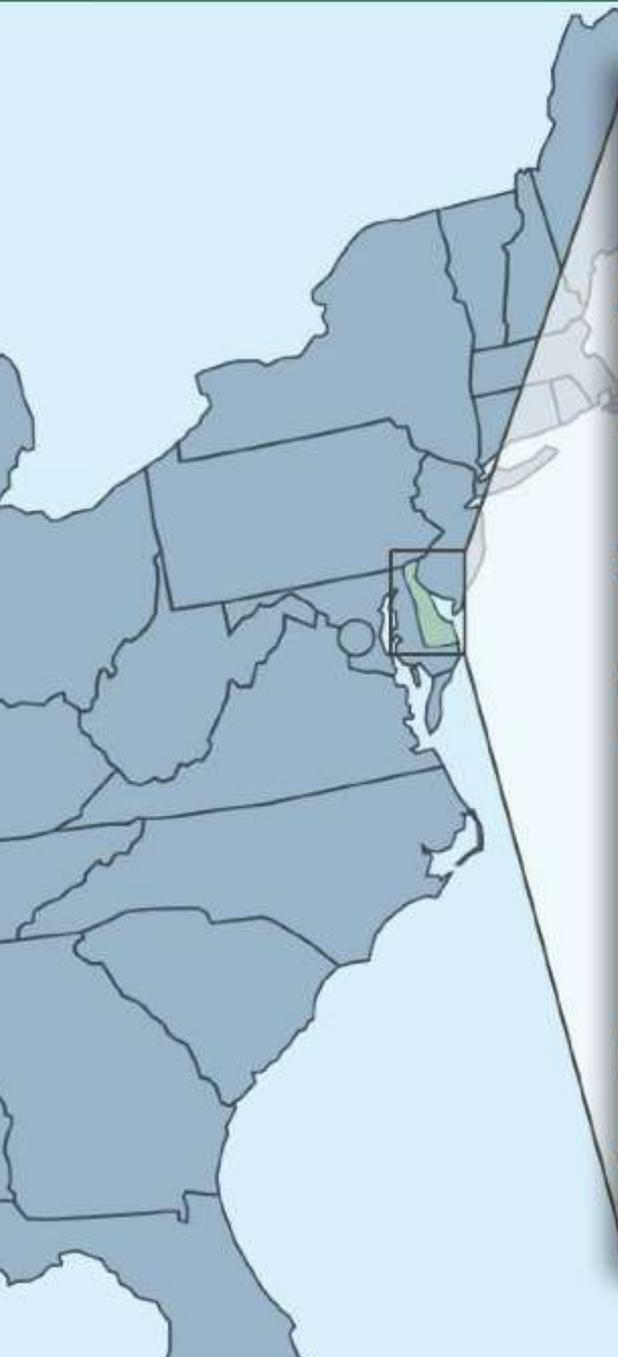


Giving TIME Back to Moms and Babies

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- Wilmington Hospital
- Christiana Hospital
- Middletown Emergency Department
- Visiting Nurse Association
- High School Wellness Center
- Satellite Location
- Other Hospital

54,000
Admissions

2 Hospitals
1,100 Beds
Tertiary Care
Level 1 Trauma
Level 3 NICU

6,300
Births

39,000
Surgeries

1,000 NICU
admissions

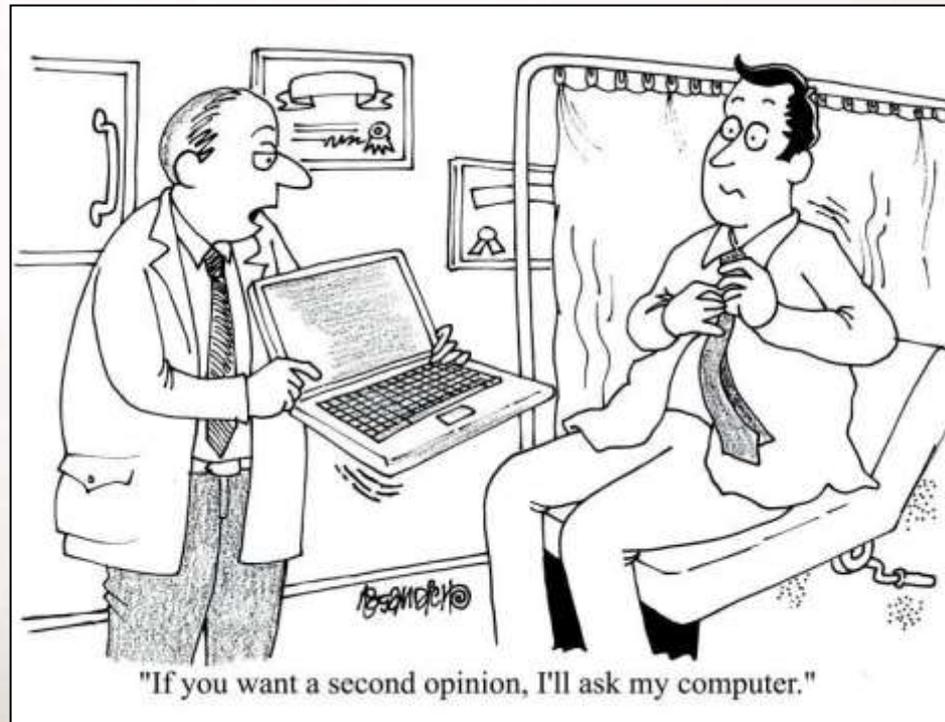
4,000 licensed
registered nurses

11,300 employees

1,500 providers
280 residents

Objective

Demonstrate how information technology can enhance the adoption of evidence-based practice and delivery of safe clinical care



Pathways at Christiana Care

- **Each Service Line was charged with creating a Pathway**
 - Multidisciplinary Team
 - Baseline Metrics
 - Evidence Based Practice
 - Gap Analysis (identify goals)
 - Process and Outcome Measurements
 - Education
 - Control Plan



Women's and Children's Service Line Goal:



<https://www.todaysparent.com/baby/baby-health/how-to-help-your-baby-thrive-in-the-nicu/>

Reduce Term Newborn Admissions to NICU

Early Onset Sepsis

- **Sepsis Definition:** Life threatening condition where the body is fighting a severe infection.
- **Two types in Newborn:**
 - Early – first 24- 48 hours (mom)
 - Late - 4-90 days of life (environment)
- **Symptoms:**
 - Not feeding well
 - Sleepy/Irritable
 - Temperature instability
 - Rapid breathing
- **Immediate Treatment Required**

Opportunity for Improvement

TIME



https://www.momjunction.com/articles/adorable-mother-and-baby-images_00355204/#gref

The goal of the TIME (Triple I to Manage Early-onset sepsis) clinical pathway is to reduce the number of newborns \geq 35 weeks gestation admitted to the NICU to rule out Early Onset-Sepsis (EOS) by 20% by June 30, 2017.

Team Members

- Muge Capan, PhD
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- Delilah Greer, MPH
- Jaidith Hernandez
- Stephen Hoover, MS
- Vanita Jain, MD
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- Cynthia Fowser, RN
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Ad Hoc: Eyad Abdul-Razeq, Joyce Breinlinger, CPA, Laura Lawler, MD, David Paul, MD

Past Contributors: Sherry Monson, RN, Michelle Oikkola, RN, and Barbara Temple, RN

Background / Clinical Knowledge

Prior to the TIME clinical pathway...

- All infants born to a mother with a diagnosis of Chorioamnionitis were admitted to the NICU
- Newborns admitted to NICU to r/o EOS* received:
 - Blood cultures and complete blood count (CBC) monitoring
 - Minimum 48 hrs of ampicillin/gentamicin
- **Diagnosis of “chorio” varied. Multiple factors influenced diagnosis:**
 - Maternal fever
 - Maternal and/or fetal tachycardia
 - Purulent or foul-smelling amniotic fluid or vaginal discharge
 - Prolonged rupture of membranes
 - Uterine tenderness
 - Elevated maternal white blood cell count

*EOS = Early Onset Sepsis

Background / IT Status

- **Clinical Documentation in Multiple Systems**
 - OBIS (Obstetrical Information System) –
 - Varied documentation
 - Inconsistent interface
 - Cerner PowerChart
 - Soarian
 - Pending PowerChart Maternity
 - Paper Documentation
- **Varied Technical Competence**
- **Multiple Monitors**

