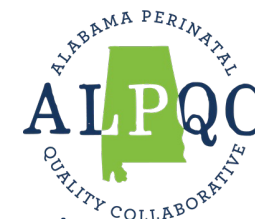




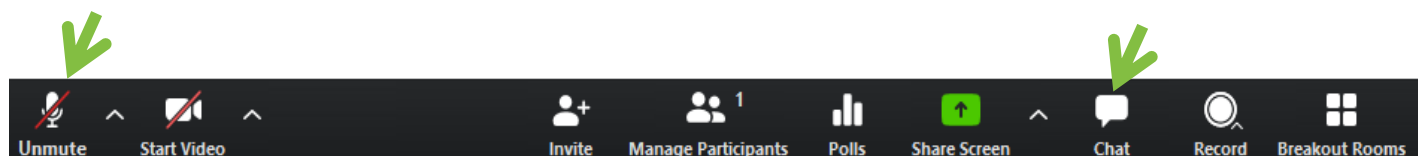
Neonatal Initiatives

Action Period Call
September 25th, 2024
12:00 – 1:00 PM CT

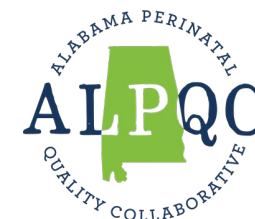


Welcome

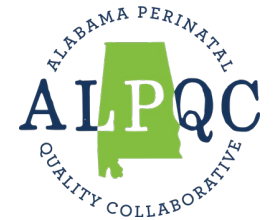
- Please type your **name** and the **organization** you represent in the chat box and send to "Everyone."
- Please click on the three dots in the upper right corner of your Zoom image, click "Rename" and put your name and organization.
- Please also do for all those in the room with you viewing the webinar.
- Attendees are automatically muted to reduce background noise.
- You may enter questions/comments in the "chat" box during the presentation. We will have a Q&A session at the end.
- Slides will be available via email and at <http://www.alpqc.org/initiatives/nhp>
- We will be recording this call to share, along with any slides.



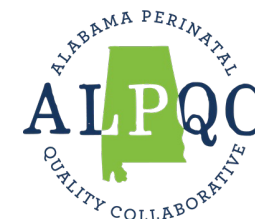
Agenda



Activity:	Time:
Welcome, Updates & Reminders	12:00-12:05
NHP July Data Review	12:05-12:20
External Speaker: Brenda Barker, TIPQC	12:20-12:50
Q&A	12:50-12:55
Reminders & Next Steps	12:55-1:00



Updates



Updates & Reminders

- Monthly (August) NHP data will be due September 30th
 - Links to survey sent on September 15th
 - Please let us know if you did not receive links and we will send them out ASAP
- The next Honor Roll will be posted this October
 - 1 point earned for each activity completed in July, August, & September
 - Monthly Data Reporting
 - Participation in Monthly Action Period Calls
 - 1-on-1 Monthly Meetings with QI-RN
 - 1 point earned for completing Quarterly Reporting due July 31st
- Hospitals with ≥ 9 points will be recognized on our quarterly Honor Roll
 - The Honor Roll will be posted on our website and shared with our partners including ALAHA and BCBS.

Updates & Reminders



- Combined November and December Action Period call
 - Joint call with the Obstetric Hemorrhage Initiative
 - ***November 20***
 - Meeting invite will be sent shortly

Hospitals who have entered 100% of their August Monthly Data
(as of 09/24/24)

1. East Alabama Medical Center (x2)

2. USA Children's & Women's Hospital

3. St. Vincent's Hospital

4. Huntsville Hospital for Women & Children

5. Brookwood Medical Center

6. Baptist Medical Center South

7. Marshall Medical North

8. Russell Medical Center

9. Jackson Hospital

10. DCH Regional Medical Center (x2)

11. Grandview

12.

13.

14.



July Data Review Levels 1 and 2

ALPQC NHP

(From December, 2023 to August, 2024)

Hide Filters

Measure Names

- All_Hospitals
- Your_Hospital

Your Hospital No Hospital

Race All

Birth Wt All

Date July 2024

GA All

Levels Multiple values

Zeros Hosps All Values

Navigation Tabs

Raw Temp

Control Charts

Race/Ethnicity Data

Structural

Main Page

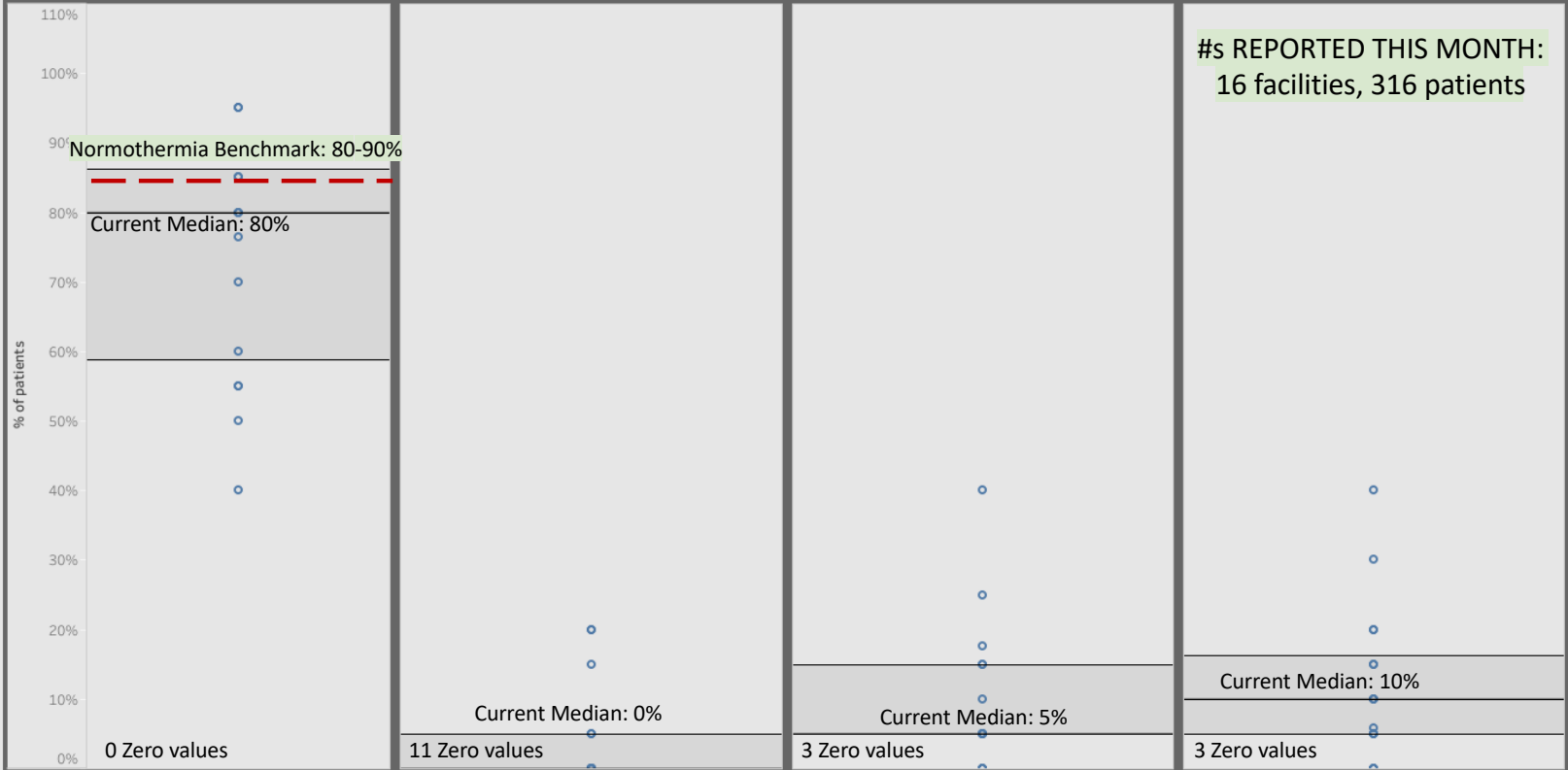


Normothermic
(≥ 36.5 & < 37.5 C)

Moderate to Severe Hypothermia
(< 35.9 C)

Mild Hypothermia
(≥ 35.9 & < 36.5 C)

Hyperthermia
(≥ 37.5 C)



ALPQC NHP

(From December, 2023 to August, 2024)

Hide Filters

Legends

- Lower Control Limit
- Upper Control Limit
- Your Hospital
- All Hospitals

Your Hospital No Hospital

Outcomes Any Hypothermia

Thermias Multiple values

Race All

Birth Wt All

GA Multiple values

DeliveryMode All

Date Multiple values

Only Your H.. All

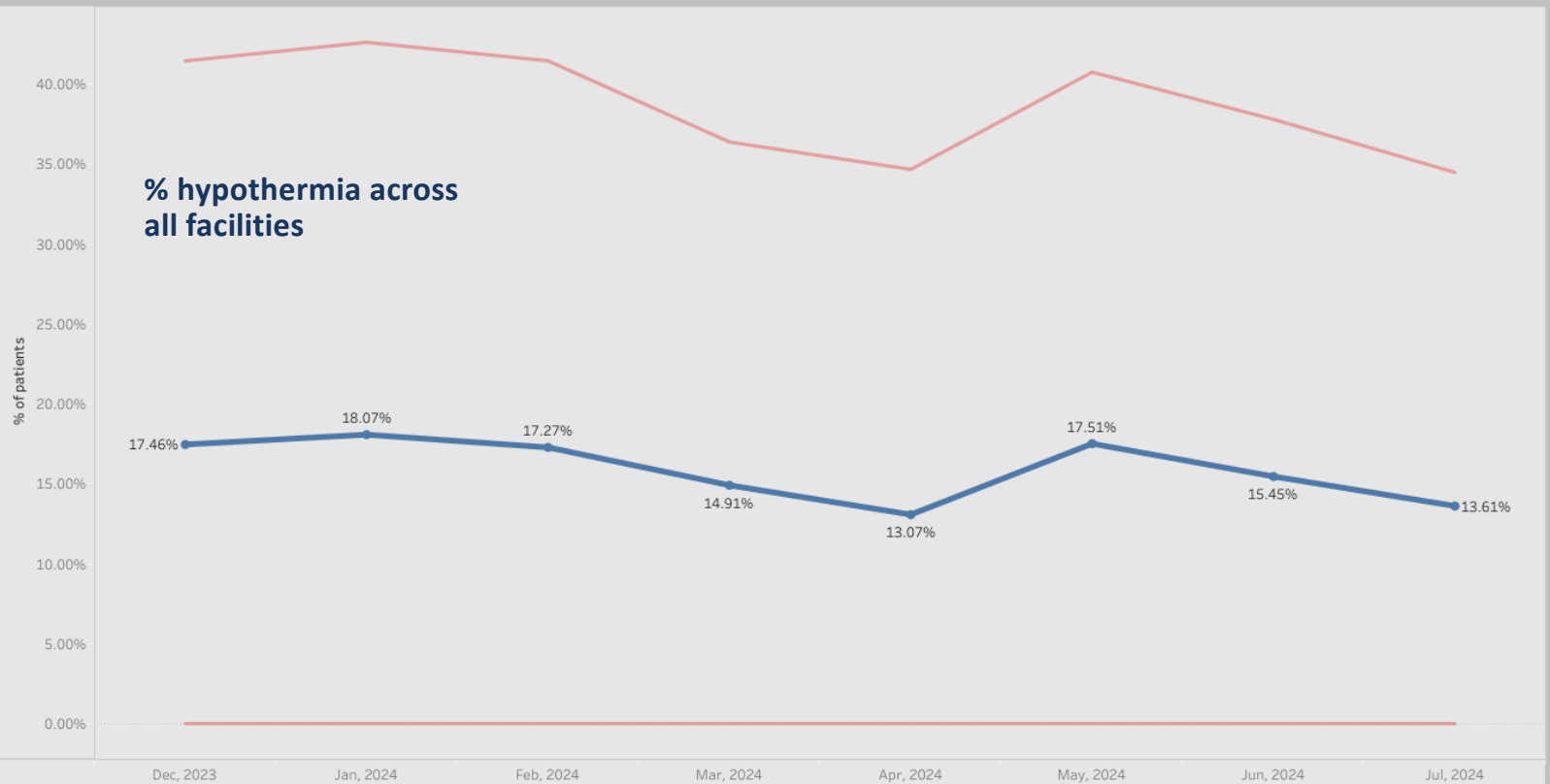
Race/Ethnicity Data

Structural

Main Page



Control Charts: All Hospitals Vs. Your Hospital



ALPQC NHP

(From December, 2023 to August, 2024)

Hide Filters

Legends

- Lower Control Limit
- Upper Control Limit
- Your Hospital

All Hospitals

Your Hospital No Hospital

Outcomes Mod-Sev Hypother..

