



# BASIC Teams Call: Using EMR for Data & Clinical Support

April 19, 2021 1:00 – 2:00pm

# **Call Overview**



- ILPQC Face to Face
- BASIC Data Overview
- Guest Speaker: Leveraging the EMR, Patrick Lyons, MD, Lurie Children's Hospital
- Designated time for questions & answers
- BASIC Data Question Office Hours (After Call)



# **ILPQC FACE TO FACE**

### Illinois Perinatal Quality Collaborative's 2021 Virtual Face to Face Meeting

#### **On-Line and Free!**

### Calling all nurses, providers and staff!

#### May 26

The **OB** Face-to-Face meeting topics include: Promoting Vaginal Birth, Birth Equity, and MNO-OB Sustainability. This day will be worth 3.75 contact hours.

### May 27

The **Neonatal** Face-to-Face meeting topics include: Babies Antibiotic Stewardship Improvement Collaborative (BASIC), Equitable Care, and MNO-Neonatal Sustainability. This day will be worth 3.75 contact hours.

Breakout sessions, Hospital Storyboards, QI Awards and more!









Dr. Amanda Bennett OB & Neo Day



Dr. Joseph Cantey Neo Day

Featured Speakers

Dr. Audra Meadows

**OB Day** 



Dr. Russell Kirby Neo Day



LaToshia Rouse OB Day



CME's offered through Morthwestern Medicine\* Feinberg School of Medicine

# 2021 Face-to-Face Agenda



Time	Session/Speaker
8:15 – 8:40 am	Welcome & overview- Celebrating Our Accomplishments in a Virtual World with a Look to 2021 and Beyond- Justin Josephsen & Leslie Caldarelli
8:40-9:45 am	Infant Mortality Inequities in Illinois and Prevention Opportunities + Q&A Amanda Bennett & Russell Kirby
9:45 – 9:55 am	Break
9:55 – 10:40 am	Being a Good Antibiotic Steward in the Nursery Setting: It can be done!- Joseph B. Cantey
10:40-10-55am	Unpacking the BASIC Toolkit Justin Josephsen & Leslie Caldarelli
10:55 – 11:15am	QI Awards
11:15 – 12:30 pm	Virtual Storyboard Review & Lunch
12:30 – 1:15 pm	BASIC Hospital Team Panel: Sharing Strategies for a Successful Launch- ILPQC BASIC + Hospital teams
1:15 – 1:25pm	Break
1:25 – 2:00 pm	Breakout Session 1: Small Group Key Topic Discussions on Implementation Strategies
2:00 – 2:05 pm	Break
2:05 – 2:40 pm	Breakout Session 2: Small Group Key Topic Discussions on Implementation Strategies
2:40 – 2:45 pm	Break
2:45 – 3:00 pm	Where do we go from here? Wrap-up, evaluation and raffle

# **Breakout Sessions**



**Neonatal Breakout Sessions** 

MNO-Neonatal: Help! I feel like we just got going with MNO

Addressing disparities in infant mortality

Navigating your BASIC data- how to optimize and streamline data collection

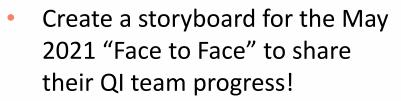
Leveraging your EMR to Achieve BASIC Success

BASICally, how to I get my Neonatologists & Pediatricians to buy into this?

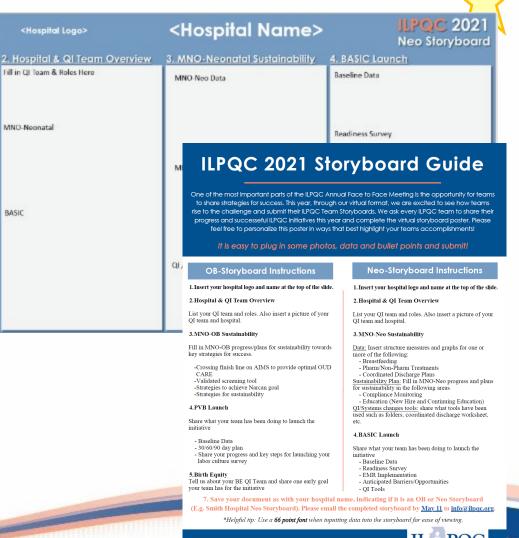
Key Components of Neonatal Early Onset Sepsis Calculator (NEOSC)- Optimizing Team Communication & Clinical Monitoring

# **Neo F2F Storyboard Session**

BASIC



- Storyboard can focus on...
  - Launching the BASIC initiative:
    - 30/60/90 day achievements
    - Prioritization matrix
    - Data collection strategies
  - **MNO-Neo Sustainability:** 
    - Compliance monitoring
    - Education for new hires
    - Continuing and ongoing education.
- Where can I find this guide?



IL

Illinois Perinatal Quality Collaborative

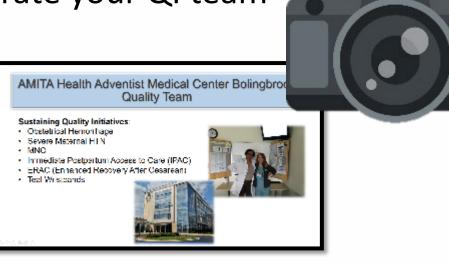
Thank you for your participation!

# You are ILPQC!



- Get READY... ILPQC wants to celebrate you during our virtual Face-to-Face Meeting!
- Coordinate with your colleagues to create ONE slide or send ONE a picture to celebrate your QI team
- Ideas to include on slide:
  - Team/Hospital Picture
  - Picture of QI bulletin board
  - Location/Region
  - Birth Volume/NICU Beds
  - Perinatal Level and Network
  - Current & Future Initiatives
  - Contact information for your team for collaboration

Submit by emailing your slide or picture to info@ilpqc.org



## 2021 OUTSTANDING LAUNCH AWARDS

# ILPQC 2021 FACE-TO-FACE MEETING BASIC

### **AWARD CRITERIA**

✓ Team Roster sent to ILPQC

+

✓ All 2020 Q4 Baseline Data
 Submitted

+

+

✓ All Data Submitted \*



✓ BASIC Readiness Survey
 Submitted

\*All Data Submitted (Hospital + Patient Level) January through March 2021 BY April 30<sup>th</sup>

# 4 Steps to Get Ready for the ILPQC Face-to-Face







# **BASIC DATA OVERVIEW**

# **ILPQC BASIC Vision & AIMS**



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

#### Measures:

- % of newborns with EOS risk assessment tool used and documented
- % of parents/families provided education on antibiotics, EOS, and treatment plan for their newborn
- % of parents/families provided education in their preferred language
- % of newborns receiving abx with documentation of maternal risk factors for EOS in their chart
- % of newborns with anticipated duration of abx course discussed by clinical team
- % of newborns with antibiotic automatic stop order in medical chart

# Coming soon: IL BASIC QI Tools and Resources



- Family education video for newborns receiving antibiotics
- Labor & Delivery Patient Education Sheet
- Communication Tools
  - L&D → Newborn caregiver communication on maternal risk for Postpartum to pediatric physician tool on results of EOS risk assessment
- BASIC Grand Rounds for interdisciplinary teams
- Nursing Education Tools and Resources
- Send your ideas for needed resources or your excellent examples to info@ilpqc.org

Illinois Perina

Quality Collaborative

]	<b>BASIC</b> Monthly
	Data Collection
	Patient-level Data

#### ILPQC Bables Antibiotic Stewardship Improvement Callaborative (BASIC)

#### Monthly Newborn Data Form

**Deta Collection Instructions:** 

Di

REDGER A

Hospital K

D. REDCAP I

- 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 (N) 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

#### Submit for every individual newborn receiving antibiotics in a month

Maternal Age:
Vaginal     Cesarean section without labor     Cesarean section with labor
Neonatal Intensive Care Unit (Level 3/4)     Immediate Care/Special Care Nursery (Level 2/2E)     Newborn Nursery (Level 1)
Date of Delivery///
Time of Birth:
Gestational age, weeks:
Gestational age, days:
Birth weight:
<ul> <li>Medicaid/Public</li> <li>Private</li> </ul>