Impact of Admission to NICU

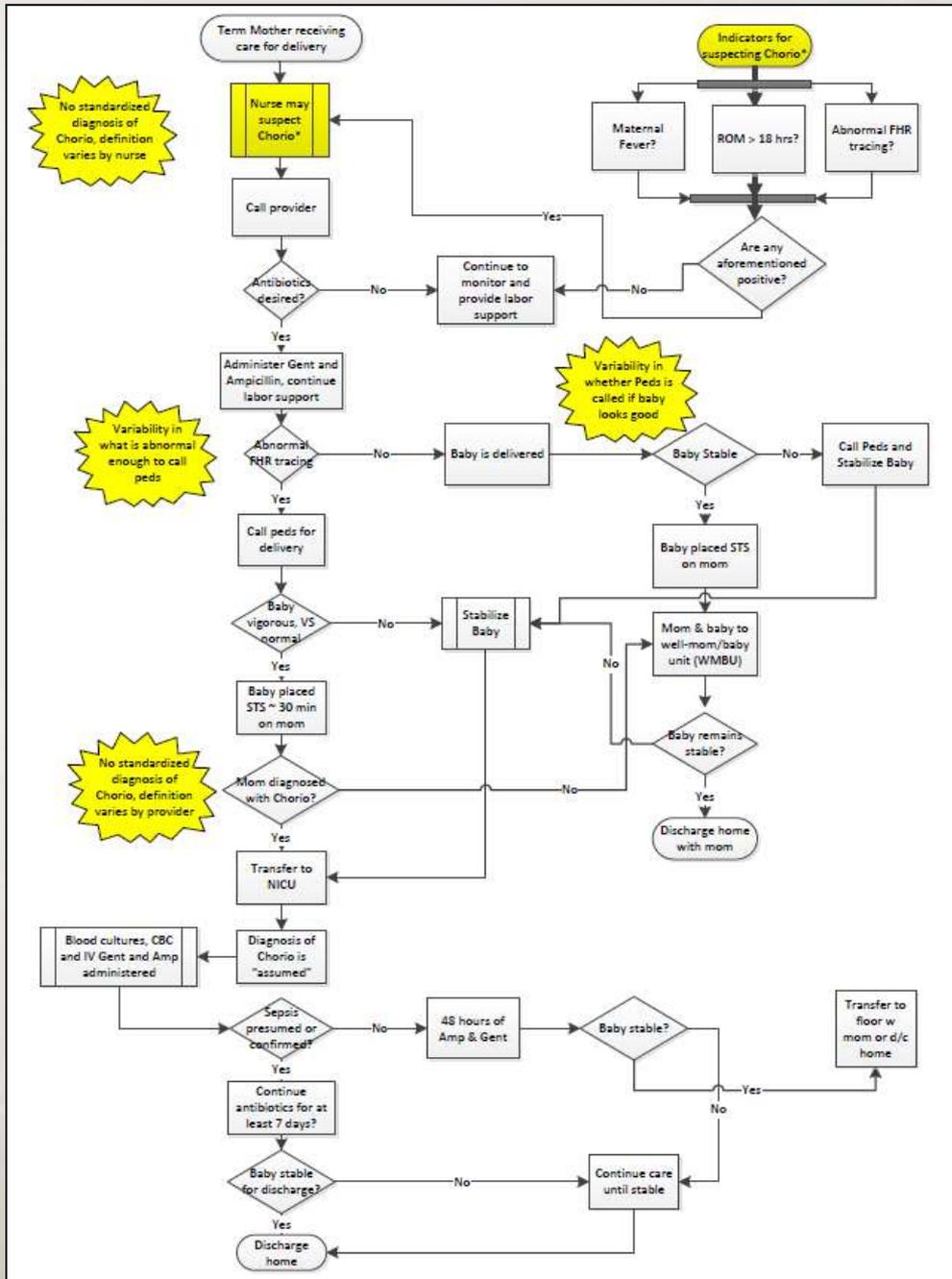
- **Mother/baby separation**
- **Unnecessary lab draws**
- **Risk for extended hospitalization**
- **Adverse events**
- **Cost associated with unnecessary care**



Baseline Data

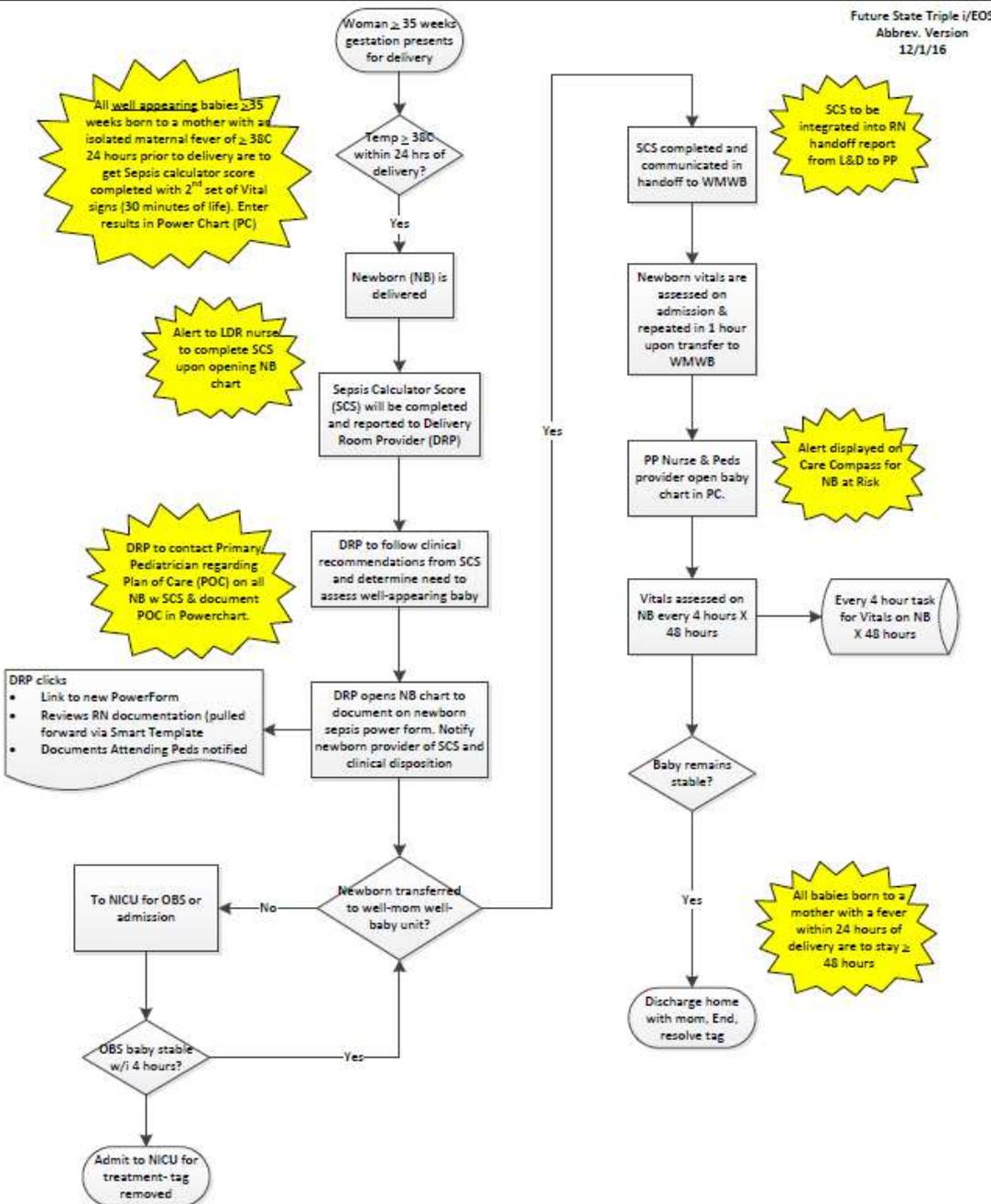
- Retrospective chart (1/1/15 to 1/23/17)
- Findings:
 - **23.1% (357/1543) of neonates (≥ 35 weeks gestation) were admitted to the NICU to rule out sepsis**
 - 0.56% (2/357) had true positive blood cultures
 - 100% (357/357) received IV antibiotics
 - 3.4% (12/357) experienced an IV infiltrate
 - 2% (7/357) received IV fluids due to maternal request to exclusively breast feed while separated from mother's room
 - 5% (18/357) exclusively breastfed

Mapped *Current State* Process



Key Outcomes/Goals

- **Reduce NICU admissions by 20% in newborns at risk for EOS***
- **Utilize and monitor use of Kaiser Permanente Sepsis Risk Calculator on all at risk newborns**
- **Foster maternal-child “TIME” to bond**
- **Safely cultivate evidence-based practice and reduce unnecessary spending of scarce health care dollars**



Mapped *Future* State Process

Where to Start?

All babies ≥ 35 weeks born to a mother with a temperature $\geq 38^{\circ}\text{C}$ prior to delivery need a sepsis calculator risk score completed

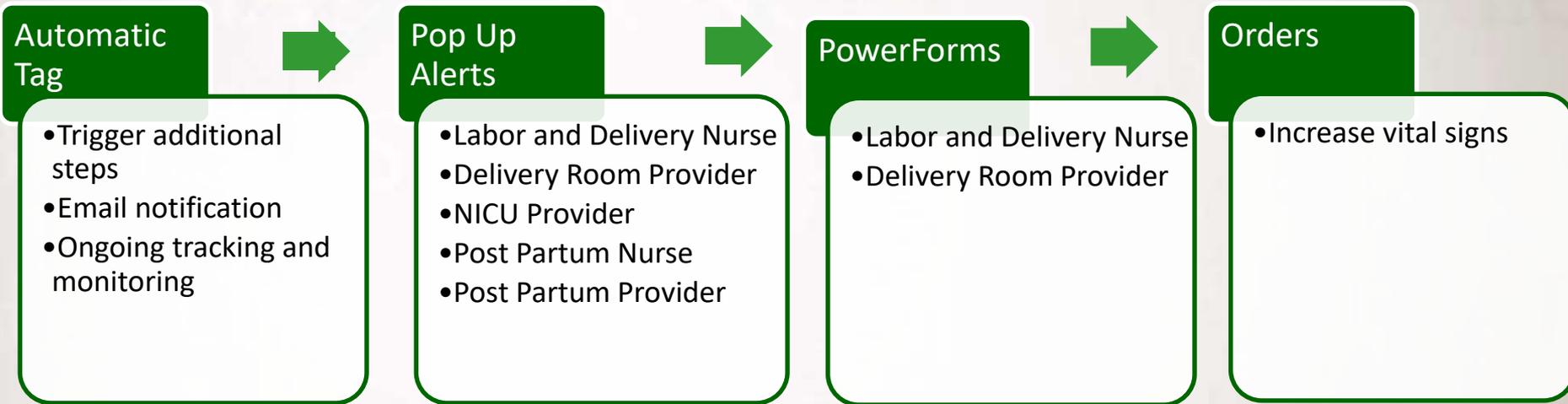
Alert LDR nurse to complete sepsis calculator risk score upon opening NB chart

Communication of at-risk NB to postpartum care givers

Document DRP assessment & communication to Primary Pediatrician.