Thermias Moderate to Sever..

Race All

Birth Wt All

GA Multiple values

DeliveryMode All

Date Multiple values

Only Your H.. All

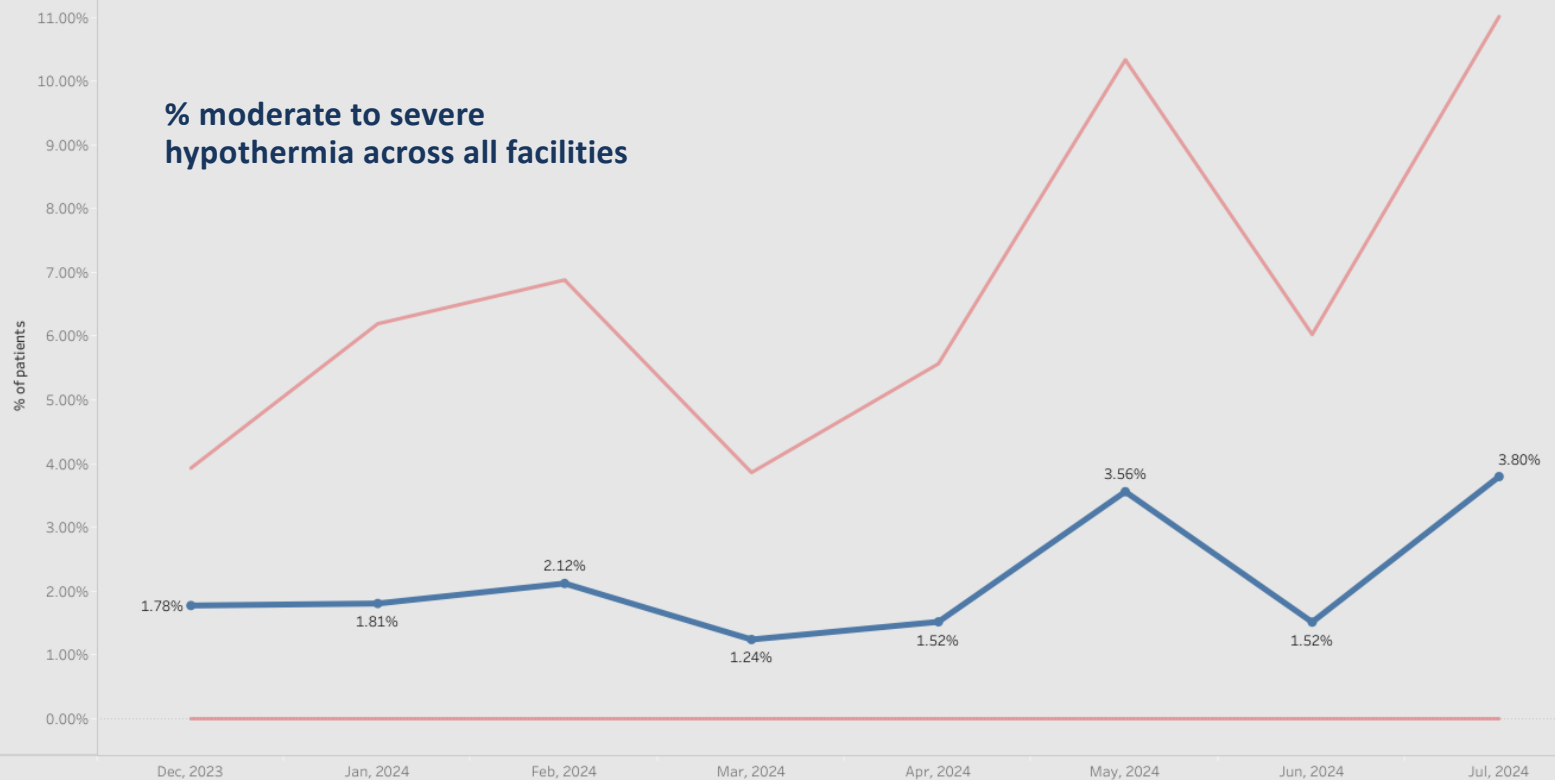
Race/Ethnicity Data

Structural

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Control Charts: All Hospitals Vs. Your Hospital



ALPQC NHP

(From December, 2023 to August, 2024)

Hide Filters

Legends

- Lower Control Limit
- Upper Control Limit
- Your Hospital

All Hospitals

Your Hospital No Hospital

Outcomes Hyperthermia

Thermias Hyperthermia (>= ..

Race All

Birth Wt All

GA Multiple values

DeliveryMode All

Date Multiple values

Only Your H.. All

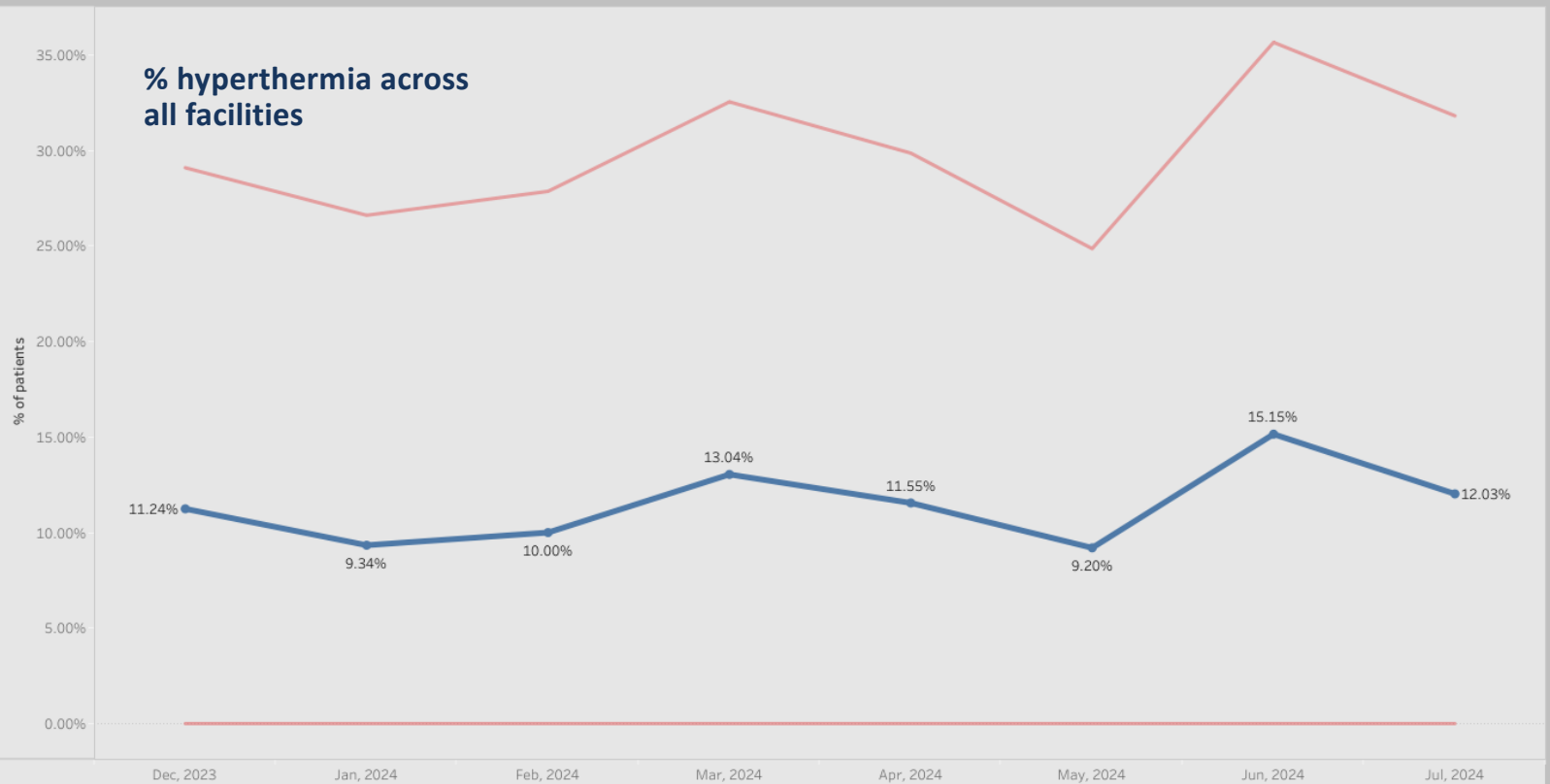
Race/Ethnicity Data

Structural

Main Page



Control Charts: All Hospitals Vs. Your Hospital





July Data Review Levels 3 and 4

ALPQC NHP (Golden Hours)

(From December, 2023 to August, 2024)

Hide Filters

Measure Names

- All Hospitals.
- Your Hospital.