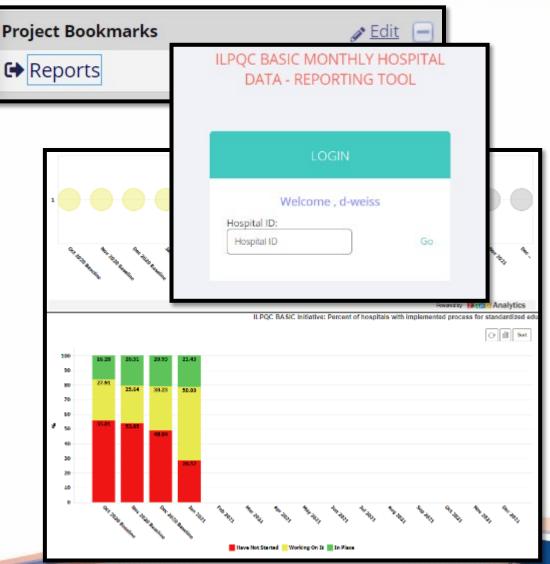




REDCAP Study M	ILPQC BASIC Monthly Structure M		
1. BEDCen Roca		SEDCan Record ID:	(automatically
2. Hospital ID N	lumber -	Hospital ID Number:	
3. Please select	the time period for this quarterly data:	Buseline (Oct-Dec 2020)     January 2021     February 2021     March 2021     April 2021	July 2021     August 2021     September 2021     October 2021     November 2021     December 2021
Data Monitoria Total number o or antibiotics fe Total number o nequiring surgis Total number o or antibiotics fe Total number o surgical proceed Total number o	Great resour your month meet	ly QI tear	where a
birth? 4. Hospital has	newborns born at 235 0/7 weeks gestation this implemented a process for standardized r healthcare team on neonatal antibiotic	Haven't started	ure drawn within 72 hours
	best practices and equitable care	In place	
neonatal/pediate	s menth, camulative propertion of ic providers educated on neonatal antibiotic practices and equitable care	2 20% 2 20% 3 20% 4 40% 5 60% 6 60% 7 70% 8 80% 2 90% 1 20%	
neonatal/pe	I this month, cumulative proportion of fathic nurses educated on neonatal antibiotic best practices and equitable care	0 10% 0 20% 0 30% 0 40% 0 50% 0 60% 0 70%	

### Hospital Measure Reports Live!

- When in hospital measures data form, go to the left hand menu and click Reports under Project Bookmarks
- Type in your 3-digit hospital ID in the new web page
- Use structure measure reports to track your hospital's monthly system changes towards achieving BASIC





# Newborn Measure Reports

Project

- When in newborn measures data form, go to the left hand menu and click Reports under Project Bookmarks
- Type in your 3-digit hospital ID in the new web page
- Use newborn measure reports to track your hospital's monthly system changes towards achieving BASIC

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Bookmarks		<b>J</b>	Edit 듣	0	lity Collabora	tive
orts	ILPQC BASIC MC DATA - REP					
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	Hospital ID 100 90 80		Go			
	70 60 50 40	•			•	
	30 20 10 0	Baseline	Jan 2021	Feb 2021	Mar 2021	
				. ur avai		

# BASIC Hospital Team Data Submission (82 Teams Total)

Month			Teams Reporting Hospital Data
Baseline (Q4 2020)	65		58
January 2021	64		58
February 2021	57		52
March 2021	41		28
Use your hospital data form as a QI team meeting roadmap to guide your efforts. Please contact us if you need help getting started with reviewing and entering your data.		given	pital data is not submitted for a month you will not have access s Antibiotic Prescribing Rate ime.

### Sample BASIC Monthly Hospital Data



Structure Measure	Baseline Q4 2020 % In Place	February 2021 % In Place
Developed an electronic reporting system from EMR	25%	29%
Standard protocols for >35 EOS assessment	48%	55%
Standard protocols for <35 EOS assessment	38%	45%

### Sample BASIC Monthly Hospital Data



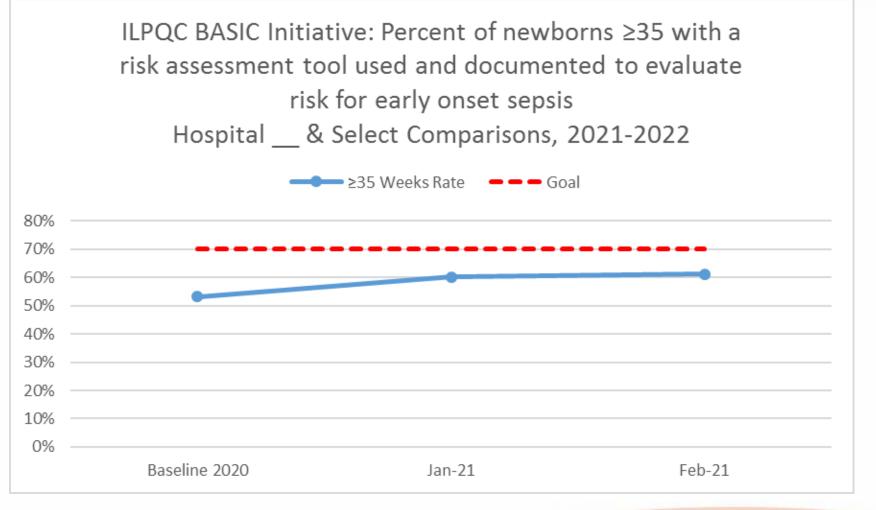
Structure Measure	Baseline Q4 2020 % In Place	February 2021 % In Place
Partnership with OB team to standardize communication about maternal risk factors for EOS	48%	55%
Standard serial assessment of neonates protocol	57%	67%
Standard identification and response to worsening clinical status	52%	65%
Standard protocols to properly & consistently obtain blood cultures	62%	66%

### **BASIC** Monthly Hospital Data

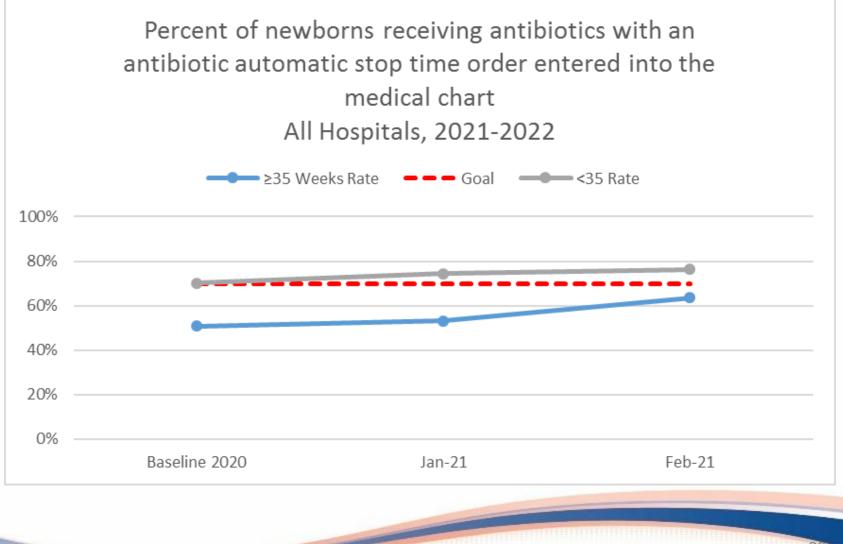


Structure Measure	Baseline Q4 2020 % In Place	February 2021 % In Place
Standardized automatic stop order process	37%	39%
Standardized process to review newborn abx quality data by race/ethnicity and insurance status	2%	6%