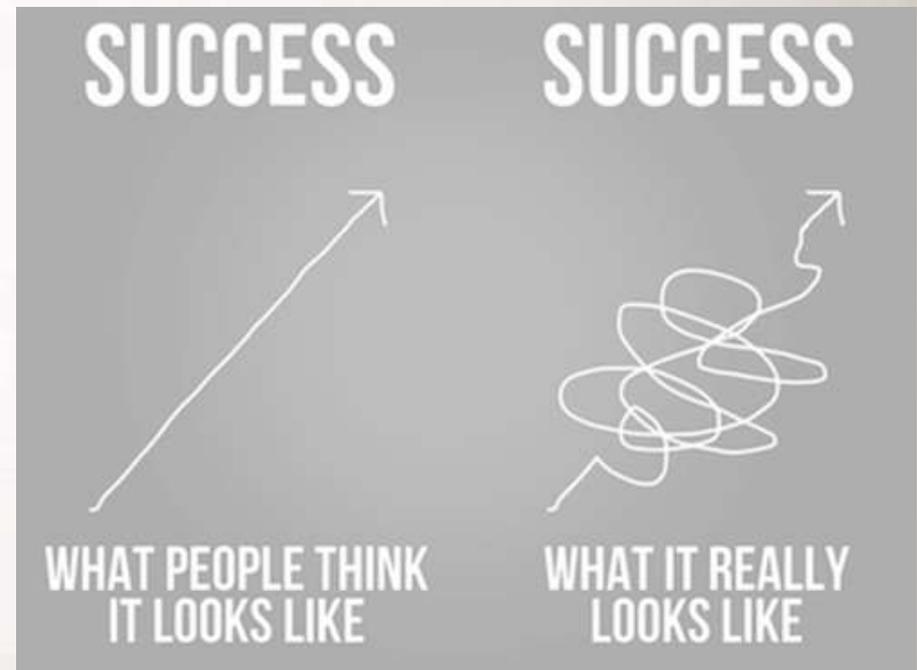
Vital signs every 4 hours for at-risk NB for 48 hours

Proposed IT Solutions



Implementation Challenges

- **Three separate systems**
- **No integration of OBIS non-prod to Cerner non-prod**
- **Mother/baby links**
- **Conflicting priorities**
- **Limited resources**



Implementation Challenges

- Multiple disciplines impacted (160+ RNs/40+ providers)
- Sporadic cases
- Varied comfort level with technology
- Clinical practice changes
- Resistance to change



Implementation Solutions

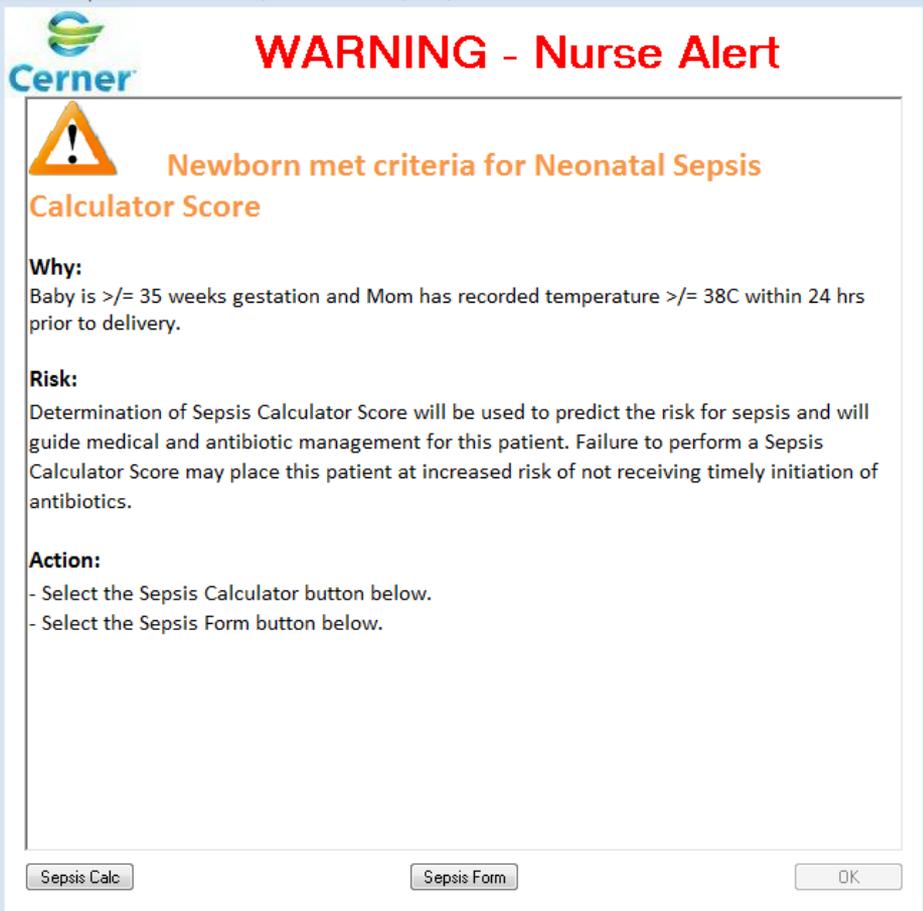
Rolling Monthly Education Cart...



- **Small Scale Simulation**
- **Screenshots**
- **Resource Books**
- **Staff meetings**
- **Individual 1:1**

Labor & Delivery Nurse Alert

- Pop-up on open chart when mom has a temperature ≥ 38 degrees Celsius prior to delivery
- Link to Kaiser Permanente Risk Calculator website
- Click to PowerForm



The screenshot shows a Cerner nurse alert window. At the top left is the Cerner logo. To the right, the text "WARNING - Nurse Alert" is displayed in red. Below the logo is a yellow warning triangle icon with a black exclamation mark. To the right of the icon, the text "Newborn met criteria for Neonatal Sepsis Calculator Score" is shown in orange. The window contains three sections: "Why:", "Risk:", and "Action:". The "Why:" section states: "Baby is ≥ 35 weeks gestation and Mom has recorded temperature ≥ 38 C within 24 hrs prior to delivery." The "Risk:" section states: "Determination of Sepsis Calculator Score will be used to predict the risk for sepsis and will guide medical and antibiotic management for this patient. Failure to perform a Sepsis Calculator Score may place this patient at increased risk of not receiving timely initiation of antibiotics." The "Action:" section lists two items: "- Select the Sepsis Calculator button below." and "- Select the Sepsis Form button below." At the bottom of the window, there are three buttons: "Sepsis Calc", "Sepsis Form", and "OK".

Cerner **WARNING - Nurse Alert**

! **Newborn met criteria for Neonatal Sepsis Calculator Score**

Why:
Baby is ≥ 35 weeks gestation and Mom has recorded temperature ≥ 38 C within 24 hrs prior to delivery.

Risk:
Determination of Sepsis Calculator Score will be used to predict the risk for sepsis and will guide medical and antibiotic management for this patient. Failure to perform a Sepsis Calculator Score may place this patient at increased risk of not receiving timely initiation of antibiotics.

Action:
- Select the Sepsis Calculator button below.
- Select the Sepsis Form button below.

Sepsis Calc Sepsis Form OK

Probability of Neonatal Early-Onset Sepsis Based on Maternal Risk Factors and the Infant's Clinical Presentation

The tool below is intended for the use of clinicians trained and experienced in the care of newborn infants. Using this tool, the risk of early-onset sepsis can be calculated in an infant born ≥ 34 weeks gestation. The interactive calculator produces the probability of early onset sepsis per 1000 babies by entering values for the specified maternal risk factors along with the infant's clinical presentation.



Please enter details below.