Your Hospital
No Hospital

Date July 2024

Race All

Birth Wt All

GA Multiple values

Zeros Hosps All Values

Temp page

Control Charts

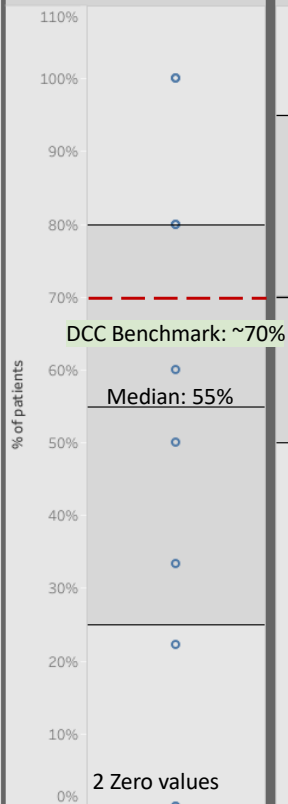
Race/Ethnicity Data

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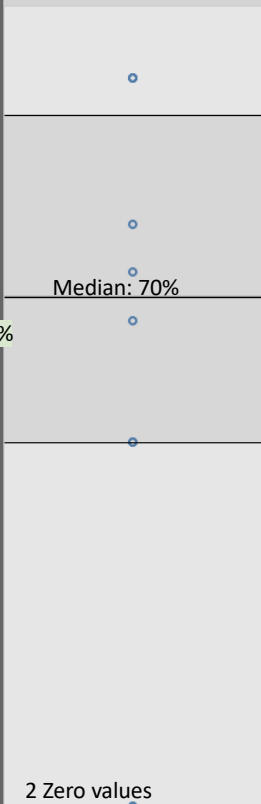
Main Page



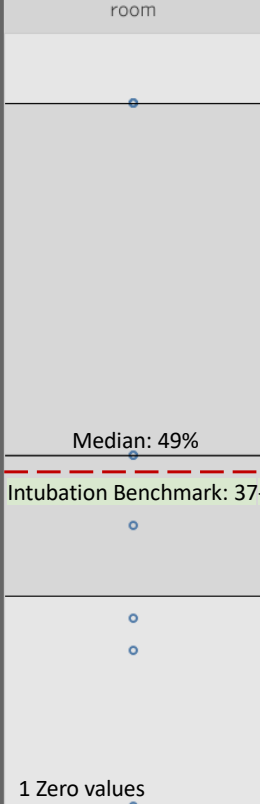
Delayed Cord Clamping



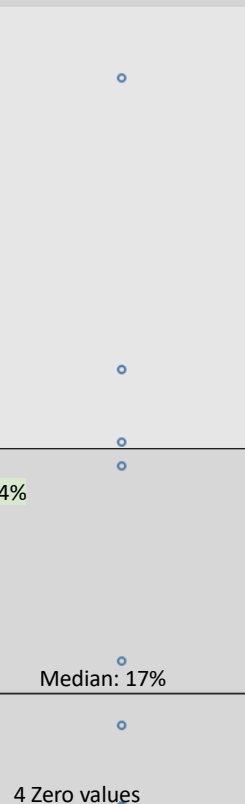
CPAP used in delivery room



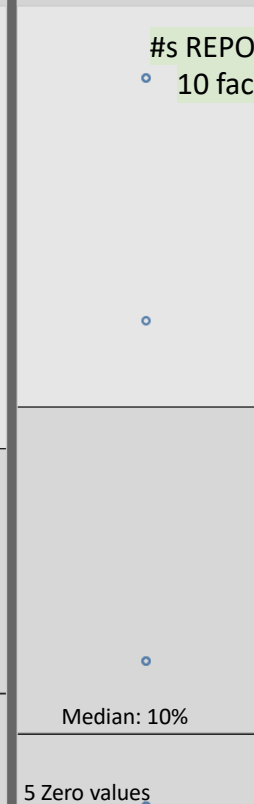
Infant intubated in delivery room



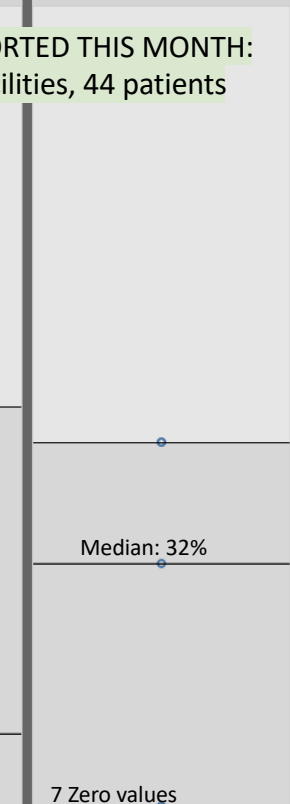
Hypothermia



IVH



Severe IVH



#s REPORTED THIS MONTH:
10 facilities, 44 patients

ALPQC NHP (Golden Hours)

(From December, 2023 to August, 2024)

Hide Filters

Legends

- Lower Control Limit
- Upper Control Limit
- Your Hospital
- All Hospitals

Your Hospital No Hospital

Outcomes O3, DCC

Thermas All

Race All

Birth Wt All

DeliveryMode All

GA Multiple values

Date Multiple values

Only Your H.. All

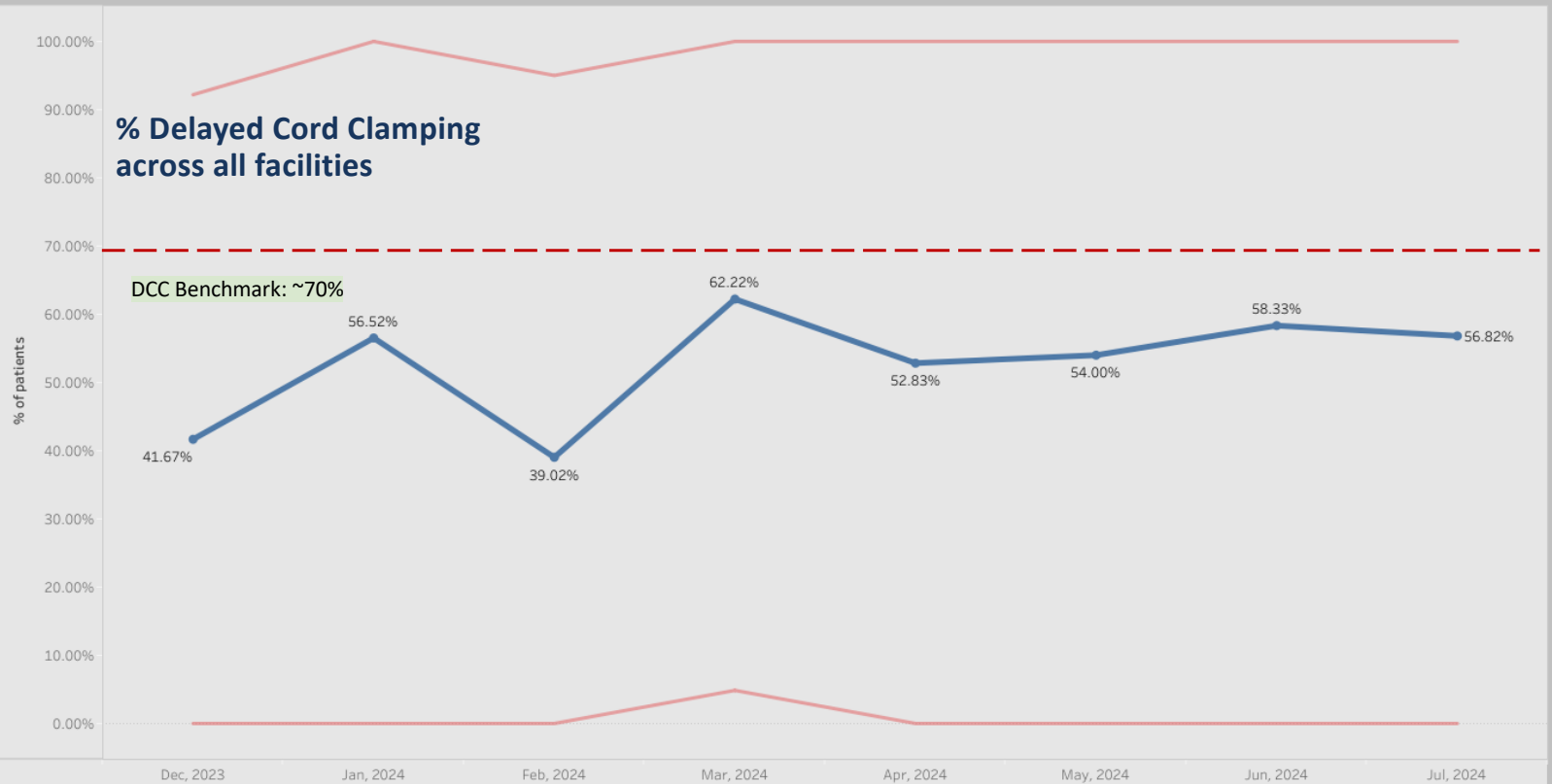
Race/Ethnicity Data

Structural

Main Page



Control Charts: All Hospitals Vs. Your Hospital



ALPQC NHP (Golden Hours)

(From December, 2023 to August, 2024)

Hide Filters

Legends

- Lower Control Limit
- Upper Control Limit
- Your Hospital

All Hospitals

Your Hospital No Hospital

Outcomes O4, CPAP

Thermas All

Race All

Birth Wt All

DeliveryMode All

GA Multiple values

Date Multiple values

Only Your H.. All

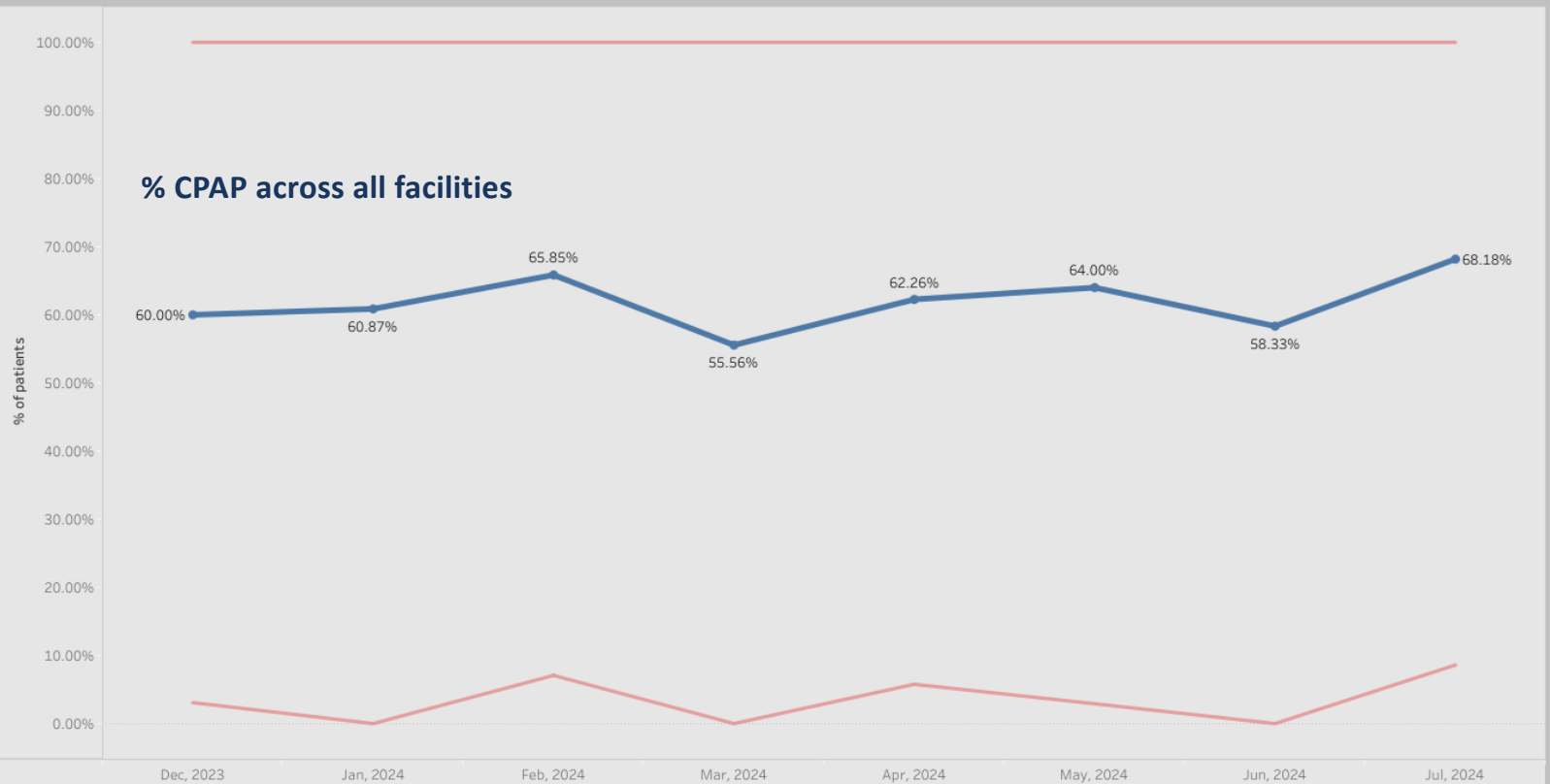
Race/Ethnicity Data

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Main Page



Control Charts: All Hospitals Vs. Your Hospital



ALPQC NHP (Golden Hours)