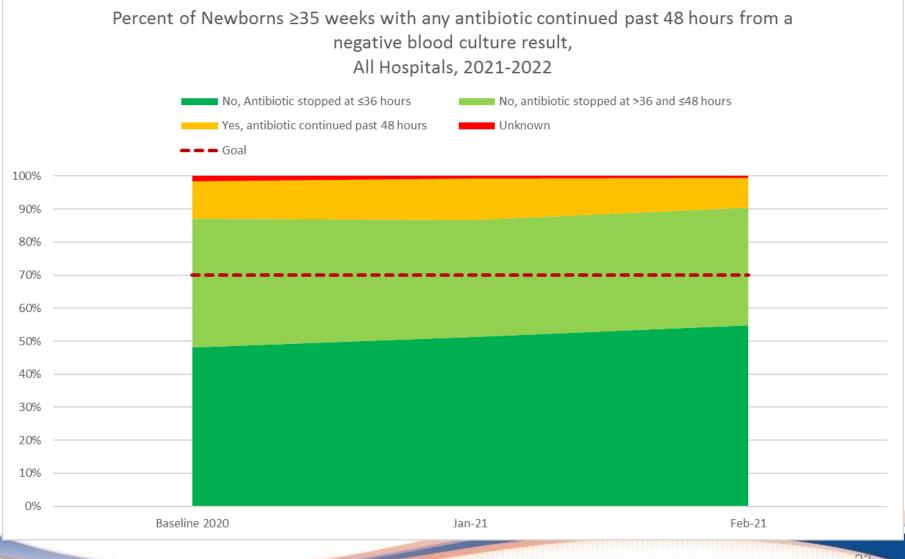
















# Leveraging The EMR

### Patrick Lyons, MD Lurie Children's Hospital

**Objectives from Today's Call** 



- Summarize EMR utility in BASIC
- Review EMR data structure and reporting
- Showcase examples of EMR builds that will contribute to achieving BASIC AIMS

### **ILPQC BASIC**



Vision: ILPQC hospitals, regardless of perinatal level or past experience with implementing newborn antibiotics initiatives, will implement best practices to provide: the right antibiotics for the right babies for the right duration

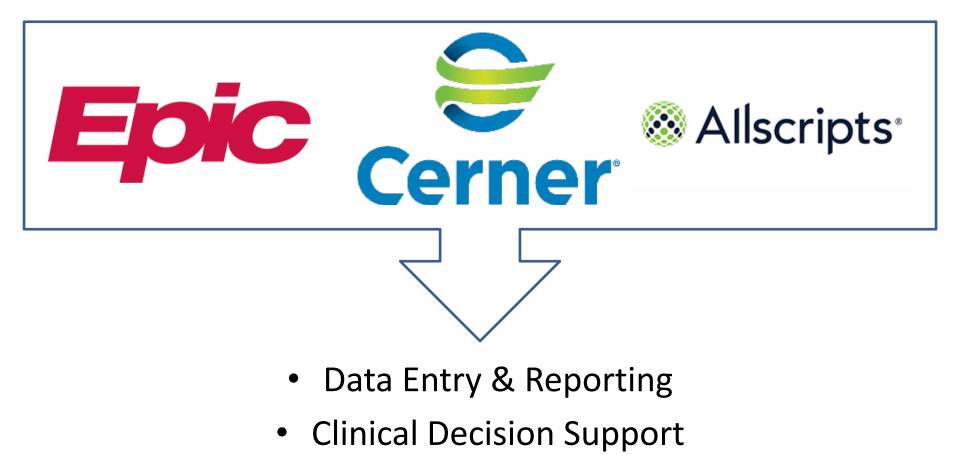
#### AIMs:

- Decrease by 20% (or absolute rate of 4%) the number of newborns, born at ≥35 weeks who receive antibiotics
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# **BASIC Key Driver Diagram**



### 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 deescalate antibiotics

Deliver equitable care

### Change Ideas

Create multidisciplinary antibiotic stewardship QI team Educate healthcare team on best practices Provide standardized education and anticipatory guidance with focus on equitable care to families on EOS and treatment plan

Coordinate with IT to implement reporting system from EMR 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

Review health quality data stratified by race, ethnicity, and Medicaid status to identify disparities and address opportunities for improvement

Version 2.12.2021

# **BASIC** Key Driver Diagram



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Version 2.12.2021

### Partnering with IT



- Anticipating Challenges
  - Opaque change management process
    - How to even get started?
  - Limited resources (and competing priorities) within IT
- IT jargon
  - Analyst = your friend in IT who will be doing the building
  - "Validate build"
  - IT Environments:
    - "PRD" or "Production" = the EMR system that you use every day
    - "Dev" or "POC" = the part of the system where changes are built
    - "TST" or "TEST" = the part of the system where changes are tested



# DATA ENTRY AND REPORTING

31

### **BASIC** Reporting



- Monthly Hospital Data Form (Structure Measure)
  - Hospital-Level Newborn Data
- Monthly Newborn Data Forms (Process Measure)
  - Patient-Level: Data collection is resource intensive, especially with high volume hospitals.
  - 1. Identify Eligible Patients (Newborn Form Data Collection Instructions)
  - 2. Audit Patient-Level Data
    - Identify EMR Gaps
    - Organize Notes for Data
  - 3. Generate Reports!

# **BASIC** Reporting



- Monthly Hospital Data Form (Structure Measure)
  - Hospital-Level Newborn Data
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  - 2. Audit Patient-Level Data
    - Identify EMR Gaps
    - Organize Notes for Data
  - **3.** Generate Reports!

### 1 - Identify Eligible Patients



#### **Monthly Newborn Data Form**

Data Collection Instructions:

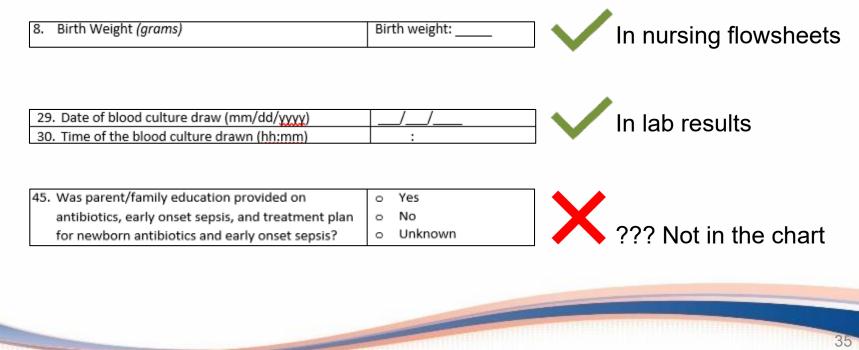
- Please collect data on all live born neonates born between 24-44 weeks gestation receiving any
  intravenous (IV) antibiotics within the first 72 hours of life (including newborns who die within 72 hours
  of life).
- Exclude newborns requiring surgical procedures or antibiotics for surgical prophylaxis within the first 72 hours of life.
- If a live born newborn 24-44 weeks gestation receives any intravenous (IV) antibiotics within the first 72 hours of life and is transferred within the first 72 hours of life, 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 (including newborns who die within 72 hours of life).
- 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.