Predictor	Scenario
Incidence of Early-Onset Sepsis [?]	<input type="text"/> ▼
Gestational age [?]	<input type="text"/> weeks <input type="text"/> days
Highest maternal antepartum temperature [?]	<input type="text"/> Fahrenheit ▼
ROM (Hours) [?]	<input type="text"/>
Maternal GBS status [?]	<input type="radio"/> Negative <input type="radio"/> Positive <input type="radio"/> Unknown
Type of intrapartum antibiotics [?]	<input type="radio"/> Broad spectrum antibiotics > 4 hrs prior to birth <input type="radio"/> Broad spectrum antibiotics 2-3.9 hrs prior to birth <input type="radio"/> GBS specific antibiotics > 2 hrs prior to birth <input type="radio"/> No antibiotics or any antibiotics < 2 hrs prior to birth

Calculate »

Clear

Risk per 1000/births			
EOS Risk @ Birth	<input type="text"/>		
EOS Risk after Clinical Exam	Risk per 1000/births	Clinical Recommendation	Vitals
Well Appearing	<input type="text"/>	<input type="text"/>	<input type="text"/>
Equivocal	<input type="text"/>	<input type="text"/>	<input type="text"/>
Clinical illness	<input type="text"/>	<input type="text"/>	<input type="text"/>

Classification of Infant's Clinical Presentation [Clinical illness](#) [Equivocal](#) [Well Appearing](#)

Labor & Delivery Nurse PowerForm

Documents:

- Information from Kaiser Permanente Risk Calculator website
- Provider notification
- Initial Newborn Vitals

Neonatal Sepsis Calculator Information

When completing the Neonatal Early-Onset Sepsis Calculator:
Select 0.5/1000 live births (CDC national incidence) for the Incidence of Early-Onset Sepsis

Early Onset Sepsis Risk after Clinical Exam	Clinical Recommendation
Well Appearing	<input type="radio"/> No Culture, No Antibiotics <input type="radio"/> Blood Culture <input type="radio"/> Empiric Antibiotics/Admit to NICU
Equivocal	<input type="radio"/> No Culture, No Antibiotics <input type="radio"/> Blood Culture <input type="radio"/> Empiric Antibiotics/Admit to NICU
Clinical Illness	<input checked="" type="radio"/> Clinically unstable newborn will be admitted to NICU

Discussed Results of Neonatal Sepsis Calculator with Peds/DR provider Date/time Peds/DR Notified

Newborn Vital Signs

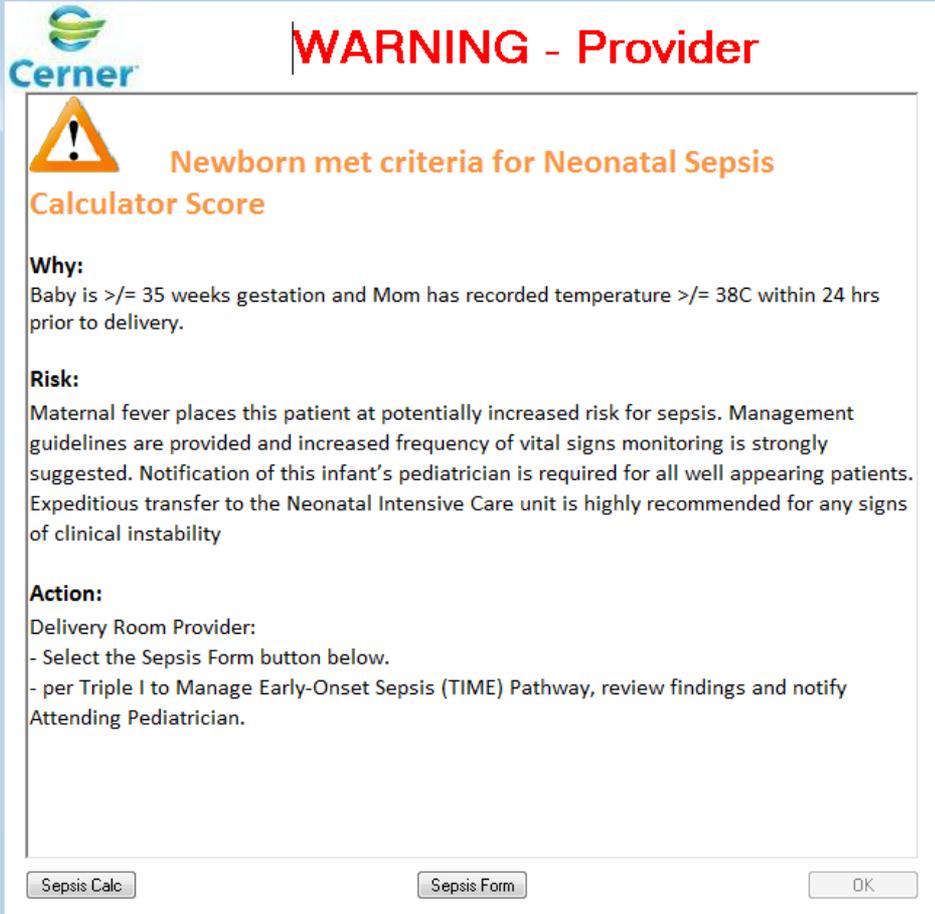
Axillary Temperature: DegC Heart Rate: bpm Heart Rate Location: Radial Pulse Apical
 Brachial Pulse Carotid Pulse
 Femoral Pulse Monitor

Pulse O₂: % Respiratory Rate: bx/min

Form Completed (Nurse) Yes No

Delivery Room & NICU Provider Alert

- Pop-up on open chart when mom has a temperature ≥ 38 degrees Celsius prior to delivery
- Link to Kaiser Permanente Risk Calculator website
- Click to PowerForm



The screenshot shows a Cerner software warning pop-up. At the top left is the Cerner logo. To the right, the text "WARNING - Provider" is displayed in red. Below this is a yellow warning triangle icon with an exclamation mark. To the right of the icon, the text "Newborn met criteria for Neonatal Sepsis Calculator Score" is shown in orange. The main body of the pop-up contains three sections: "Why:", "Risk:", and "Action:". The "Why:" section states: "Baby is ≥ 35 weeks gestation and Mom has recorded temperature ≥ 38 C within 24 hrs prior to delivery." The "Risk:" section states: "Maternal fever places this patient at potentially increased risk for sepsis. Management guidelines are provided and increased frequency of vital signs monitoring is strongly suggested. Notification of this infant's pediatrician is required for all well appearing patients. Expeditious transfer to the Neonatal Intensive Care unit is highly recommended for any signs of clinical instability." The "Action:" section states: "Delivery Room Provider: - Select the Sepsis Form button below. - per Triple I to Manage Early-Onset Sepsis (TIME) Pathway, review findings and notify Attending Pediatrician." At the bottom of the pop-up, there are three buttons: "Sepsis Calc", "Sepsis Form", and "OK".

WARNING - Provider

Newborn met criteria for Neonatal Sepsis Calculator Score

Why:
Baby is ≥ 35 weeks gestation and Mom has recorded temperature ≥ 38 C within 24 hrs prior to delivery.

Risk:
Maternal fever places this patient at potentially increased risk for sepsis. Management guidelines are provided and increased frequency of vital signs monitoring is strongly suggested. Notification of this infant's pediatrician is required for all well appearing patients. Expeditious transfer to the Neonatal Intensive Care unit is highly recommended for any signs of clinical instability

Action:
Delivery Room Provider:
- Select the Sepsis Form button below.
- per Triple I to Manage Early-Onset Sepsis (TIME) Pathway, review findings and notify Attending Pediatrician.

Sepsis Calc Sepsis Form OK

Delivery Room Provider PowerForm

- **Displays nurse's documentation of:**
 - Kaiser Permanente information
 - Newborn vitals
- **Provider documents assessment, disposition, and communication to next provider**

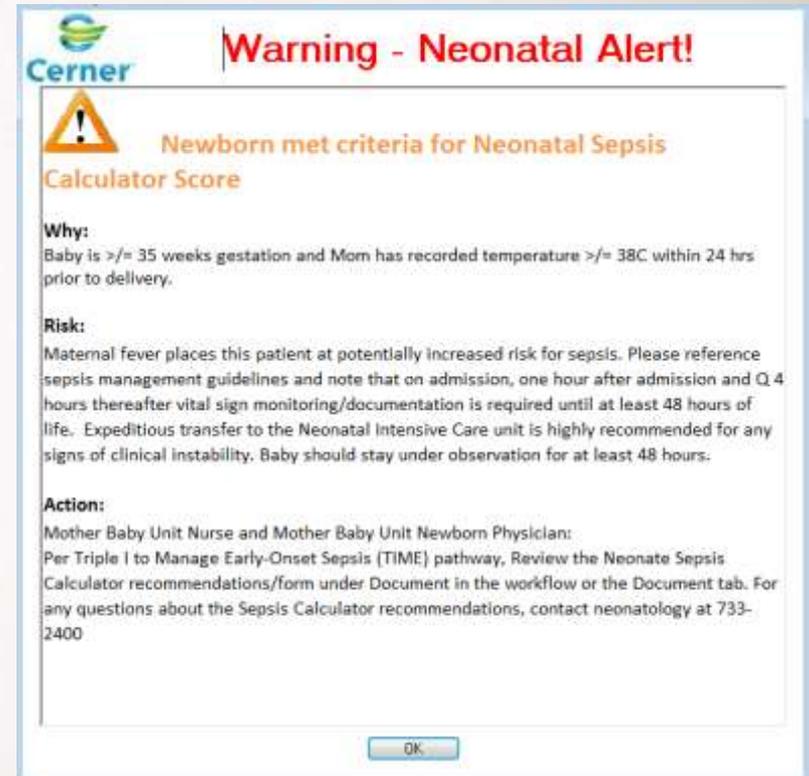
Neonatal Sepsis Risk Calculator Information (information documented by RN)	
Early Onset Sepsis Risk after Clinical Exam	Clinical Recommendation
Well Appearing	<input checked="" type="radio"/> No Culture, No Antibiotic <input type="radio"/> Blood Culture <input type="radio"/> Empiric Antibiotics/Admit <input type="radio"/> Routine care & visit
Equivocal	<input checked="" type="radio"/> No Culture, No Antibiotic <input type="radio"/> Blood Culture <input type="radio"/> Empiric Antibiotics/Admit
Clinical Illness	<input checked="" type="radio"/> Clinically unstable newborn will be admitted to NICU

Newborn Vital Signs
T:96(Axillary) RR:145 BR:44 BP: / / Pulse: Ox:95% Source: --- / 06/20 09:54

