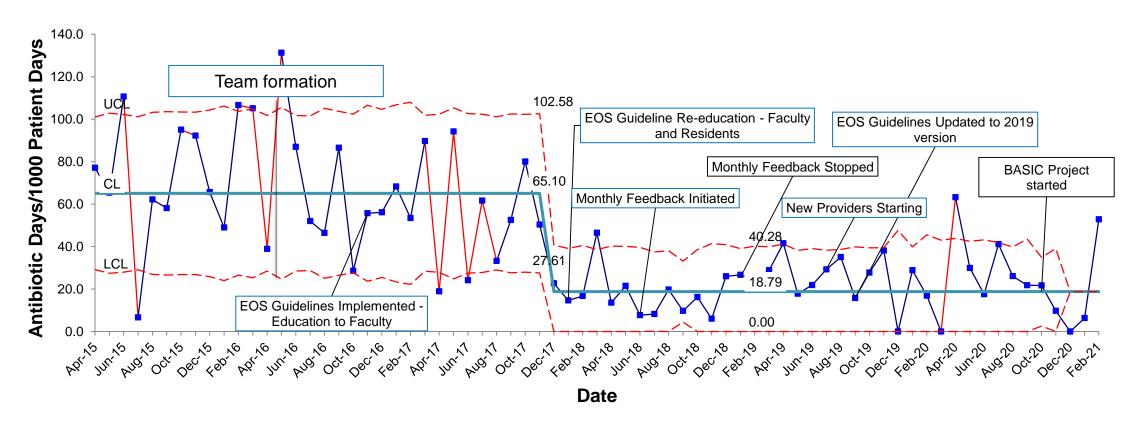
Chorioamnionitis and Management of Asymptomatic Infants ≥35 Weeks Without Empiric Antibiotics FREE

Amanda I. Jan, MD 🚾 ; Rangasamy Ramanathan, MD; Rowena G. Cayabyab, MD



### **Antibiotic Stewardship - ILPQC**

#### **Newborn Nursery Antibiotic Usage Rate - u Chart**





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



## Implementation/Ongoing Communication

- 3. Standing Agenda item REPEAT
  - Hospitalist/Newborn Committee meetings(Neos/Nurse leaders)/Pediatric Department meeting
    - 1. Minutes incorporate graphs
    - 2. Email communications

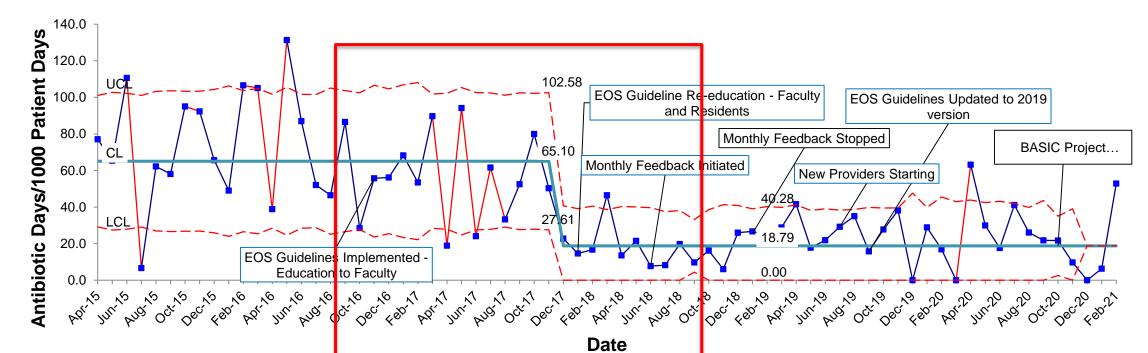
	Wednesday January 11th, 2022 Newborn Committee Agenda
Гime	Topic
11:30	Reflection/Approval of minutes
11:30	NBC 2021 Goals Review
	NBC 2022 Goals Plan
11:40	Standing Reports
	COVID Vaccination Rates
	Census Level 1/Level 2
	Hepatitis C testing
	NICU Transfers
	Hyperbilirubinemia
	Antibiotic Usage
	Readmissions
	Vitamin K Refusal Rates



### **Use the Data**

- 4. Separate the data from the NICU
- 5. Share data/outcomes of early adopters
- 6. Share balancing measures
- 7. Share directed data/feedback

#### **Newborn Nursery Antibiotic Usage Rate - u Chart**



## **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**

Date	Topic
April 18 2022, 2-3 PM	Integrating the NEOSC into the EMR
May 26, 2022	ILPQC 2022 Face-to-Face Meeting



### Next Steps for BASIC

- q Review Face-to-Face to-dos!
  - q Registration Open April 4th
  - q Submit QI Data by May 2nd
  - q Submit QI Storyboard by May 11th
  - q 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:



Northwestern University Feinberg School of Medicine