### 2 - Audit Patient-Level Data



- Match data form questions to data source
  - On Paper (SBAR, signout sheets)
  - In the EMR

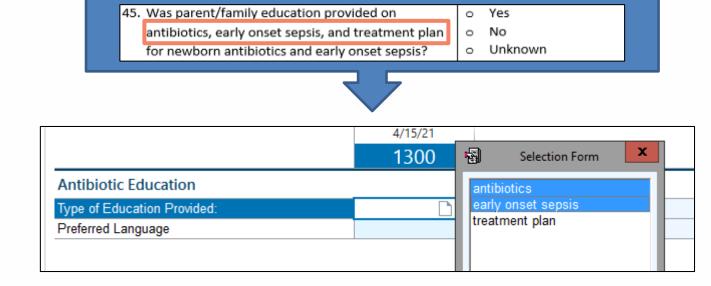
### • For example:



# 2 - Audit Patient-Level Data (Fill in Data Gaps)

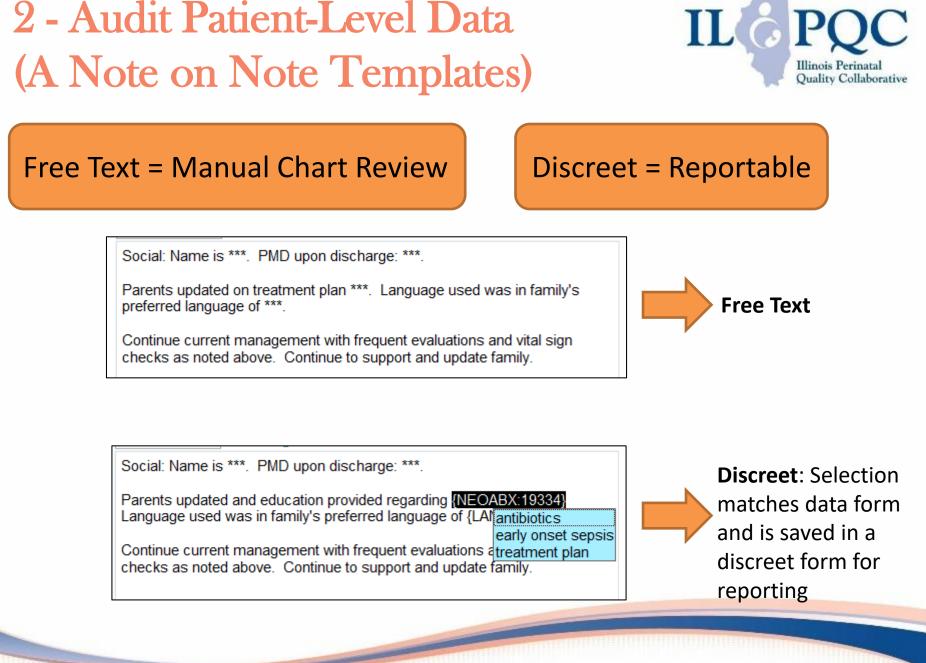


Modify the EMR to capture any missing data



	Social. Name is """. PMD upon discharge. """.
Note template for MD documentation	Parents updated and education provided regarding {NEOABX:19334} Language used was in family's preferred language of {LANGUAGE:3184}.
	Continue current management with frequent evaluations and vital signature treatment plan above. Continue to support and update family.

Flowsheet for RN documentation



## 3 - Generate Reports!



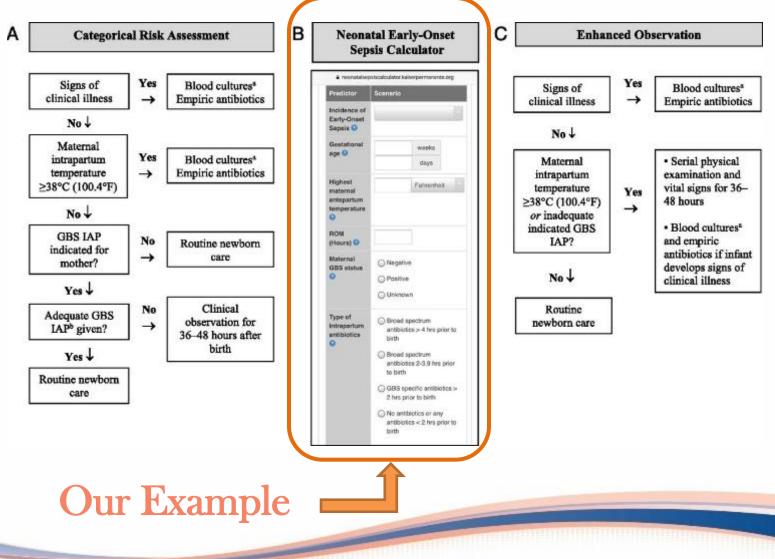
- All EMRs have capability of generating reports; the process of building reports varies by institution
- Most hospital systems have a dedicated team responsible for data reporting that might be separate from the IT team (Data Analytics, Enterprise Data Warehouse)
- Key takeaways
  - Ensure the answer to every data form question exists in your EMR
  - Make data discreet to the extent possible to enable reporting
  - Work with your hospital's data analytics team to create reports



# CLINICAL DECISION SUPPORT

#### Adopt A Risk Assessment Tool





## Make Your Risk Assessment Tool Easy To Find



- Add a link to a protocol or to the Kaiser EOS website into admission or antibiotic order sets
- Using Epic & Using NEOSC? Turn on the built-in NEOSC based on the Kaiser EOS calculator!
  - Auto-populates risk factors from data in the maternal chart.
  - Recommendations can be displayed in patient lists and within the patient's chart

## Epic Early-Onset Sepsis Calculator (Based on Kaiser NEOSC)



NICU Vitals	infant/NICU Asse	ssment NICU I/O IV Assessment Daily Cares/Safety Vent D	
н	ide All Show All	Accordion Expanded View All & 1m 5m 10m 15	
HEAD	⊗ 🗸	Admission (Current) fro	
CHEST	⊗ 🔽	5/2/17	
EXTREMITIES	≈ 🗸	1237	
SKIN	⊗ 🗸		
MUSCULOSKELET		Newborn Sepsis Screening Gestational Age (Weeks) 35	
ABDOMEN	≫ 🗸		
PELVIS	≈ 🗸	Gestational Age (Days) 2 Highest Maternal Antepartum Temp (F) 101	
PSYCHOSOCIAL	<ul><li>✓</li><li>✓</li><li>✓</li></ul>	Rupture of Membranes (Hours) 4	
SEPSIS RISK	* ▼	Maternal Group B Strep Status 2	
Nouhorn So		Type of Intrapartum Antibiotics	
Newborn Sepsis Sc     Image: Sepsis Contrapartum Antibiotics     1       Newborn Sepsis C     Image: Sepsis Calculator     1			
		Gestational Age Calculation 35.28571	
PROVIDER NOTIFI	•	Gestational Age Coefficient (gaCo) 244.61818	
CHARTING TYPE	$\gg$ $\checkmark$	Gestational Age 2 Coefficient (ga2Co) 109.19363	
		Highest Maternal Temperature Coefficient 87.668	
		Rupture of Membranes Coefficient 1.62121	
		Group B Strep Positive Coefficient 0	
		Group B Strep Unknown Coefficient 0	
		Broad Spectrum Antibiotics Coefficient 1 0	
		Group B Strep Antibiotics Coefficient 1 1.0488	
		Group B Strep Antibiotics Coefficient 2 0	



cultures, no antibiotics

## Order Sets With Kaiser NEOSC

ILC PQC Illinois Perinatal Quality Collaborative

Please enter details below.