Neonatal Sepsis Risk Assessment (to be completed by Peds/DR Provider)	
Exam of Baby	Document Exam
<input type="radio"/> Exam of baby completed <input type="radio"/> Exam of baby not necessary <input type="radio"/> Exam of baby not applicable	<input type="radio"/> Exam normal, no abnormalities noted <input type="radio"/> Exam normal, except (Comment Below)
Provider Assessment of Baby	Provider Plan/Disposition of Baby
<input type="radio"/> Stable without signs of clinical instability <input type="radio"/> Equivocal physical exam findings <input type="radio"/> Signs of clinical illness or instability <input type="radio"/> Other:	<input type="radio"/> Remain with mother, routine care <input type="radio"/> Transfer to NICU for further observation <input type="radio"/> Transfer to NICU for admission <input type="radio"/> Other:
Blood Culture Indicated?	Neonatal Provider Notified
<input type="radio"/> Yes - ordered and collect <input type="radio"/> No	<input type="radio"/> Yes- provider notified <input type="radio"/> Message left for provider

Postpartum Alert and Order

- Pop-up when postpartum nurses and providers enter newborns chart for the first time
- Automatic Order for increased vital signs on arrival to Postpartum unit



The screenshot shows a Cerner alert window titled "Warning - Neonatal Alert!". It features a yellow warning triangle icon and the text "Newborn met criteria for Neonatal Sepsis Calculator Score". The "Why:" section states: "Baby is \geq 35 weeks gestation and Mom has recorded temperature \geq 38C within 24 hrs prior to delivery." The "Risk:" section states: "Maternal fever places this patient at potentially increased risk for sepsis. Please reference sepsis management guidelines and note that on admission, one hour after admission and Q 4 hours thereafter vital sign monitoring/documentation is required until at least 48 hours of life. Expedious transfer to the Neonatal Intensive Care unit is highly recommended for any signs of clinical instability. Baby should stay under observation for at least 48 hours." The "Action:" section states: "Mother Baby Unit Nurse and Mother Baby Unit Newborn Physician: Per Triple I to Manage Early-Onset Sepsis (TIME) pathway, Review the Neonate Sepsis Calculator recommendations/form under Document in the workflow or the Document tab. For any questions about the Sepsis Calculator recommendations, contact neonatology at 733-2400." An "OK" button is located at the bottom right of the alert window.



Vital Signs PP

Ordered

Q4H TIMED, x 48 HR, 08/27/2018 21:51

Created by the system (patient is at high risk for Sepsis)



Clinical Pathway Go-Live 1/24/2017!

Implementation Surveillance

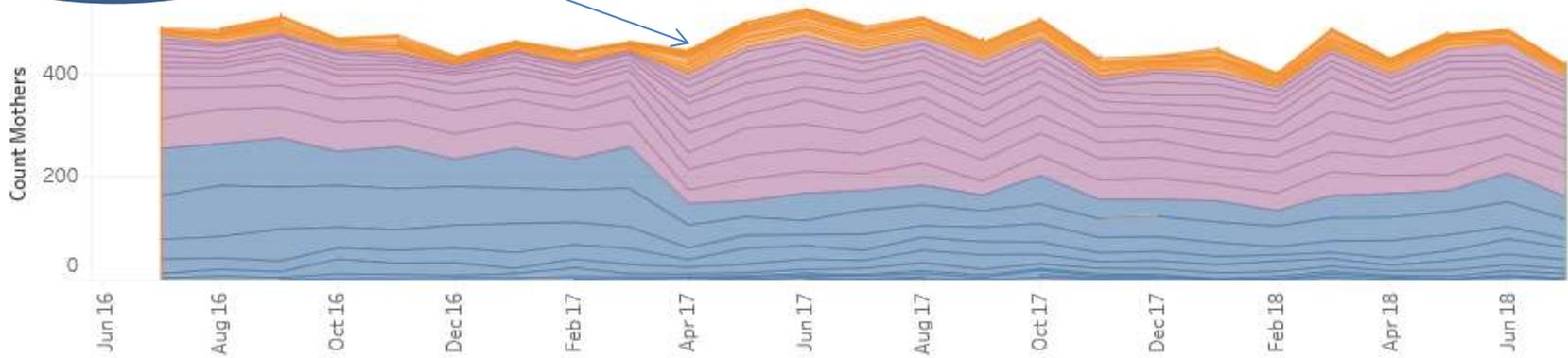
Process Control Plan Matrix													
Process Owner Name: _____													
Process Control Plan for: TIME Clinical Pathway													
Date: 11/14/16													
Revision Date: 12/20/17													
Approved By: TIME Pathway Steer													
Ref.	Control Subject	Subject Goal (Standard)	Unit of Measure	Sensor	Frequency of Measurement	Sample Size	Where Measurement Recorded	Measured by Whom	Criteria for Taking Action	What Actions to Take	Who Decides	Who Acts	Where Recorded
1	Nursing protocol compliance	Monitor compliance with nursing protocol for temperature (T) monitoring	Temp vital signs q 4hrs or q 2hrs if Rupture of Membranes (ROM)	OBIS, Power Insights	Monthly	30 per month X 3 with 100% compliance then GROW will monitor for issues	OBIS	L&D Nurse	< 100% compliance w monitoring T per Nsg protocol	Review perf and educate nurse	VP Patient Care Services for W&C services	L&D Manager	TIME CPW Dashboard
5	Neonatal Pathway participation	All tagged NB with a completed Sepsis Calculator Score (SCS)	# of NB with a completed SCS	Power Insights	Monthly	100% of all tagged NB	Transcribed from sepsis calculator into Power Chart	L&D Nurse	< 100 % of SCS not completed on tagged NB (trsf'd to WMWB)	Educate & coach nurse	VP Patient Care Services for W&C services	L&D Manager	TIME CPW Dashboard
6	Neonatal Pathway participation	All tagged NB with a completed Sepsis Calculator Score (SCS)	# of NB with a completed SCS	Power Insights	Weekly	100% of all tagged NB	Transcribed from sepsis calculator into Power Chart	L&D Nurse	Positive blood culture for neonate sent to the WMWB unit in TIME pathway or Death of neonate in TIME pathway	Follow Sentinel event process with RCA and/or convene TIME CPW team (within a month of event)	Director of Quality & Patient Safety W&C Services	Director of Quality & Patient Safety W&C Services	RCA &/or debrief summary kept in Safety and accreditation files
8	TIME Clinical Pathway Evaluation	Identify babies who go to well-mom well-baby (WMWB) and subsequently require transfer to NICU	# of NB with a completed SCS that get transferred to NICU from WMWB (to also be expressed as a % of the total with a completed SCS)	Power Insights	Monthly	100% of all tagged NB	HIMS, Power Chart	HIMS	Greater than 20% transfer rate from WMWB unit to the NICU	Convene TIME CPW team to evaluate pathway within 1 month of identifying the increased trend	Director of Quality & Patient Safety W&C Services	Director of Quality & Patient Safety W&C Services	TIME CPW Dashboard
10	Neonatal Pathway participation	Monitor compliance with Delivery Room Provider (DRP) contacting peds provider and completing form in Cerner	# of tagged NBs with completed forms in Cerner	Power Insights	Monthly	100% of all tagged NB	Power Chart	DRP	< 100% of NB transferred to WMWB have form completed	Reinforce education with DRP	TIME CPW Neonatologist & Director of Quality & Patient Safety W&C Services	TIME CPW Neonatologist	TIME Pilot Log
11	Maternal Pathway participation	Monitor successful intrapartum antibiotic administration	# of tagged mothers receiving antibiotics (Ampicillin) after an initial temp of >38C and > 2 hours prior to delivery	Power Insights	Monthly	100% of tagged mothers delivering > 2 hour after initial temp \geq 38C	Power Chart	L&D Nurse	< 50% of tagged mothers with T \geq 38C do not receive Ampicillin within 2 hour of delivery	Reinforce education with OB/GYN providers and nursing	OB/GYN Department Chair, Medical Director of L&D, Clinical operations director	OB/GYN Department Chair, Medical Director of L&D, Clinical operations director	TIME CPW Dashboard
12	TIME Clinical Pathway Evaluation	Event Reporting System (R2L) alerts indicating issues of concern	R2L events (AKA Safety First Learning Reports)	R2L	Monthly	100% of R2L events involving CPW patients	R2L	R2L reporting system	- High Risk ("RED") baby transfers to WMWB unit instead of NICU -> 3 events of same nature in a week - Increased # of reports highlighting a developing new point of concern	Convene a team to debrief within 1 week and convene TIME CPW team if pathway issue	TIME CPW Neonatologist & Director of Quality & Patient Safety W&C Services	TIME CPW Neonatologist & Director of Quality & Patient Safety W&C Services	TIME CPW Meeting Notes