(From December, 2023 to August, 2024)

Hide Filters

Legends

- Lower Control Limit
- Upper Control Limit
- Your Hospital

All Hospitals

Your Hospital No Hospital

Outcomes OS, Intubation

Termias All

Race All

Birth Wt All

DeliveryMode All

GA Multiple values

Date Multiple values

Only Your H.. All

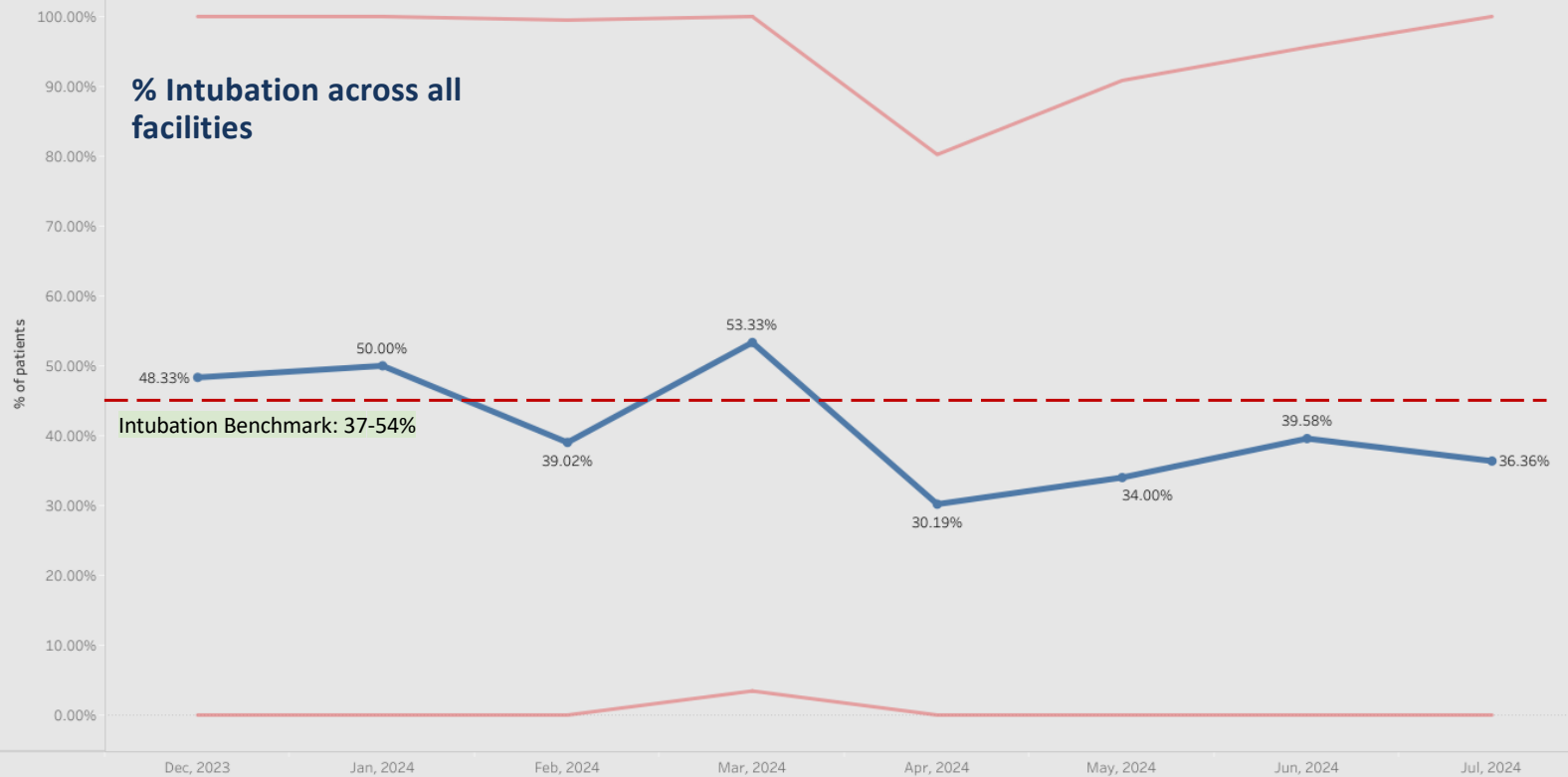
Race/Ethnicity Data

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Main Page



Control Charts: All Hospitals Vs. Your Hospital



ALPQC NHP (Golden Hours)

(From December, 2023 to August, 2024)

Hide Filters

Legends

- Lower Control Limit
- Upper Control Limit
- Your Hospital

All Hospitals

Your Hospital No Hospital

Outcomes O6, IVH

Therms All

Race All

Birth Wt All

DeliveryMode All

GA Multiple values

Date Multiple values

Only Your H.. All

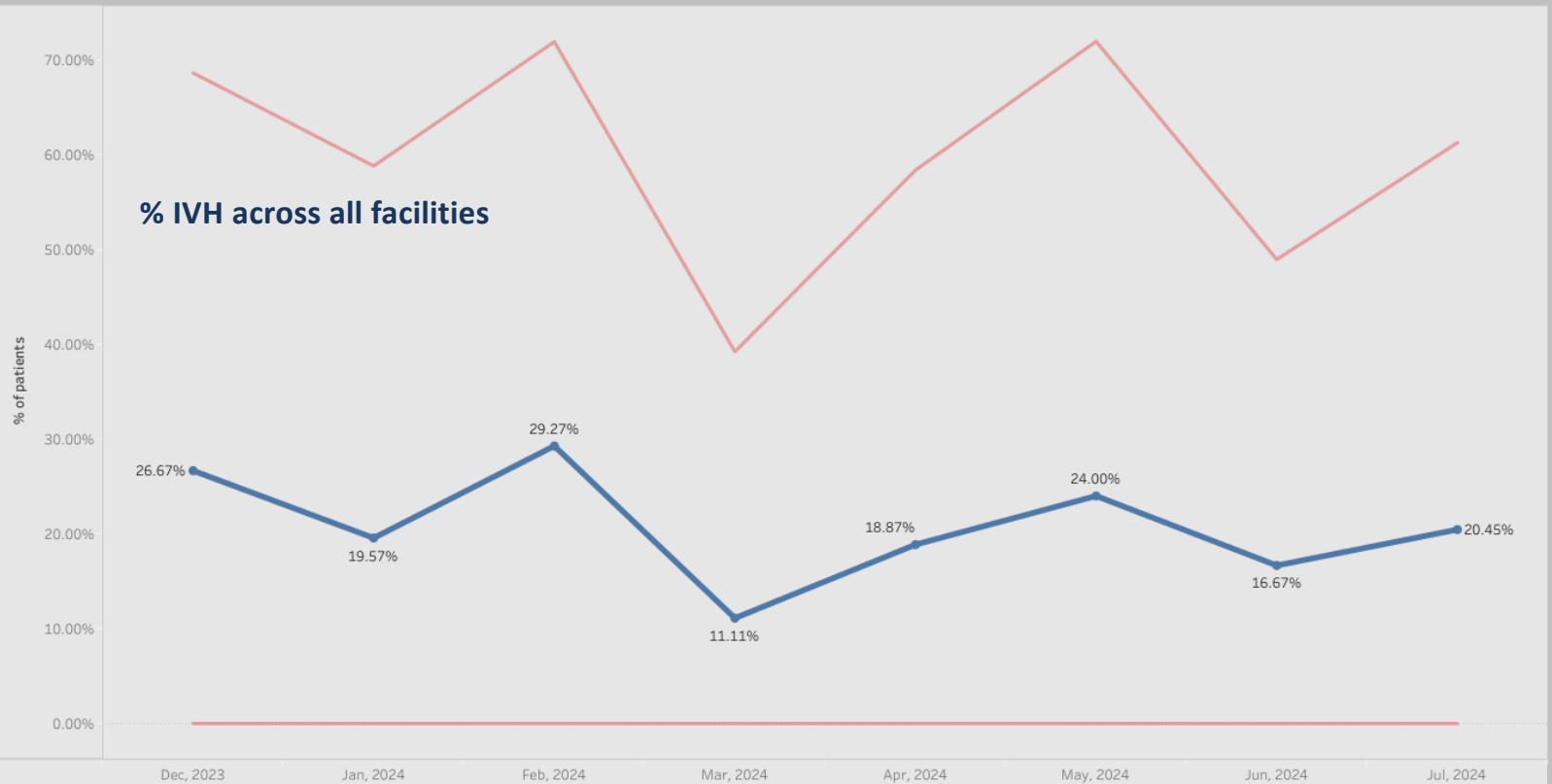
Race/Ethnicity Data

Structural

Main Page



Control Charts: All Hospitals Vs. Your Hospital



ALPQC NHP (Golden Hours)

(From December, 2023 to August, 2024)

Hide Filters

Legends

- Lower Control Limit
- Upper Control Limit
- Your Hospital

All Hospitals

Your Hospital No Hospital

Outcomes O6a. IVH Severe

Therms All

Race All

Birth Wt All

DeliveryMode All

GA Multiple values

Date Multiple values

Only Your H.. All

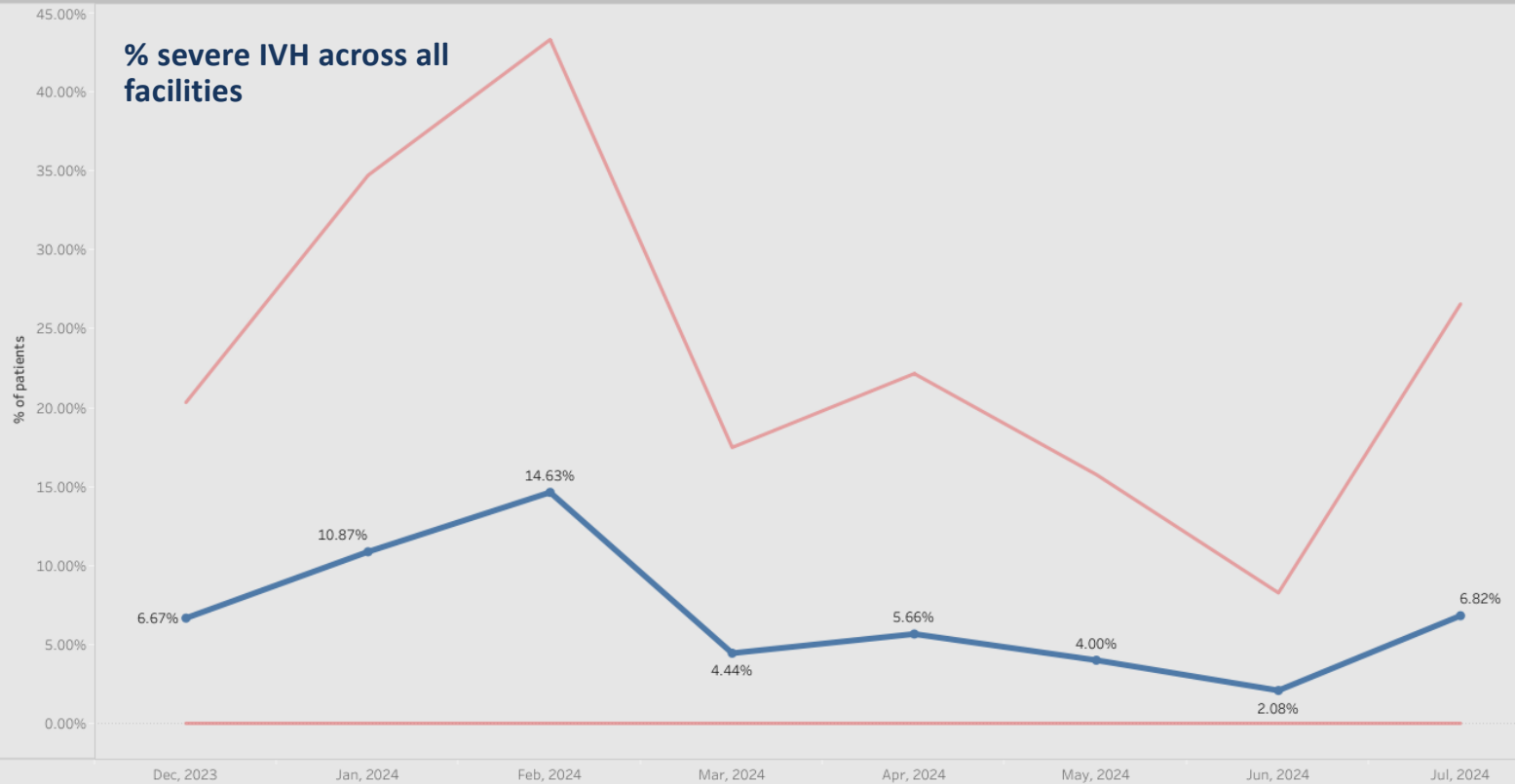
Race/Ethnicity Data

Structural

Main Page



Control Charts: All Hospitals Vs. Your Hospital



ALPQC NHP (Golden Hours)