Predictor	Scenario		
Incidence of Early-Onset Sepsis (2)	0.5/1000 live births (CDC national 🗸		
Gestational age 🧿	39	weeks	
	5	days	
Highest maternal antepartum temperature ②	100.5	Fahrenheit 🗸	
ROM (Hours) 📀	19		
Maternal GBS status <table-cell></table-cell>	<ul> <li>Negative</li> <li>Positive</li> <li>Unknown</li> </ul>		
Type of intrapartum antibiotics ②	<ul> <li>Broad spectrum antibiotics &gt; 4 hrs prior to birth</li> <li>Broad spectrum antibiotics 2-3.9 hrs prior to birth</li> <li>GBS specific antibiotics &gt; 2 hrs prior to birth</li> <li>No antibiotics or any antibiotics &lt; 2 hrs prior to birth</li> </ul>		

isk per 1000/births OS Risk @ Birth		0.92	
OS Risk after Clinical Exam	Risk per 1000/births	Clinical Recommendation	Vitals
Vell Appearing	0.38	No culture, no	Routine
quivocal	4.60	Empiric antibiotics	Vitais per NICU
linical Illness	19.20	Етріпс апаріов	Vitais per NICU
ssification of Infant's Clinical Prese	ntation Clinical Illness	Equivocal Well Ap	

Use order sets to translate recommendations into clinical practice

#### **Order Sets**

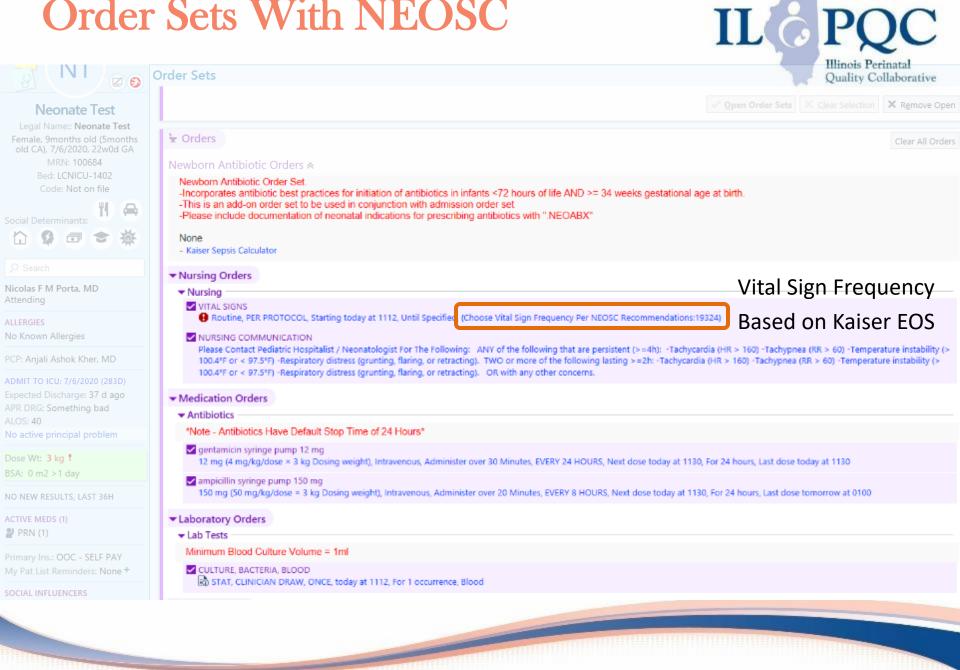


- A group of orders that standardizes & expedites the ordering process for a common clinical scenario
- Reduce variation in care
- Align clinical practice with BASIC AIMS
- Educate healthcare team on best practices



	Order Sets
Neonate Test	✓ <u>Open Order Sets</u> × Clear Selection × Remove Open
Legal Name:: Neonate Test Female, 9months old (5months old CA), 7/6/2020, 22w0d GA MRN: 100684	<b>È Orders</b> Newborn Antibiotic Orders ≈
Bed: LCNICU-1402 Code: Not on file Social Determinants:	Newborn Antibiotic Order Set. -Incorporates antibiotic best practices for initiation of antibiotics in infants <72 hours of life AND >= 34 weeks gestational age at birth. -This is an add-on order set to be used in conjunction with admission order set -Please include documentation of neonatal indications for prescribing antibiotics with ".NEOABX"
	None - Kaiser Sepsis Calculator
₽ Search	✓ Nursing Orders
Nicolas F M Porta, MD Attending	✓ Nursing ✓ VITAL SIGNS
ALLERGIES No Known Allergies	Routine, PER PROTOCOL, Starting today at 1112, Until Specified, (Choose Vital Sign Frequency Per NEOSC Recommendations:19324)     NURSING COMMUNICATION
PCP: Anjali Ashok Kher, MD	Please Contact Pediatric Hospitalist / Neonatologist For The Following: ANY of the following that are persistent (>=4h): -Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instability (> 100.4°F or < 97.5°F) -Respiratory distress (grunting, flaring, or retracting). TWO or more of the following lasting >=2h: -Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instability (> 100.4°F or < 97.5°F) -Respiratory distress (grunting, flaring, or retracting). OR with any other concerns.
ADMIT TO ICU: 7/6/2020 (283D) Expected Discharge: 37 d ago APR DRG: Something bad ALOS: 40	<ul> <li>✓ Medication Orders</li> <li>✓ Antibiotics</li> </ul>
No active principal problem	*Note - Antibiotics Have Default Stop Time of 24 Hours*
Dose Wt: <b>3 kg !</b> BSA: 0 m2 >1 day	gentamicin syringe pump 12 mg 12 mg (4 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer over 30 Minutes, EVERY 24 HOURS, Next dose today at 1130, For 24 hours, Last dose today at 1130
NO NEW RESULTS, LAST 36H	antipictum syntige puttip 150 mg 150 mg (50 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer over 20 Minutes, EVERY 8 HOURS, Next dose today at 1130, For 24 hours, Last dose tomorrow at 0100
ACTIVE MEDS (1) PRN (1)	✓ Laboratory Orders ✓ Lab Tests
Primary Ins.: OOC - SELF PAY My Pat List Reminders: None +	Minimum Blood Culture Volume = 1ml ✓ CULTURE, BACTERIA, BLOOD
SOCIAL INFLUENCERS	😨 STAT, CLINICIAN DRAW, ONCE, today at 1112, For 1 occurrence, Blood