Practice Change Reduces Variation

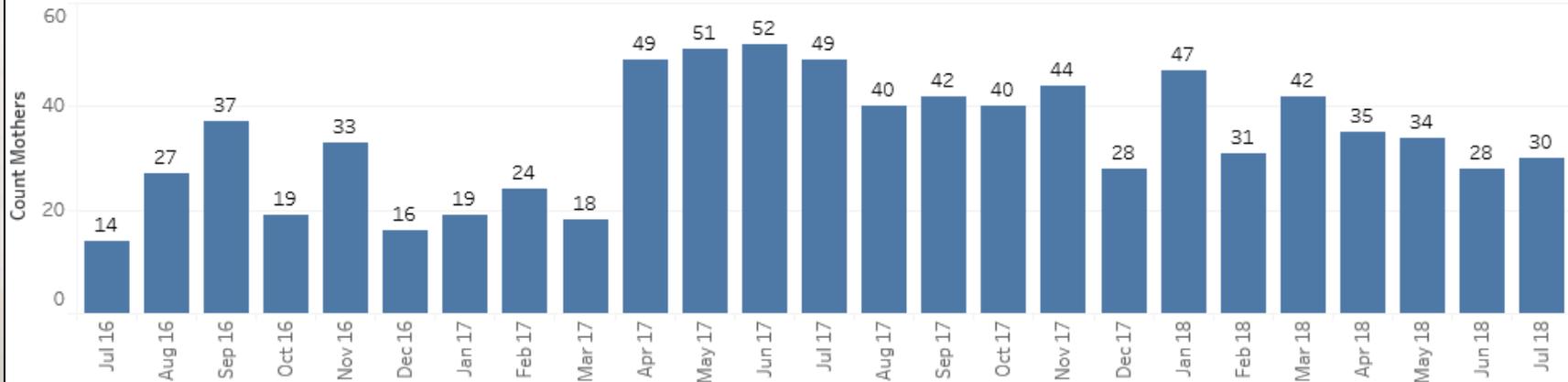
Initiated use of
Temporal
Thermometers

Mother Temperatures 24 Hours before Delivery

$\leq 36.9^{\circ}\text{C}$ $37.0^{\circ}\text{C} - 37.9^{\circ}\text{C}$ $\geq 38.0^{\circ}\text{C}$



Mothers with Temperature $\geq 38^{\circ}\text{C}$
24 Hours before Delivery



Clinical Pathway Dashboard

TIME Pathway

All data based on newborns ≥ 35 weeks gestation

Delivery Date



Pathway data begins 2/1/2017
Temporal Thermometer go-live 4/1/2017



Woman & Children's Health

Mothers with Triple I Flag

582

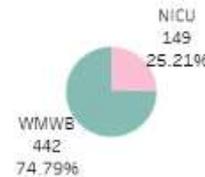
Newborns with Sepsis Flag

591

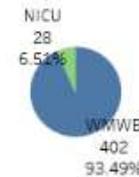
Newborns with Sepsis Calculator Form

581

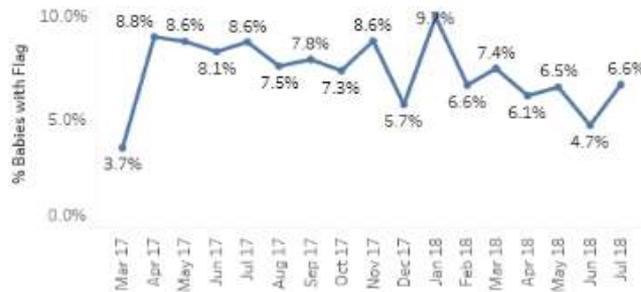
Pathway Newborns Unit after L&D



Pathway Newborns direct to WMWB



Percent Newborns ≥ 35 Weeks Gestation with Sepsis Flag



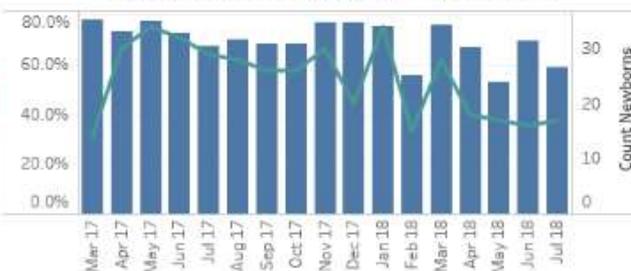
Newborns ≥ 35 Weeks with Sepsis Flag direct to NICU



Pathway Newborns to NICU



Pathway Newborns Remaining on WMWB Unit



Tracking Compliance

TIME Pathway

All data based on newborns \geq 35 weeks gestation

Mothers with Triple I Flag	Newborns with Sepsis Flag	Newborns with Sepsis Calculator Form
602	614	602

Delivery Date

2/1/2017

7/31/2018



Pathway data begins 2/1/2017

Temporal Thermometer go-live 4/1/2017



Women & Children's Health

Delivery Date

7/1/2018

7/31/2018



Pathway data begins 2/1/2017

Temporal Thermometer go-live 4/1/2017



Women & Children's Health

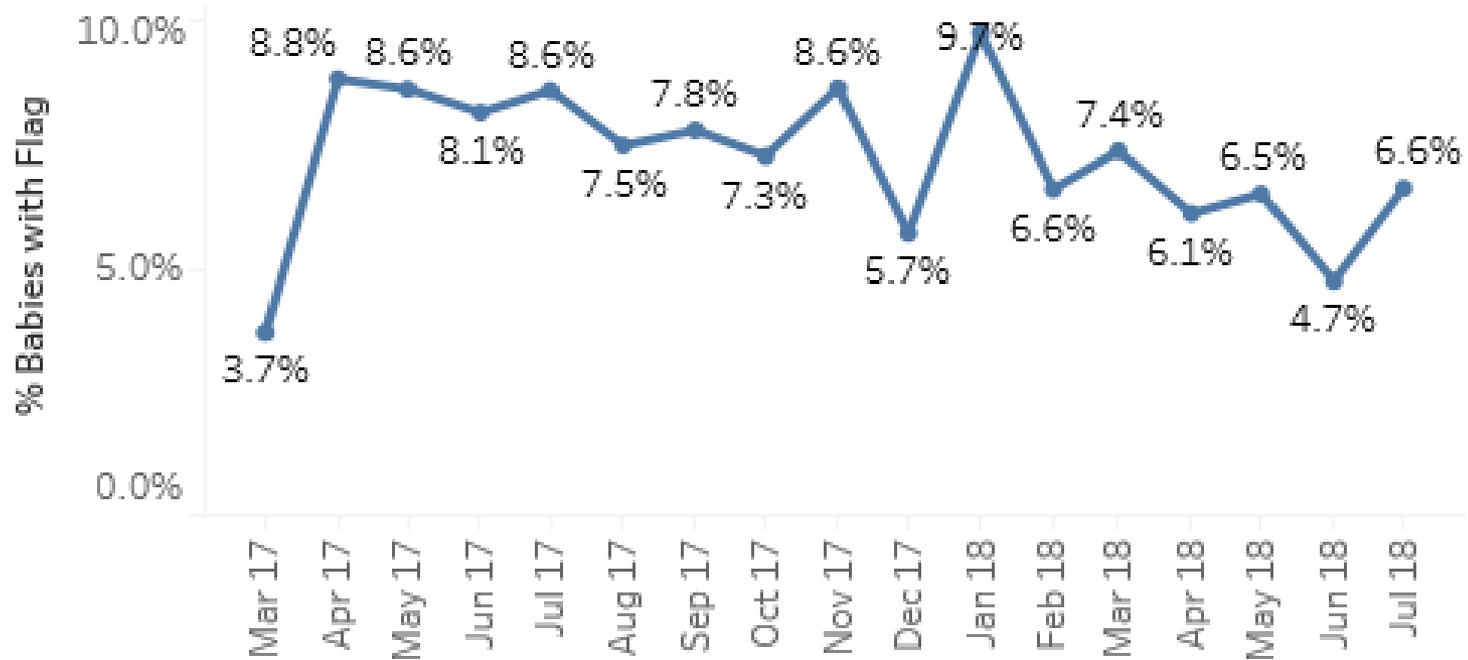
TIME Pathway

All data based on newborns \geq 35 weeks gestation

Mothers with Triple I Flag	Newborns with Sepsis Flag	Newborns with Sepsis Calculator Form
29	29	29

At-risk Babies

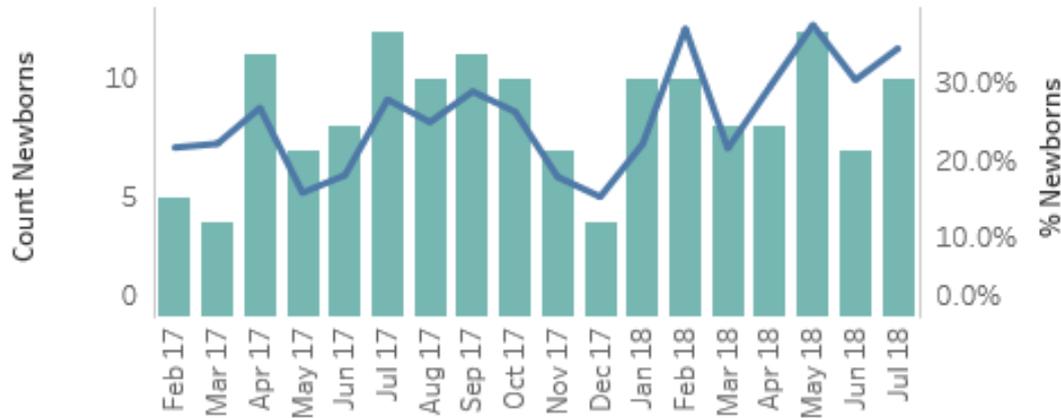
Percent Newborns \geq 35 Weeks Gestation with Sepsis Flag



The increase in newborns identified as “at-risk” corresponds with the reduced variation in obtaining maternal temperatures observed with the switch to temporal thermometers