(From December, 2023 to August, 2024)

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- Your_Hospital

Your Hospital
No Hospital

Birth Wt All
GA Multiple values
Date July 2024
Race All
Zeros Hosps All Values

Temp page

Control Charts

Race/Ethnicity Data

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Main Page

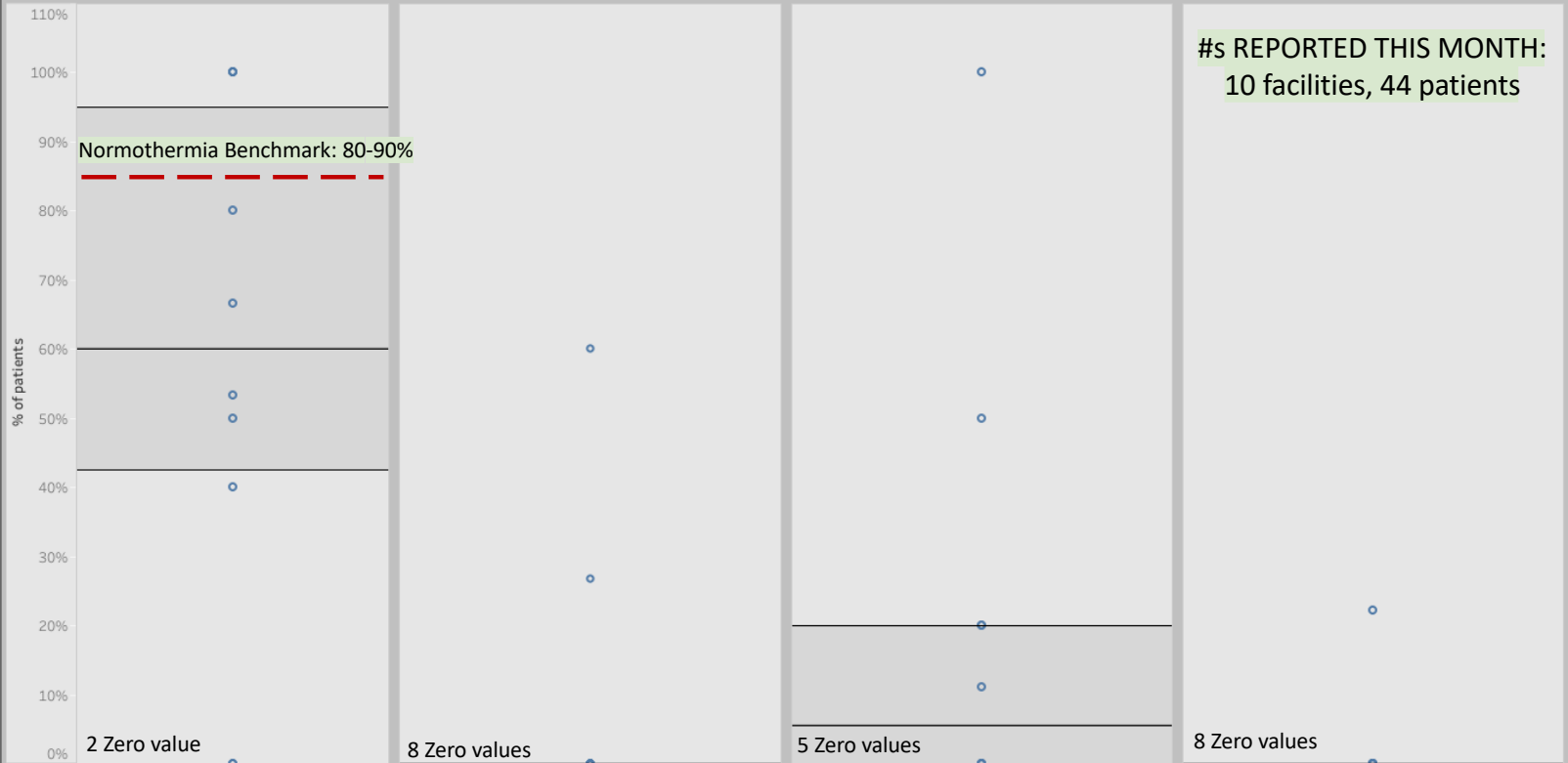


Normothermic
(≥ 36.5 & < 37.5 C)

Moderate to Severe Hypothermia
(< 35.9 C)

Mild Hypothermia
(≥ 35.9 & < 36.5 C)

Hyperthermia
(≥ 37.5 C)



ALPQC NHP (Golden Hours)

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All Hospitals

Your Hospital No Hospital

Outcomes Any Hypothermia

Thermias Multiple values

Race All

Birth Wt All

DeliveryMode All

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Date Multiple values

Only Your H.. All

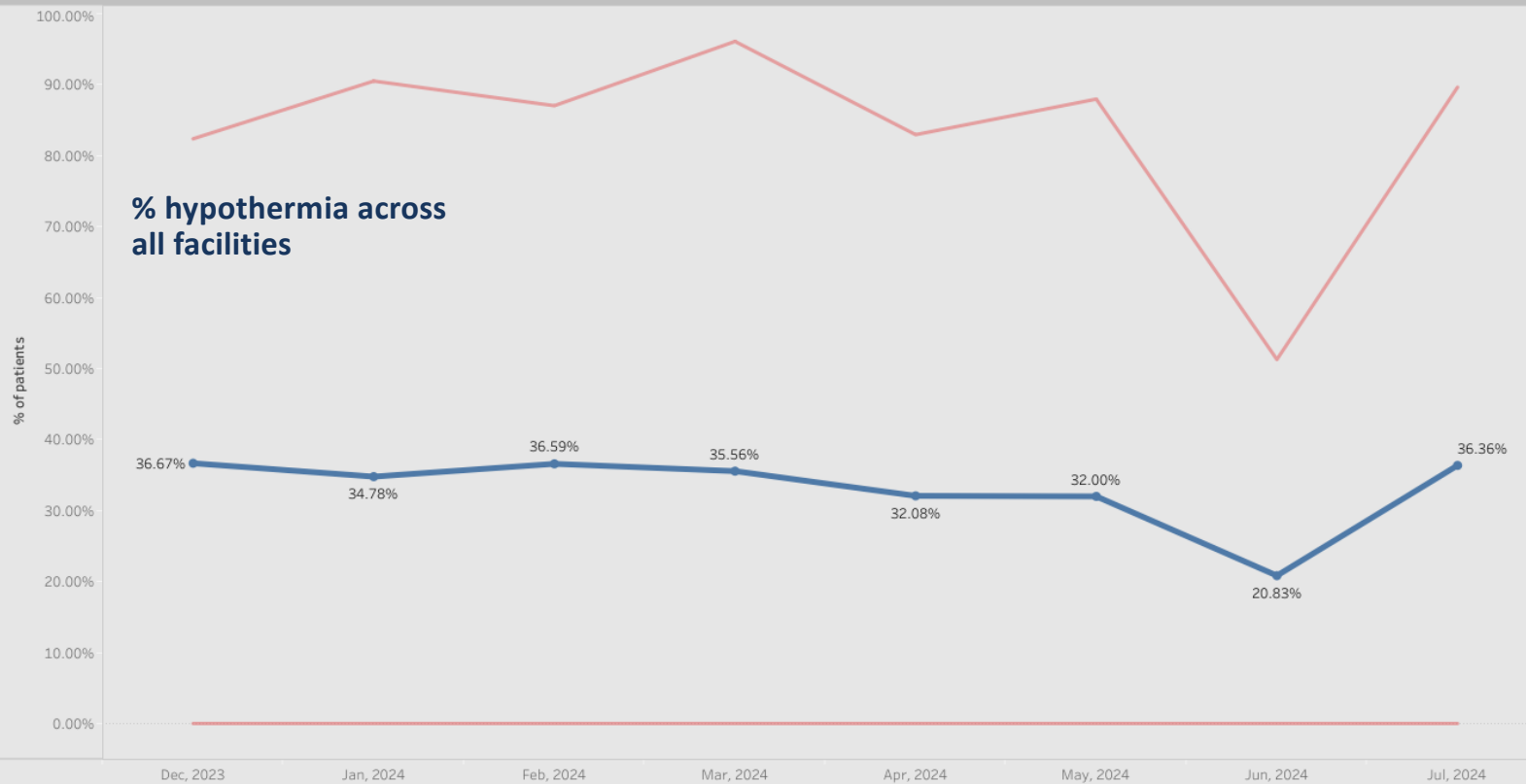
Race/Ethnicity Data

Structural

Main Page



Control Charts: All Hospitals Vs. Your Hospital



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(From December, 2023 to August, 2024)

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- Upper Control Limit
- Your Hospital
- All Hospitals

Your Hospital No Hospital

Outcomes Mod-Sev Hypother...

Thermias Moderate to Sever...

Race All

Birth Wt All

DeliveryMode All

GA Multiple values

Date Multiple values

Only Your H.. All

Race/Ethnicity Data

Structural

Main Page



Control Charts: All Hospitals Vs. Your Hospital



ALPQC NHP (Golden Hours)

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All Hospitals

Your Hospital No Hospital

Outcomes Hyperthermia

Thermias Hyperthermia (>= ..