Legal Network Test         Legal Network Test         Female Smooths old Gometha         Smoothants         MRX: 100844         Bet LCUL14022         Code Not on file         Social Determinants         Image Sector         Image Sector         Image Sector         Nicolas F Morta, MD         Attending         Attending         Image Sector         Nicolas F Morta, MD         Attending         Notiona Allergies         PCP- Angli Achok Kiver, MD         ADMIT Torkur, 7/k2220 (2820)         Notiona Croter Sela	8	Order Sets Ullinois Perinatal Quality Collaborative
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object AV, 76/2020, 22/w00 GA         MINEX       Model         Beet, UCNUCI-1402       Model         Code: Not on file       Model         Social Determinants       Model         Social Determinants       Model         Model       Model         Auterdiand       Model         Model       Model         Model       Model         Model       Model         Model       Model         PCP. Anjali Ashok Kher. MD       Model         ADMIT OLU: 760/2026 (2810)       Model		
Bed: LCNICU-1402 Code: Not on file       NetWork Antibiotic Order Set.         Social Determinants:       Image: Control of the control of the control of antibiotics in infants <72 hours of life AND >= 34 weeks gestational age at birth.         Image: Control of the control of th		Clear All Orders
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Social Determinants       -Please include documentation of neonatal indications for prescribing antibiotics with "NEOABX"         No       -Please include documentation of neonatal indications for prescribing antibiotics with "NEOABX"         No       -No         No favor       -Ninsing         ALLERGIS       -No sing         No Known Allergies       -Ninsing         PCP-Anjali Ashok Kher. MD       -No Sing (Sing)         ADMIT To LCU. <i>TACE200</i> (282D)       -No sing)         Expected Dicknown 2014       -State Defaultic Hospitalist / Neonatologist For The Following: ANY of the following lasting >=21: "Tachycardia (HR > 160) "Tachypnes (RR > 60) "Temperature instabilit 100.4F or < 97.5F) -Respiratory distress (grunting, flaring, or retracting). TWO or more of the following lasting >=21: "Tachycardia (HR > 160) "Tachypnes (RR > 60) "Temperature instabilit 100.4F or < 97.5F) -Respiratory distress (grunting, flaring, or retracting). WO or more of the following lasting >=21: "Tachycardia (HR > 160) "Tachypnes (RR > 60) -Temperature instabilit 100.4F or < 97.5F) -Respiratory distress (grunting, flaring, or retracting). OR with any other concerns.		-Incorporates antibiotic best practices for initiation of antibiotics in infants <72 hours of life AND >= 34 weeks gestational age at birth.
Note:   Seach   Nicolas: FM Porta, MD   Attending   Attending   No. Known Allergies   PCP- Anjali Ashok Kher, MD   ADMIT TO ICU: 7/40202 (0280)   Expected Discharge: 37 d ago   No. active principal problem   Dose Wt: 3 kg 1   BSA: 0 m2 1 d ago   BSA: 0 m2 1 d ago   Mort NESSULTS, LAST 36H   ACTVE MIDS (1)   Prinary Ins: 00C - SELF PAY		
• Kaiser Sepsis Calculator       • Link to Kaiser calculator         • Search       • Nursing Orders         Nicolas F M Porta, MD       • Mursing         • Mursing       • Wirkl SURNs         • Routine, PER ROTOCOL, Starting today at 1112, Until Specified, (Choose Vital Sign Frequency Per NEOSC Recommendations:19324)         • No Known Allergies       • Mursing Conduction         PCP: Anjali Ashok Kher, MD       • Medication Orders         • AUDS: 40       • Source of the following lasting >=2h: "Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instability 100.4ºF or < 97.5ºF) -Respiratory distress (grunning, flaring, or retracting). OR with any other concerns.		None
P Search         Nicolas F M Porta, MD         Attending         V TALS SIGNS         ALLERGIES         No Known Allergies         PCP. Anjali Ashok Kher, MD         ADMIT TO ICU: 7/6/2020 (2810)         Expected Discharge: 37 d ago         ARX BRG: Something bad         ALOS: 40         No active principal problem         Dose Wt: 3 kg !         BA: 0 m2 > 1 day         No NEW RESULTS, LAST 36H         ACTIVE KEDS (1)         P RN (1)		- Kaiser Sepsis Calculator
Nicolas F M Porta, MD <ul> <li>Missing</li> <li>VITAL SIGNS</li> <li>VITAL SIGNS</li> <li>Routine, PER PROTOCOL, Starting today at 1112, Until Specified, (Choose Vital Sign Frequency Per NEOSC Recommendations:19324)</li> <li>Nursing</li> <li>VITAL SIGNS</li> <li>Routine, PER PROTOCOL, Starting today at 1112, Until Specified, (Choose Vital Sign Frequency Per NEOSC Recommendations:19324)</li> <li>NURSING COMMUNICATION</li> <li>Please Contact Pediatric Hospitalist / Neonatologist For The Following: ANV of the following lasting &gt;=2h: -Tachycardia (HR &gt; 160) -Tachypnea (RR &gt; 60) -Temperature instabilit 100.4F or &lt; 97.5F). Respiratory distress (grunting, flaring, or retracting). TWO or more of the following lasting &gt;=2h: -Tachycardia (HR &gt; 160) -Tachypnea (RR &gt; 60) -Temperature instabilit 100.4F or &lt; 97.5F). Respiratory distress (grunting, flaring, or retracting). OR with any other concerns.</li> </ul> APR DRG: Something bad <ul> <li>Mole Active principal problem</li> <li>Mote - Antibiotics Have Default Stop Time of 24 Hours*</li> <li>Antibiotics Have Default Stop Time of 24 Hours*</li> <li>Gentamicin syringe pump 12 mg</li> <li>12 mg (4 mg/kg/dose * 3 kg Dosing weight), Intravenous, Administer over 30 Minutes, EVERY 24 HOURS, Next dose today at 1130, For 24 hours, Last dose today at 1130</li> <li>Ampicillin syringe pump 150 mg</li> <li>150 mg (\$0 mg/kg/dose * 3 kg Dosing weight), Intravenous, Administer over 20 Minutes, EVERY 8 HOURS, Next dose today at 1130, For 24 hours, Last dose today at 1130</li> <li>Ampicillin syringe pump 150 mg</li> <li>Song Kg: Josse * 3 kg Dosing weight), Intravenous, Administer over 20 Minutes, EVERY 8 HOURS, Next dose today at 1130, For 24 hours, Last dose</li></ul>		
Attending       VITAL SIGNS         ALLERGIES       No known Allergies         No known Allergies       Nu NURSING COMMUNICATION         PCP: Anjali Ashok Kher, MD       No 4ff or < 97.5ff) - Respiratory distress (grunting, flaring, or retracting). TWO or more of the following lasting >=2h: -Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instability 100.4ff or < 97.5ff) - Respiratory distress (grunting, flaring, or retracting). TWO or more of the following lasting >=2h: -Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instability 100.4ff or < 97.5ff) - Respiratory distress (grunting, flaring, or retracting). OR with any other concerns.	Nicolas F M Porta, MD	
Nuckets       No Known Allergies         No Known Allergies       INURSING COMMUNICATION         PCP: Anjali Ashok Kher. MD       Nuckets         ADMIT TO ICU: 7/6/2020 (2820)       INURSING COMMUNICATION         Expected Discharge: 37 d ago       APR DRG: Something bad         ALOS: 40       Modication Orders         VNote - Antibiotics       Note - Antibiotics         No New RESULTS, LAST 36H       Ig gentamicin syringe pump 12 mg         No NEW RESULTS, LAST 36H       Ig 0m (50 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer over 30 Minutes, EVERY 24 HOURS, Next dose today at 1130, For 24 hours, Last dose tomorrow at 0100         ACTIVE MEDS (1)       Image: Something 50 mg (50 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer over 20 Minutes, EVERY 8 HOURS, Next dose today at 1130, For 24 hours, Last dose tomorrow at 0100         ACTIVE MEDS (1)       Image: Last 36H         Primary Ins: OOC - SELF PAY       Minimum Blood Culture Volume = 1ml	Attending	
PCP: Anjali Ashok Kher, MD       Please Contact Pediatric Hospitalist / Neonatologist For The Following: ANY of the following that are persistent (>=4h): -Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instabilit 100.4*F or < 97.5*F) -Respiratory distress (grunting, flaring, or retracting). TwO or more of the following lasting >=2h: -Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instabilit 100.4*F or < 97.5*F) -Respiratory distress (grunting, flaring, or retracting). WO or more of the following lasting >=2h: -Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instabilit 100.4*F or < 97.5*F) -Respiratory distress (grunting, flaring, or retracting). OR with any other concerns.	ALLERGIES	B Routine, PER PROTOCOL, Starting today at 1112, Until Specified, (Choose Vital Sign Frequency Per NEOSC Recommendations:19324)
PCP: Anjali Ashok Kher, MD       100.4*F or < 97.5*F) -Respiratory distress (grunting, flaring, or retracting). TWO or more of the following lasting >=2h: -Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instability         ADMIT TO ICU: 7/6/2020 (2830)       • Medication Orders         Expected Discharge: 37 d ago       • Medication Orders         ALOS: 40       • Medication Orders         No active principal problem       • Medication Syringe pump 12 mg         Dose Wt: 3 kg !       • gentamicin syringe pump 12 mg         12 mg (4 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer over 30 Minutes, EVERY 24 HOURS, Next dose today at 1130, For 24 hours, Last dose today at 1130         SA: 0 m2 >1 day       • Laboratory Orders         * Laboratory Orders       • Lab Tests         Primary Ins: 00C - SELF PAY       • Minimum Blood Culture Volume = 1ml	No Known Allergies	
ADMIT TO ICU: 7/6/2020 (283D)         Expected Discharge: 37 d ago         APR DRG: Something bad         ALOS: 40         No active principal problem         Dose Wt: 3 kg !         BSA: 0 m2 >1 day         NO NEW RESULTS, LAST 36H         ACTIVE MEDS (1)         Primary Ins: OOC - SELF PAY         Primary Ins: OOC - SELF PAY	PCP: Aniali Ashok Kher, MD	Please Contact Pediatric Hospitalist / Neonatologist For The Following: ANV of the following that are persistent (>=4h): -Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instability (> 100.435 or < 97.535) -Respiratory distress (orunting, flaring, or retraction). TWO or more of the following lacting >=2h: -Tachycardia (HR > 160) -Tachypnea (RR > 60) -Temperature instability (>
Expected Discharge: 37 d ago   APR DRG: Something bad   ALOS: 40   No active principal problem   Dose Wt: 3 kg !   BSA: 0 m2 >1 day   NO NEW RESULTS, LAST 36H   ACTIVE MEDS (I)   Primary Ins: OCC - SELF PAY                    Primary Ins: OCC - SELF PAY                 ACTIVE MEDS (I)        Primary Ins: OCC - SELF PAY                 Primary Ins: OCC - SELF PAY		
APR DRG: Something bad <ul> <li>Antibiotics</li> <li>Antibiotiotiotics</li> <li>Antibiotics</li></ul>		
ALOS: 40   No active principal problem   Dose Wt: 3 kg !   BSA: 0 m2 > 1 day   No NEW RESULTS, LAST 36H   ACTIVE MEDS (1)   Primary Ins:: OOC - SELF PAY      * Note - Antibiotics Have Default Stop Time of 24 Hours* * Advise of the stop of the st		
No defice principal prodeficit         Dose Wt: 3 kg !         BSA: 0 m2 >1 day         No NEW RESULTS, LAST 36H         ACTIVE MEDS (1)         P PRN (1)         Primary Ins: OOC - SELF PAY		
Dose Wt: 3 kg !       12 mg (4 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer over 30 Minutes, EVERY 24 HOURS, Next dose today at 1130, For 24 hours, Last dose today at 1130         BSA: 0 m2 >1 day       ampicillin syringe pump 150 mg         NO NEW RESULTS, LAST 36H       150 mg (50 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer over 20 Minutes, EVERY 8 HOURS, Next dose today at 1130, For 24 hours, Last dose tomorrow at 0100         ACTIVE MEDS (1) <ul> <li>Laboratory Orders</li> <li>Lab Tests</li> <li>Minimum Blood Culture Volume = 1ml</li> <li>Minimum Blood Culture Volume = 1ml</li> </ul>	No active principal problem	
BSA: 0 m2 >1 day       ampicillin syringe pump 150 mg 150 mg (50 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer over 20 Minutes, EVERY 8 HOURS, Next dose today at 1130, For 24 hours, Last dose tomorrow at 0100         ACTIVE MEDS (1) P PRN (1)       Laboratory Orders         Primary Ins.: OOC - SELF PAY       Minimum Blood Culture Volume = 1ml	Dose Wt: 3 kg 1	
NO NEW RESULTS, LAST 36H       150 mg (50 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer over 20 Minutes, EVERY 8 HOURS, Next dose today at 1130, For 24 hours, Last dose tomorrow at 0100         ACTIVE MEDS (1)	BSA: 0 m2 >1 day	
PRN (1)     Lab Tests       Primary Ins.: OOC - SELF PAY     Minimum Blood Culture Volume = 1ml	NO NEW RESULTS, LAST 36H	
Primary Ins.: OOC - SELF PAY Minimum Blood Culture Volume = 1ml	ACTIVE MEDS (1)	★Laboratory Orders
Primary Ins.: OOC - SELF PAY	Active mees (i)	Lab Tests
		Minimum Blood Culture Volume = 1ml
	<b>P</b> PRN (1)	
SOCIAL INFLUENCERS	<b>P</b> PRN (1)	CULTURE, BACTERIA, BLOOD