NICU Admissions

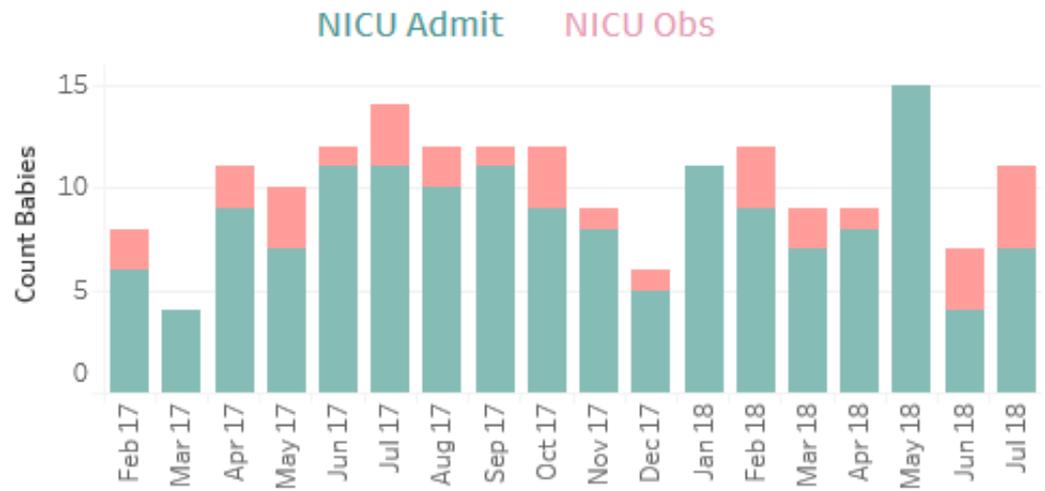
Newborns \geq 35 Weeks with Sepsis Flag direct to NICU



Based on clinical appearance and recommendations from Kaiser Permanente Sepsis Calculator

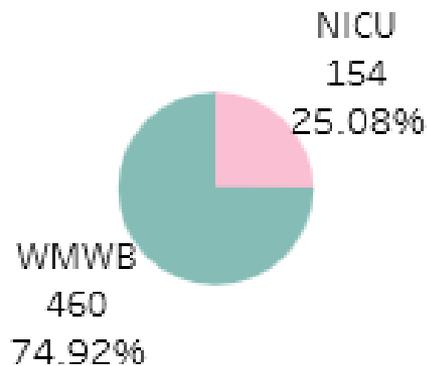
Tracking babies requiring more time to transition for potential impact on NICU staffing