Race All

Birth Wt All

DeliveryMode All

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Date Multiple values

Only Your H.. All

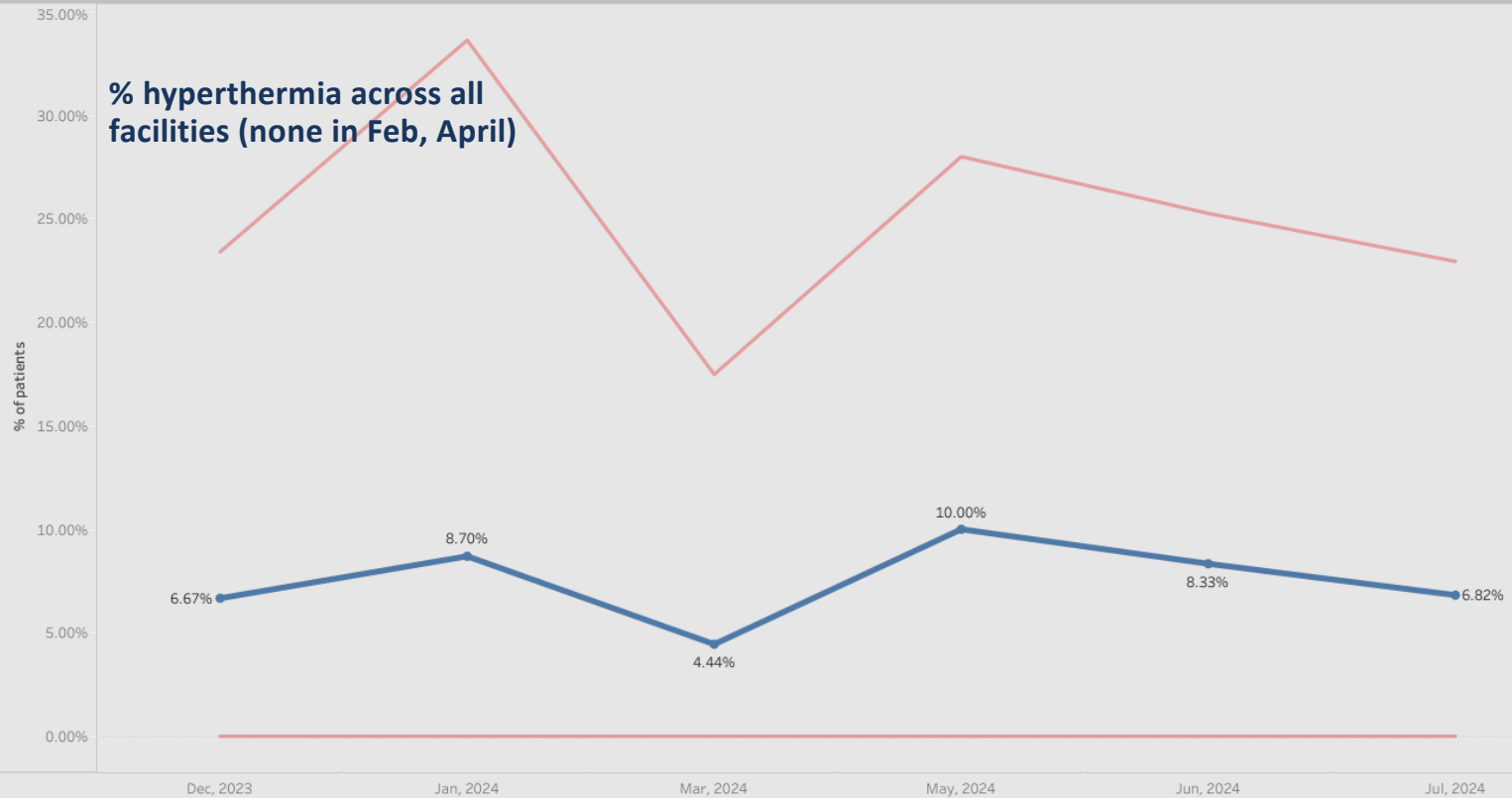
Race/Ethnicity Data

Structural

Main Page



Control Charts: All Hospitals Vs. Your Hospital





External Speaker

Brenda Barker, M Ed, MBA

**Executive Director, Tennessee Initiative for Perinatal Quality
Care**



Optimal Cord Clamping

Brenda Barker, MEd, MBA

Executive Director
TIPQC



TIPQC

Tennessee Initiative for
Perinatal Quality Care

Alabama PQC Meeting
September 25, 2024

Objectives

1. Learn the historical background of cord clamping.
2. Understand one state's approach to optimizing Optimal Cord Clamping (OCC) through a quality improvement lens.
3. Recall QI measures utilized in the OCC QI project.
4. Discuss ways to adapt interventions to Alabama hospitals and the PQC.



Initiatives



Infant Projects

2009-2010, NICU Hypothermia
2009-2013, NICU Human Milk, 2009-2013
2010-2012, NICU CLABSI Reduction
2011-2012, Undetected Critical Congenital Heart Disease
2012-2013, NCABSI Multi-State Collaborative
2012-2015, Family Involvement Teams
2012-2013, NICU Follow-Up Network
2012-2015, NICU Golden Hour
2012-2015, NICU NAS 1.0 & 2.0
2014-2016, NICU HAI 2.0
2015-2016, NICU NAS Multi-State Collaborative
2016-2018, iNICQ Antibiotic Stewardship
2016-2018, Nutrition: Improving Nutrition and Growth in Very Low Birth Weight Infants
2018-2019, Tennessee Antibiotic Stewardship
2018-2019, Optimizing Care of the 35-36 Week Infant in the Newborn Nursery
2019-20 OEN Wave 1
2020-21 Safe Sleep
2020, iNICQ Transitions of Care
2022- Tennessee's Tiniest Babies (TTB)

Maternal Projects

2009-2015, Reduction of Early Elective Deliveries
2010-2011, Breastfeeding Promotion: Prenatal
2013-2014, Breastfeeding Promotion: Delivery & Postpartum, Wave 1
2013-2014, Antenatal Steroids
2014-2016, Breastfeeding Promotion: Delivery & Postpartum, Wave 2
2016-2018, Obstetric Hemorrhage
2018-2019, Immediate Postpartum Long-Acting Reversible Contraception
2019-20 OUD Wave 1
2020-22 Severe Maternal HTN
2022-24- Promotion of Safe Vaginal Delivery
2023- Cardiac Conditions in OB Care

Joint Projects

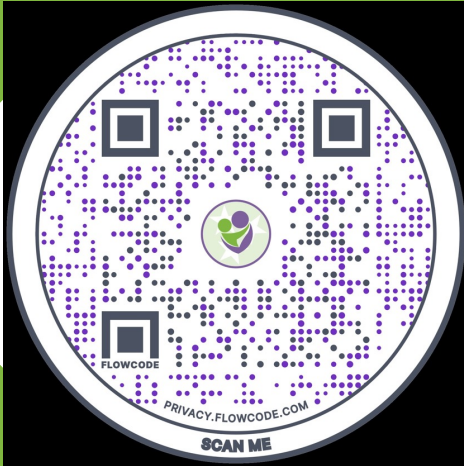
2019-2021, Opioid Use Disorder: Optimizing Obstetric & Neonatal Care (Joint Maternal and Infant Project)

2022- 23 Optimal Cord Clamping

2023- Best For All

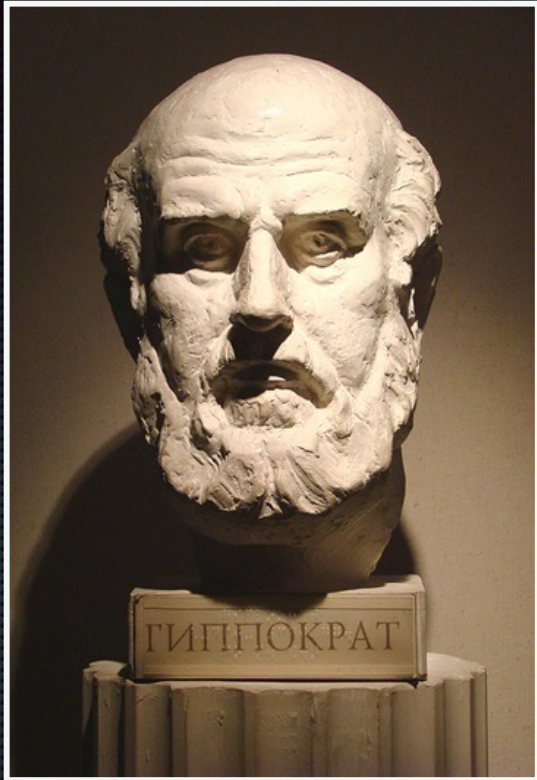


Optimal Cord Clamping 2022-23



Optimal Cord Clamping





Hippocrates
460-370 BCE

“If the woman has had a difficult labour, and cannot be delivered without the help of machines, the child is generally weak, and therefore the navel-string ought not to be divided until it shall have either urined, sneezed, or cried aloud; in the meantime, it must be kept very near the mother: for though the child does not seem to breathe at first, nor to give any other signs of life, the navel-string, by remaining uncut, may be in a little time inflated, and the life of the infant saved.”

S. Guthrie, PAS Meeting, May 2023



Erasmus Darwin
1731-1802 CE

“Another thing very injurious to the child, is the tying and cutting of the navel string too soon; which should always be left till the child has not only repeatedly breathed but till all pulsation in the cord ceases. As otherwise the child is much weaker than it ought to be.”

Zoonomia, Volume III

S. Guthrie, PAS Meeting, May 2023



Virginia Apgar
1909-1974 CE

“The initial score is to be determined at 60 seconds after birth which is after clamping or tying of the cord.”

*A Proposal for a New Method of
Evaluation of the Newborn Infant, 1953*

S. Guthrie, PAS Meeting, May 2023

Way back in 2010!

Circulation

Volume 122, Issue 16_suppl_2, 19 October 2010; Pages S516-S538
<https://doi-org.proxy.library.vanderbilt.edu/10.1161/CIRCULATIONAHA.110.971127>



2010 INTERNATIONAL CONSENSUS ON CARDIOPULMONARY RESUSCITATION AND EMERGENCY CARDIOVASCULAR CARE SCIENCE WITH TREATMENT RECOMMENDATIONS

Part 11: Neonatal Resuscitation

2010 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science With Treatment Recommendations

Treatment Recommendation:

Delay in umbilical cord clamping for **at least 1 minute** is recommended for newborn infants [term and preterm] not requiring resuscitation.

One interesting conclusion in the preterm infant:

Early cord clamping probably causes harm

S. Guthrie, PAS Meeting, May 2023



Rabe H, et al.
DOI: 10.1002/14651858.CD003248.pub4.



Who Supports This Now?



To Quantify That:

Every 10% increase in the rate of OCC among preterm infants at a hospital was associated with a 5% lower hospital mortality rate

Quinn, et al. Delayed cord clamping uptake translating into improved outcomes for very preterm infants in California NICUs. Am J Perinatology. 2022 Nov. DOI:10.1055/a-1975-4607

S. Guthrie, PAS Meeting, May 2023





Development: Faculty & Toolkit

Optimal Cord Clamping
Tennessee Initiative for Perinatal Quality Care
Inter-Institutional Quality Improvement Project
Funded under a grant from the Tennessee Department of Health (TDH)



Project Development Leaders

Scott Guthrie, MD
State Project Leader & TIPQC Infant Medical Director

Patricia A. Scott, DNP, APRN, NNP-BC, C-NPT
TIPQC Infant Quality Improvement Specialist

Ashley Lerro, RN, CCM, CLC
TIPQC Program Manager

Brenda Barker, MEd, MBA
TIPQC Executive Director

Theresa A Scott, MS
TIPQC Data Manager

DISCLAIMER: The authors of this toolkit used reasonable efforts to provide accurate information. The information and resources included in this toolkit are provided for informational purposes only. Nothing contained herein constitutes medical, legal, or other professional advice nor does it represent an endorsement of any treatment or particular product. Referral to specific programs, resources, or websites does not imply endorsement by the toolkit's authors or the authors' organizations or their sponsors, contents, expressed views, programs or activities. Further, the authors do not endorse any commercial products that may be referred to in this toolkit or that may be advertised or available from these programs, resources, or websites. This toolkit is not meant to be comprehensive; the exclusion of a program, resource or website does not reflect the quality of that program, resource, or website. Please note that websites and URLs are subject to change without advanced notice.