	Order Sets		Illinois Perinatal Quality Collaborative
Neonate Test			n Order Sets X Clear Selection X Remove Open
Legal Name:: <b>Neonate Test</b> Female, 9months old (5months old CA), 7/6/2020, 22w0d GA	★ Orders		Clear All Orders
MRN: 100684 Bed: LCNICU-1402	Newborn Antibiotic Orders 🛠		
Code: Not on file	Newborn Antibiotic Order Set. -Incorporates antibiotic best practices for initiation of antibiotics in infant -This is an add-on order set to be used in conjunction with admission or -Please include documentation of neonatal indications for prescribing a	der set	
	None - Kaiser Sepsis Calculator		
	✓ Nursing Orders		
Nicolas F M Porta, MD Attending	▼ Nursing ▼ VITAL SIGNS		
ALLERGIES No Known Allergies	Routine, PER PROTOCOL, Starting today at 1112, Until Specified, {Choo     NURSING COMMUNICATION	se vital sign Frequency Per NEOSC Recommendations:19324}	
PCP: Anjali Ashok Kher, MD	Please Contact Pediatric Hospitalist / Neonatologist For The Following: A 100.4*F or < 97.5*F) -Respiratory distress (grunting, flaring, or retracting). 100.4*F or < 97.5*F) -Respiratory distress (grunting, flaring, or retracting).	TWO or more of the following lasting >=2h: -Tachycardia (HR > 160	
ADMIT TO ICU: 7/6/2020 (283D) Expected Discharge: 37 d ago APR DRG: Something bad	✓ Medication Orders		ssessment Protocols
ALOS: 40	<ul> <li>Antibiotics</li> <li>*Note - Antibiotics Have Default Stop Time of 24 Hours*</li> </ul>		
No active principal problem Dose Wt: <b>3 kg !</b> 3SA: 0 m2 >1 day	<ul> <li>gentamicin syringe pump 12 mg</li> <li>12 mg (4 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer over</li> </ul>	30 Minutes, EVERY 24 HOURS, Next dose today at 1130, For 24 ho	urs, Last dose today at 1130
NO NEW RESULTS, LAST 36H	ampicillin syringe pump 150 mg 150 mg (50 mg/kg/dose × 3 kg Dosing weight), Intravenous, Administer o	ver 20 Minutes, EVERY 8 HOURS, Next dose today at 1130, For 24 ho	ours, Last dose tomorrow at 0100
ACTIVE MEDS (1)	✓ Laboratory Orders ✓ Lab Tests		
Primary Ins.: OOC - SELF PAY	Minimum Blood Culture Volume = 1ml		
My Pat List Reminders: None +	CULTURE, BACTERIA, BLOOD		
SOCIAL INFLUENCERS			

IL POC



ALOS: 40

Dose Wt: 3 kg !

**PRN (1)** 



Order Sets

**\_** 

**V**Orders

None

Nursing

Neonate Test Legal Name:: Neonate Test

MRN: 100684

Code: Not on file

Nicolas F M Porta, MD

ALOS: 40

Dose Wt: 3 kg !

**PRN (1)** 

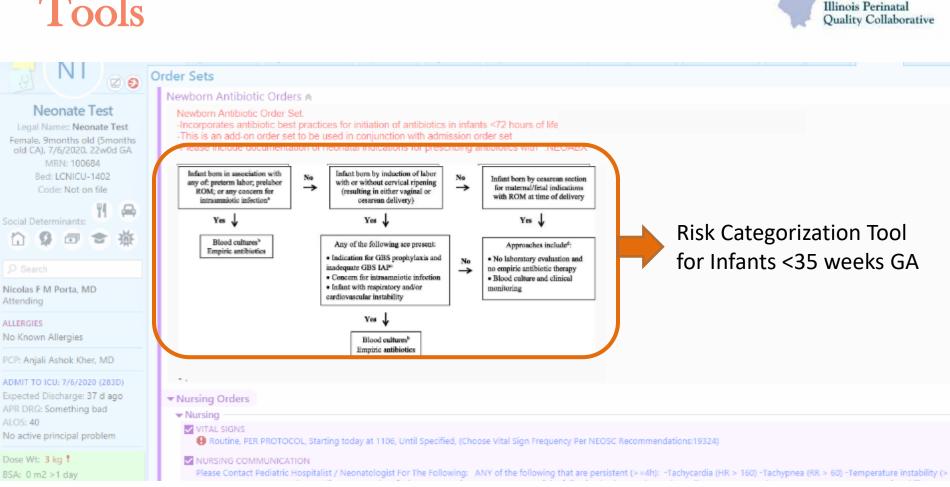
My Pat List Reminders: None +



Minimum Blood Culture Volume = 1ml

CULTURE, BACTERIA, BLOOD STAT, CLINICIAN DRAW, ONCE, today at 1112, For 1 occurrence, Blood Blood Culture Best Practices