Pathway Newborns to NICU

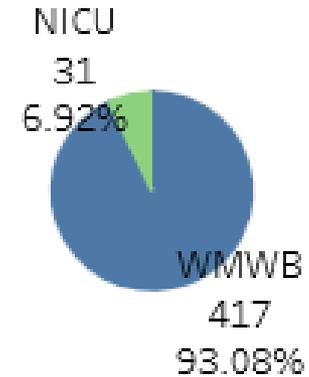


Newborn Pathway

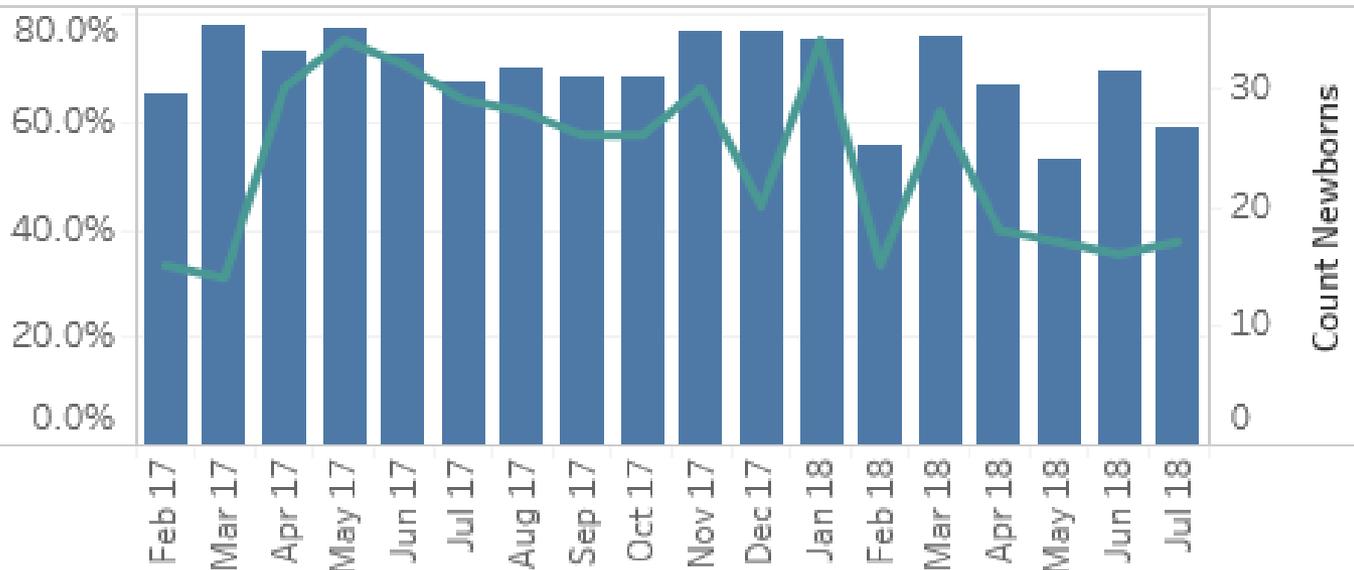
Pathway Newborns Unit after L&D



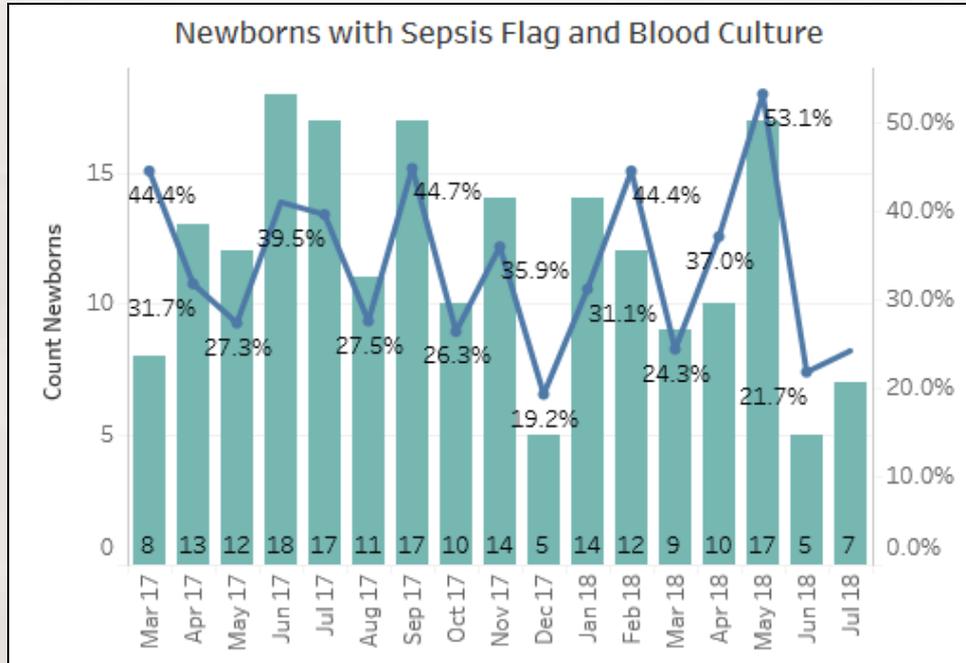
Pathway Newborns direct to WMWB



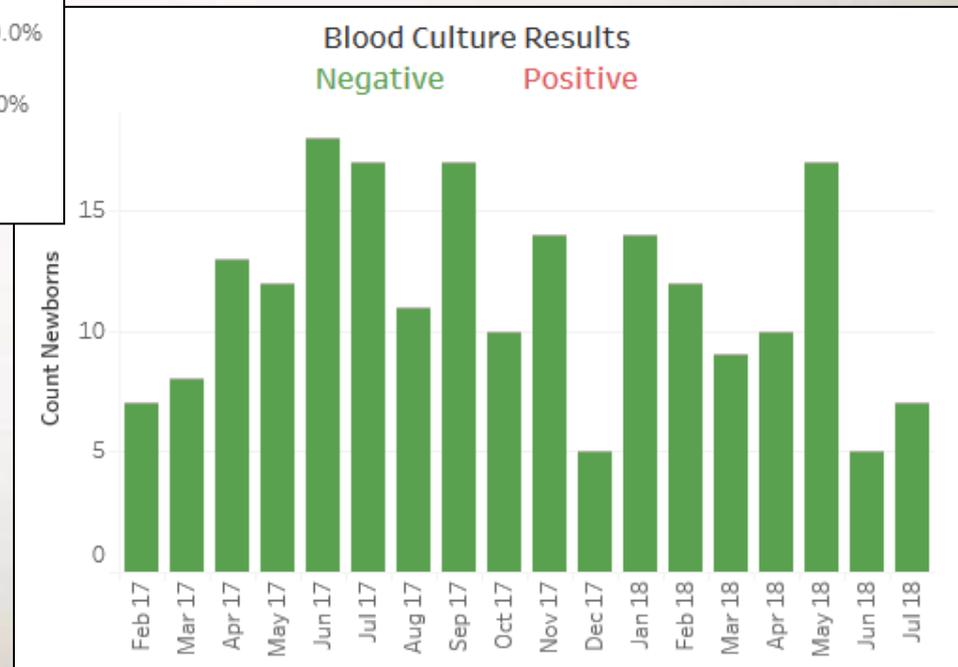
Pathway Newborns Remaining on WMWB Unit



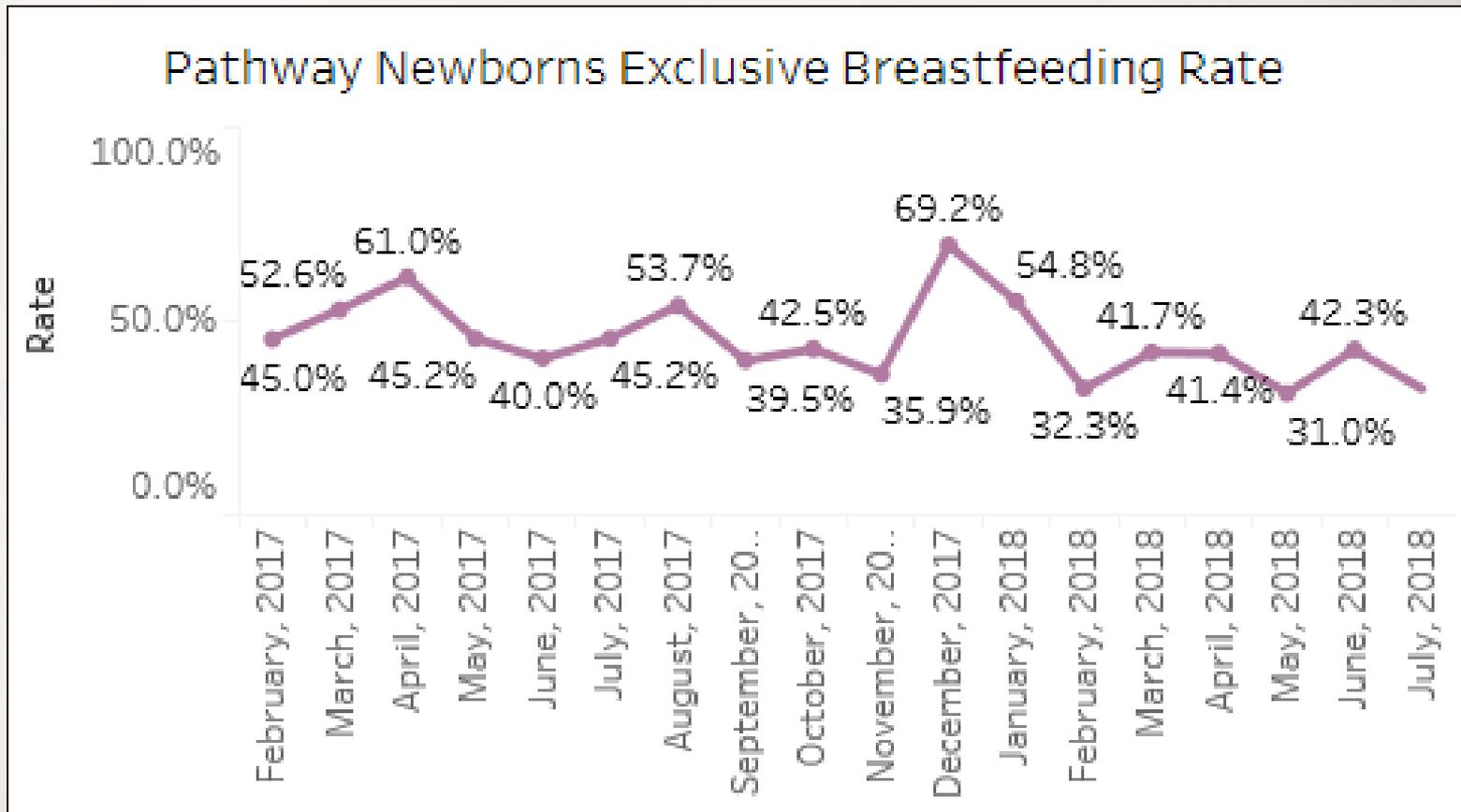
Blood Cultures



No positive blood cultures to date in the TIME clinical pathway babies.



Exclusive Breastfeeding



Prior to implementing the TIME Clinical pathway, the exclusive breastfeeding rate in newborns admitted to NICU to r/o sepsis was 5%

Impact of Clinical Pathway

- Gave “together” TIME back to moms and babies
- Reduced NICU Admissions
- Increased exclusive breastfeeding
- Averted antibiotic exposure
- Reduced unnecessary interventions, i.e. blood cultures, IVs
- Generated reductions in NICU expenses of over \$400,000



<https://www.usa.philips.com/healthcare/medical-specialties/mother-and-child-care>

WOW!

A Reduction in Annual Expenses!!!



<https://1john417.wordpress.com/2015/01/12/paradigm-shift/>

Is this lost revenue?

Is this what we want?

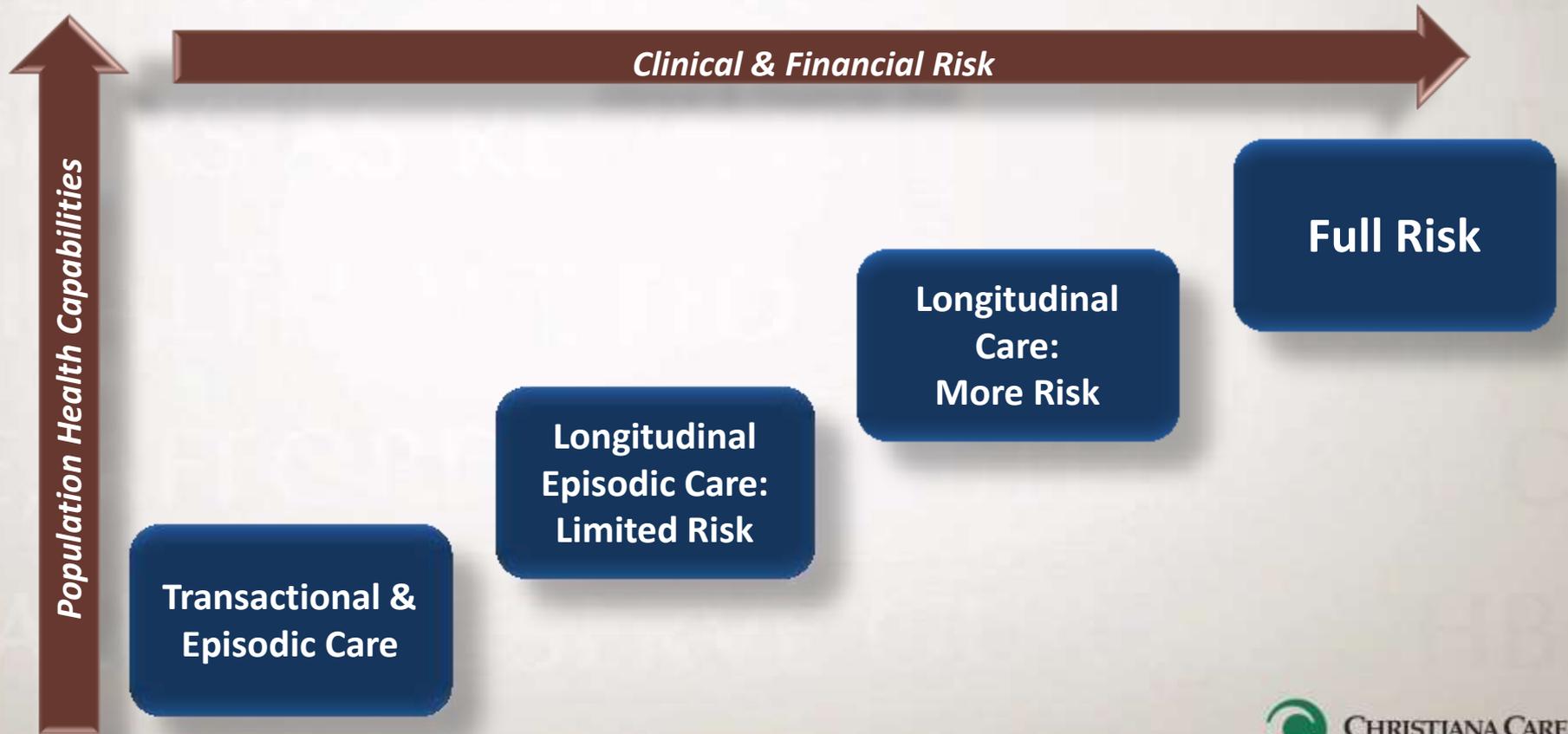
Changing Healthcare Environment

Fee for Service
Pay for

Bundled Payments

Shared Savings

Total Cost of
Care/Capitation



Next Steps

- **Integrate pathway process into PowerChart maternity go-live (Oct, 2018)**
- **Streamline process for completing and recording the Kaiser Permanente sepsis risk calculator into the electronic health record**
- **Continue to monitor evidence based practices for further opportunities to advance care delivery**
- **Create a value measure to track “Organizational Vitality” of the Clinical Pathway**

Lessons Learned

- **Challenges & limitations of large healthcare IT projects**
 - Integration of multiple systems (or lack there of...)
 - Resources
 - Priorities
 - Varied experience of staff
 - Training
 - Time
- **Smart Technology**
 - IT's the Future
 - Powerful Tool
 - Standardize Care
 - Safety Net
 - Communication
 - Accountability



<http://www.arooj.in/mother-&-baby-care.php>

THE CHRISTIANA CARE WAY

We serve our neighbors as respectful, expert, caring partners in their health. We do this by creating innovative, effective, affordable systems of care that our neighbors value.



CHRISTIANA CARE
HEALTH SYSTEM