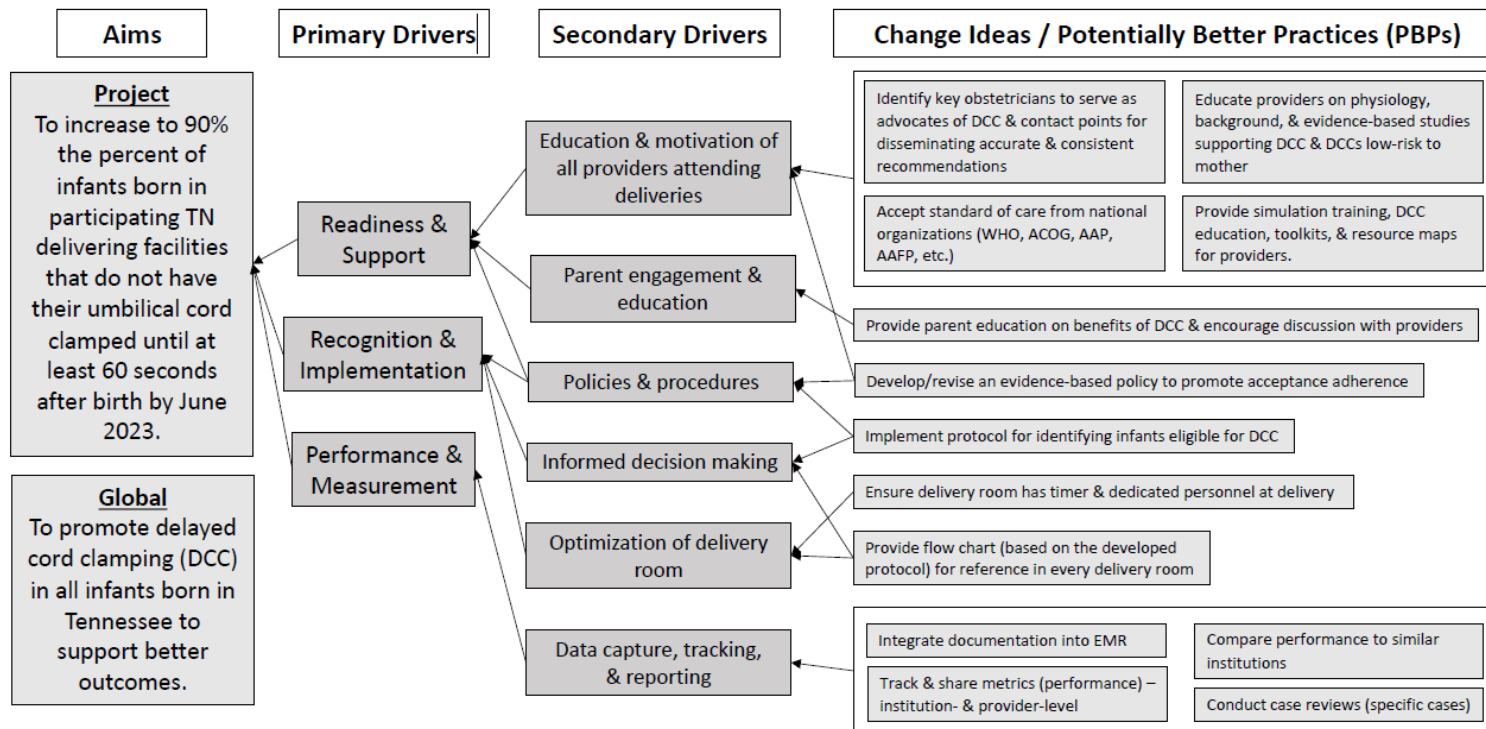
page 1 of 31

<https://tipqc.org/occ>



Delayed Cord Clamping

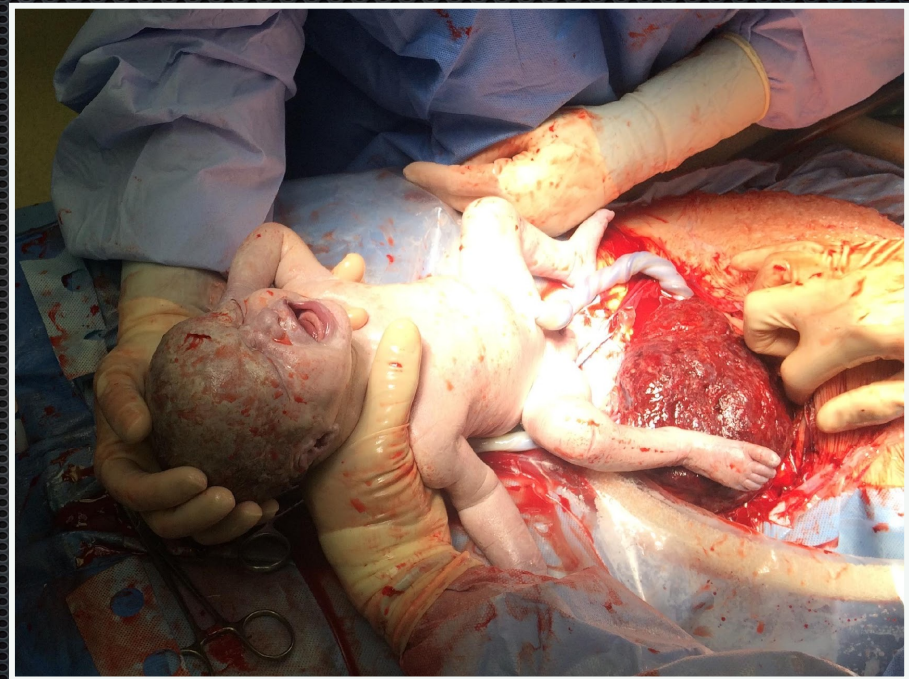
Key Driver Diagram



<https://tipqc.org/occ/>

The TIPQC Project Details

- ▶ At 30 seconds, the team should assess for spontaneous respirations
- ▶ If resuscitation is needed, clamp the cord at 30 seconds
- ▶ If not, continue with the placental transfusion and clamp after at least 60 seconds



Recommendations

- ▶ Healthy Term: delayed cord clamping for 1-5 minute
- ▶ Healthy Preterm: 1 minute if infant has good tone, breathing, and can be kept warm
- ▶ Very preterm infant not requiring immediate resuscitation, also target 1 minute if can be kept warm



Contraindications

- Maternal collapse and resuscitation
- Trauma to the umbilical cord



Discussion should always take place between obstetrical and neonatal providers prior to delivery.

Other rare conditions may be a relative contraindication.

These may include:
fetal hydrops, recipient twin in twin to twin transfusion syndrome, selected congenital malformations, etc.

Setting the Stage



<https://tipqc.org/occ/>

OPTIMAL CORD CLAMPING

Provider Information

WHAT IS OPTIMAL CORD CLAMPING?

Clamping of the umbilical cord at least 60 seconds after the baby is delivered as medically indicated



WHAT IS THE EFFECT?

About 80mL of blood is transferred from the placenta to the fetus within 1 minute



No change in the APGAR score



Improved neuro-developmental outcomes



Reduced incidence of late onset sepsis

WHAT ARE THE BENEFITS?

Reduced mortality



Reduced need for blood transfusions



Reduced need for hypotension treatment



Every 10% increase in the rate of OCC among preterm infants at a hospital was associated with a 5% lower hospital mortality rate*



Nothing contained in this infographic constitutes Medical or other Professional Advice nor does it represent an endorsement of any treatment. The information provided via this infographic is for informational purposes and should only be adapted to your patient population in accordance with your own professional judgment. Contact your hospital's OCC Patient Champion for more information.

TIPQC
Tennessee Indicators for Perinatal Quality Care





Episode 033 Dr. Anup Katheria

Healthy Mom
Healthy Baby



EPISODE 33

E033: OPTIMAL CORD CLAMPING WITH DR. ANUP KATHERIA

Published on: 24th January, 2022



E033: Optimal Cord Clamping with Dr. Anup Kath...

Episode 33 • 24th January 2022 • Healthy Mom Healthy Baby Tennessee • Tennessee Initiative for Perinatal Q...



00:00:00

00:42:28



NOTES LINKS FOLLOW SHARE

Parent Education & Engagement

التشبيك المتأخر للحبل السري

ما هو "التشبيك المتأخر للحبل السري" [Optimal Cord Clamping] (OCC)?

التشبيك المتأخر للحبل السري هو
الانتظار على الأقل 60 ثانية لتشبيك
الحبل السري للمولود بعد ولادته



الدم الإضافي من الأم يساعد المولود
على التكيف مع الحياة بعد الولادة

تحسين المهارات الاجتماعية
والمهارات الحركية الدقيقة

تقل المشاكل في الأطفال المولدين باكراً

ما هي
الفوائد
للمولود؟



ليس الغرض من أي شيء متضمن في هذا المستند أن يكون بمثابة مشورة طبية أو غيرها من مشورات الاختصاصيين. وكعصادة أو وصفة أو ترويج لأي إجراء أو علاج طبي أو خطة رعاية. فالمعلومات موزونة فقط لأغراض العلم ويجب النظر فيها ومناقشتها فقط مع من يخطبك من طبيب التوليد أو غيره من مقدمي الرعاية الصحية. كما يجب إتباعها فقط ضمن خطة يوصي بها طبيب التوليد أو غيره من مقدمي الرعاية الصحية لك ولطفلك. وإذا كنت بحاجة إلى مزيد من المعلومات، فاطلبها ممن يخطبك من طبيب التوليد أو غيره من مقدمي الرعاية الصحية.

Optimal Cord Clamping

What is Optimal Cord Clamping (OCC)?

Optimal Cord Clamping is waiting at
least 60 seconds to clamp the baby's
umbilical cord after birth



Extra blood from mom helps
the baby adjust to life after birth

What are the
benefits for
the baby?

Improved social skills
and fine motor skills

Less problems for babies born early

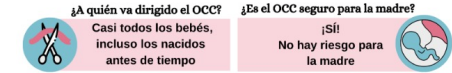
Nothing contained in this document is intended to be Medical or other Professional Advice, nor an endorsement, prescription, or promotion of any medical procedure or treatment or plan of care. The information is provided solely for informational purposes and should only be considered and discussed with your Obstetrician or other healthcare provider and only followed under your Obstetrician or other healthcare provider's recommended plan of care for you for your baby. If you need further information, ask your Obstetrician or other healthcare provider.



Pinzamiento óptimo del cordón umbilical

¿Qué es el pinzamiento óptimo del cordón umbilical (OCC)?

El pinzamiento óptimo del cordón umbilical consiste
en esperar al menos 60 segundos para pinzar el
cordón umbilical del bebé tras el nacimiento



La sangre adicional de la madre
ayuda al bebé a adaptarse a la vida
después del nacimiento

¿Cuáles son los
beneficios
para el bebé?

Mejora de las habilidades sociales
y de las habilidades motrices finas

Menos problemas para los bebés
nacidos antes de tiempo

Nada de lo contenido en este documento pretende ser un consejo médico u otro consejo profesional, ni aprobación, prescripción o promoción de ningún procedimiento o tratamiento o plan de atención médica. La información se proporciona únicamente con fines informativos y solo debe ser considerada y discutida con su obstetra u otro prestador de servicios médicos y solo debe seguirse bajo el plan de atención recomendado por su obstetra u otro prestador de servicios médicos para su bebé. Si necesita más información, hable con su obstetra u otro prestador de servicios médicos.



<https://tipqc.org/occ/>



Measures

TIPQC OPTIMAL CORD CLAMPING



MONTHLY CAPTURE OF OUTCOMES & BALANCING MEASURES

Use the following tables to capture the outcome and balancing measures for the Optimal Cord Clamping (OCC) TIPQC inter-institutional QI project.