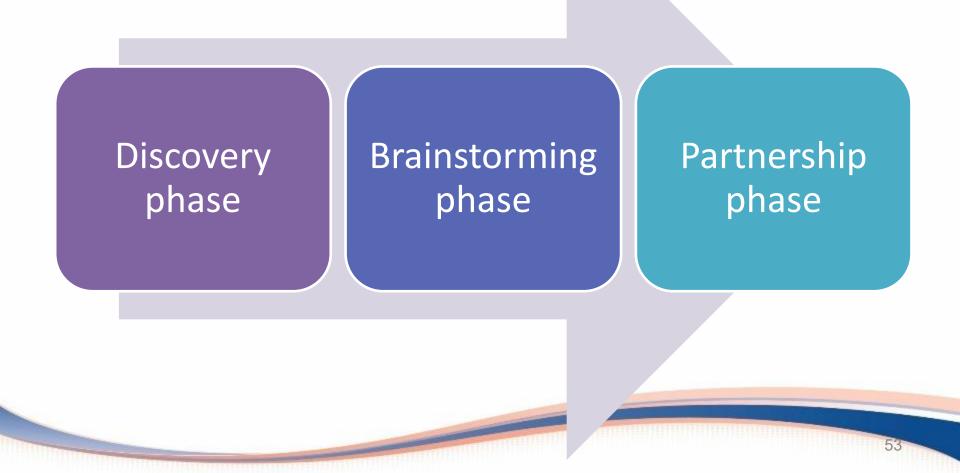
## Order Sets With Risk Assessment Tools

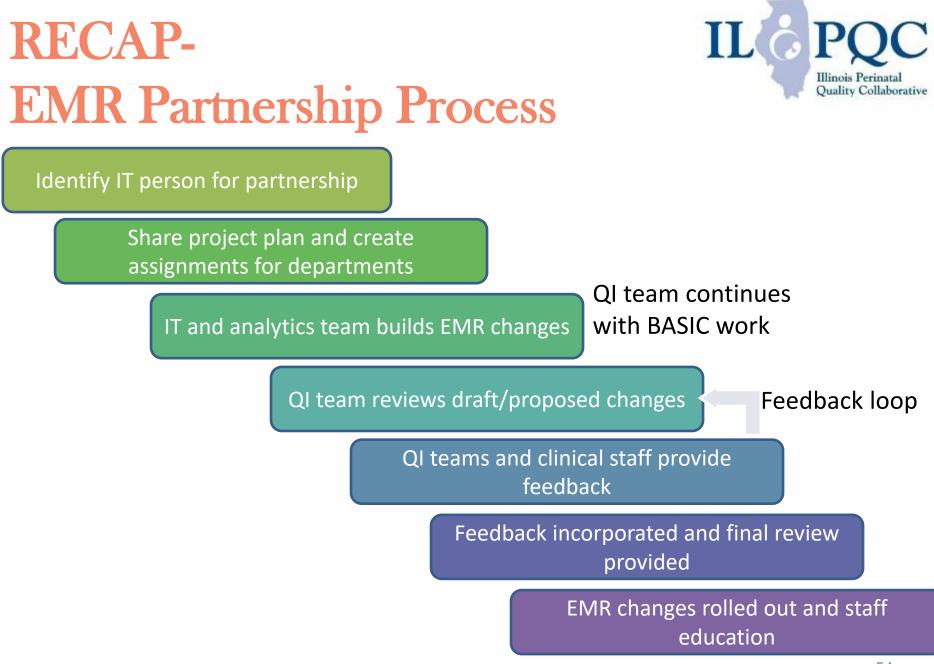


IL C PQC

## **RECAP- EMR Process**









## **QUESTIONS**?

## Want to Dive Deeper into IL PQC EMR Optimization for BASIC?

- ILPQC is offering a QI Topic call on Thursday, April 29<sup>th</sup> from 12-1pm!!
- Target audience: Data analysts and EHR professionals
- Invited but not targeted: clinicians, nurses, physicians, etc.
- We encourage hospital teams to invite their HIT team members!
- Register here: <u>https://northwestern.zoom.us/meet</u> <u>ing/register/tJ0pfumorzojG9CWHDq</u> <u>7f1gDXfHnPLn9GyxU</u>





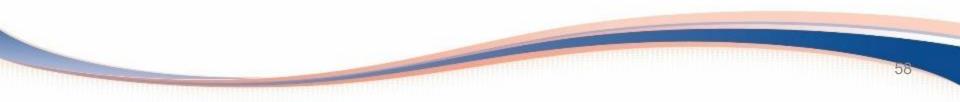
## USING EMR FOR DATA & CLINICAL SUPPORT

## EMR Utilization in ILQPC Data System



#### **Monthly Hospital Data Form Questions:**

Hospital has developed, in coordination with IT department, an electronic reporting system from electronic medical record	E 🖓	<ul> <li>Data not available in Medical Record</li> <li>Haven't started</li> <li>Working on it</li> <li>In place</li> </ul>	
			reset



## Get to Green: Electronic Reporting IL Q PQC System in EMR

## WHAT DOES IT MEAN TO BE AT GREEN WITH IMPLEMENTING REPORTING SYSTEM IN EMR?

- Have reports built into your EMR to support QI work and data entry/reporting
- Have EMR systems implemented for clinical decision support (i.e. dot phrases/order-sets)

# Next Steps within Next Month

- BASIC "Successful Launch Award" at Face to Face
  - ✓ Submit BASIC Readiness Survey
  - Enter baseline (Q4 2020), January, February and March 2021 newborn & hospital data
- Log into your REDCap account to view your hospital's structure and newborn measures
- ✓ Work with your team to make a 30-60-90 day plan and PDSA...consider EMR builds for your BASIC protocols!
- Recruit your data analysts and HIT colleagues to attend 4/29
   QI Topic Call on Deeper Dive in Optimizing Your EMR for BASIC

#### 2021 BASIC Webinars



Date	Торіс		
April 19	Using EMR for Data & Clinical Support		
May 29	Neonatal Face to Face N	/leeting (Virtual)	
June 21	Driver 3: Administer and	d De-escalate Antibiotics	
July 19	Using YOUR Data to Ach	ieve Success	
August 16	Using ILPQC Data for Equ	uitable Care	
September 20	Assessment for EOS in N	ewborns <35 Weeks	
October	Annual Conference	Register for all upcoming	
November 15		webinars here:	
December 20		https://northwestern.zoom.us/m eeting/register/tJcpc-	
		<u>qppjMpHdWBNEO8WJsLjfDDU</u> <u>z9ucmt2</u>	



# **OFFICE HOURS**



For newborns with a documented maternal diagnosis of chorioamnionitis or intraamniotic infection, at our institution we routinely

- 1. Evaluate for sepsis and start on antibiotics
- 2. Evaluate for sepsis and monitored clinically without antibiotics
- 3. Evaluate based on NEOSC recommendations
- 4. Other



#### **FUNDERS**



CENTERS FOR DISEASE

CONTROL AND PREVENTION



ON MATERNAL HEALTH

**JB & MK PRITZKER** 

**Family Foundation** 

#### In Kind Support

Feinberg School of Medicine



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





## APPENDIX

#### Build Your Teams QI Capacity! IL PQC Ulinois Perinatal Quality Collaborative

Are you or a member of your hospital QI team looking to learn and build quality improvement skills and strategies?



- What is IHI and why does it matter to me?
  - IHI stands for the Institute for Healthcare Improvement
  - Helps leaders use improvement science to advance and sustain outcomes in healthcare
- We are granting a few volunteers per hospital access to the IHI Open School.
- This <u>FREE</u> opportunity allows participates to asynchronously complete up to 13 continuing education hours leading to a <u>Certificate in Quality Improvement Science.</u>
- Members will have access for two years to complete the open school training.
- Details coming Summer 2021!