- Frequency of data capture: *monthly*

OUTCOME MEASURE

- Percent of infants who had their umbilical cord clamped at least 60 seconds (or more) after birth
 - Denominator (D) = total number of live births in the month
 - Numerator (N) = among the denominator, number of infants who had their umbilical cord clamped at least 60 seconds (or more) after birth
- “Overall” numerator & denominator counts will be captured as well as counts disaggregated by mother’s race/ethnicity (defined as Non-Hispanic (NH) White, NH Black, and Hispanic).
 - The denominator would translate to (for example), the number of live births for mothers who self-identified as White Non-Hispanic (NH White). The numerator would then count the number of these NH White live births where the infant had their umbilical cord clamped at least 60 seconds (or more) after birth among.

<https://tipqc.org/occ/>





BALANCING MEASURES

1. Percent of 5-minute APGAR scores ≤ 3
 - Denominator (D) = total number of live births in the month
 - Numerator (N) = among the denominator, number of infants with 5-minute APGAR score ≤ 3
2. Percent of hypothermia on first temperature
 - Denominator (D) = total number of live births in the month
 - Numerator (N) = among the denominator, number of infants with first temp $< 97.7^{\circ}\text{F} / 36.5^{\circ}\text{C}$

NOTE: The 5 min APGAR score and/or 1st temp may be *missing* (ie, not documented) for some of the infants born in a given month. To capture the existence of missing data correctly, the Numerator value for each Balancing Measure in the following table has been broken up into two components: “Missing N” = among the denominator, the number of infants with missing data for the corresponding Balancing Measures; and “Non-missing N” = among the denominator, the number of infants that do not have missing data and meet the Balancing Measure’s Numerator definition criteria.

ADDITIONAL GUIDANCE:

First temperature

An infant’s temperature should be recorded within 15 to 30 minutes of age, or per existing hospital policy, irrespective of the infant’s location (eg, newborn nursery or NICU). Hospital policy should be followed regarding method of first temperature (ie, rectal or axillary). If no policy exists, an *axillary* temperature is recommended.

<https://tipqc.org/occ/>



TIPQC OPTIMAL CORD CLAMPING

QUARTERLY CAPTURE OF PROCESS & STRUCTURE MEASURES

Indicate the quarter for which you are reporting data:

QUARTER

☐ Q1 (January 1 to March 30)

YEAR

☐ 2022

PROCESS MEASURES

1. Provider education

At the end of this reporting period, what cumulative proportion of infant care providers, including delivering physicians, midwives, Neonatologists, Pediatricians, and NNPs, have completed (within the last 2 years) an education program on OCC that includes the unit-standard protocols?

☐ 0-9% ☐ 10-19% ☐ 20-29% ☐ 30-39% ☐ 40-49% ☐ 50-59% ☐ 60-69% ☐ 70-79% ☐ 80-89% ☐ 90-100%

2. Nursing education

At the end of this reporting period, what cumulative proportion of OB, Newborn Nursery, and Neo nurses have completed (within the last 2 years) an education program on OCC that includes the unit-standard protocols?

☐ 0-9% ☐ 10-19% ☐ 20-29% ☐ 30-39% ☐ 40-49% ☐ 50-59% ☐ 60-69% ☐ 70-79% ☐ 80-89% ☐ 90-100%

3. Percent of infants who had their cord clamping documented in their medical record (ie, no missing data)

Do not report until after "EMR integration" Structure measure (see below) has been completed.

Denominator: Total number of live births in reporting period (denominator) _____

Numerator: Among the denominator, number of infants who had
complete (no missing) OCC data in their medical record



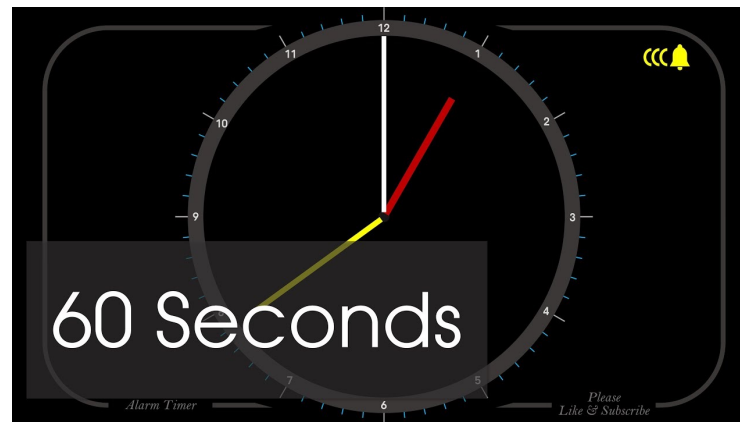
Recognition Awards Criteria



Optimal Cord Clamping (OCC) Project

Criteria to receive corresponding Gold Star <i>Criteria cover entire project timeline; all criteria must be met to receive corresponding Gold Star</i>	Corresponding data metric(s)
Project Participation <ul style="list-style-type: none"> • ≥90% active project participation, defined as attendance (≥1 team members present) at Huddles & Learning Sessions and submission of Leadership Reports (LR; when applicable). <i>Expected participation based on team's approval date. LR can be submitted "late".</i> 	<ul style="list-style-type: none"> • Attendance & submission of LR
Project Data <ul style="list-style-type: none"> • Complete capture of project data – monthly capture of Outcome & Balancing measures, and quarterly capture of Process & Structure measures. <i>"Complete" = ≤2-month lag in monthly data capture and ≤1-quarter lag in quarterly data capture. Feb '22 start for Pilot teams; May '22 start for all others.</i> 	<ul style="list-style-type: none"> • Presence of relevant data in the Monthly & Quarterly REDCap surveys
Data Driven QI <ul style="list-style-type: none"> • Proper documentation of OCC (based on guidelines) has been integrated into EMR. • OCC performance metrics are being tracked and shared. • ≥95% of infants have their cord clamping documented in their medical record. <i>Target percentage must be maintained for ≥2 quarters.</i> 	<ul style="list-style-type: none"> • Structure Measure (SM) #4 • SM #5 • Process Measure (PM) #3
Clinical Change Ideas <ul style="list-style-type: none"> • 90-100% of <u>both</u> providers and nursing staff (who deliver babies and/or attend deliveries) have completed an education program on OCC that includes the unit-standard protocols. • Education materials have been developed to provide to parents on the benefits of OCC and to encourage discussion with providers. • An OCC policy and procedure has been written (or reviewed and updated in the last 2-3 years if already existed), approved, and is in place. • The Best Practice OCC flow chart (based on the developed protocol) is available for reference in every delivery room. 	<ul style="list-style-type: none"> • PM #1 & # 2 • SM #1 • SM #2 • SM #3
Statewide Aim <ul style="list-style-type: none"> • ≥90% of infants do not have their umbilical cord clamped until at least 60 seconds after birth. <i>Target percentage must be maintained for ≥2 months.</i> 	<ul style="list-style-type: none"> • Outcome Measure

Our Motto: Just Wait a Minute



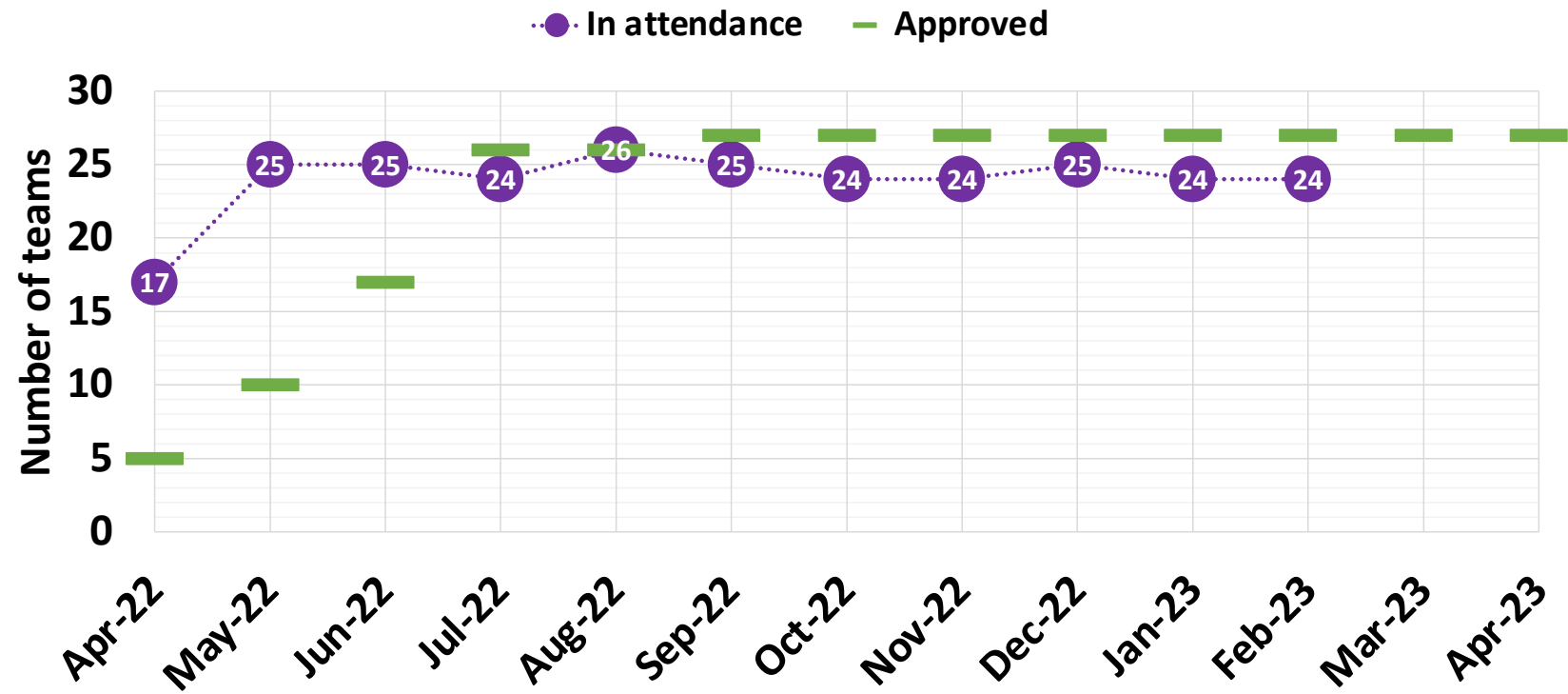
Collaborative Work Begins!

Our Teams.....

- ▶ Ascension St. Thomas Rutherford
- ▶ Ascension St. Thomas Midtown
- ▶ Bristol Regional Medical Center
- ▶ Baptist Memorial Hospital for Women
- ▶ Baptist Memorial Hospital--Tipton
- ▶ Blount Memorial Hospital
- ▶ Cumberland Medical Center
- ▶ Erlanger Health Center
- ▶ Fort Sanders Regional Medical Center
- ▶ Franklin Wood Community Hospital
- ▶ Greeneville Community Hospital
- ▶ Hardin Medical Center
- ▶ Indian Path Community Hospital
- ▶ Jackson-Madison County General Hospital
- ▶ LeConte Medical Center
- ▶ Methodist Medical Center - Oak Ridge
- ▶ Methodist LeBonheur Germantown Hospital
- ▶ Morristown Hamblen Healthcare System
- ▶ Niswonger Children's Hospital
- ▶ Parkwest Medical Center
- ▶ Regional One Health
- ▶ Tennova North Knoxville
- ▶ TriStar Centennial Medical Center
- ▶ TriStar Summit
- ▶ University of TN Medical Center Knoxville
- ▶ Vanderbilt University Medical Center
- ▶ Vanderbilt Wilson County Hospital
- ▶ West TN Healthcare - Dyersburg



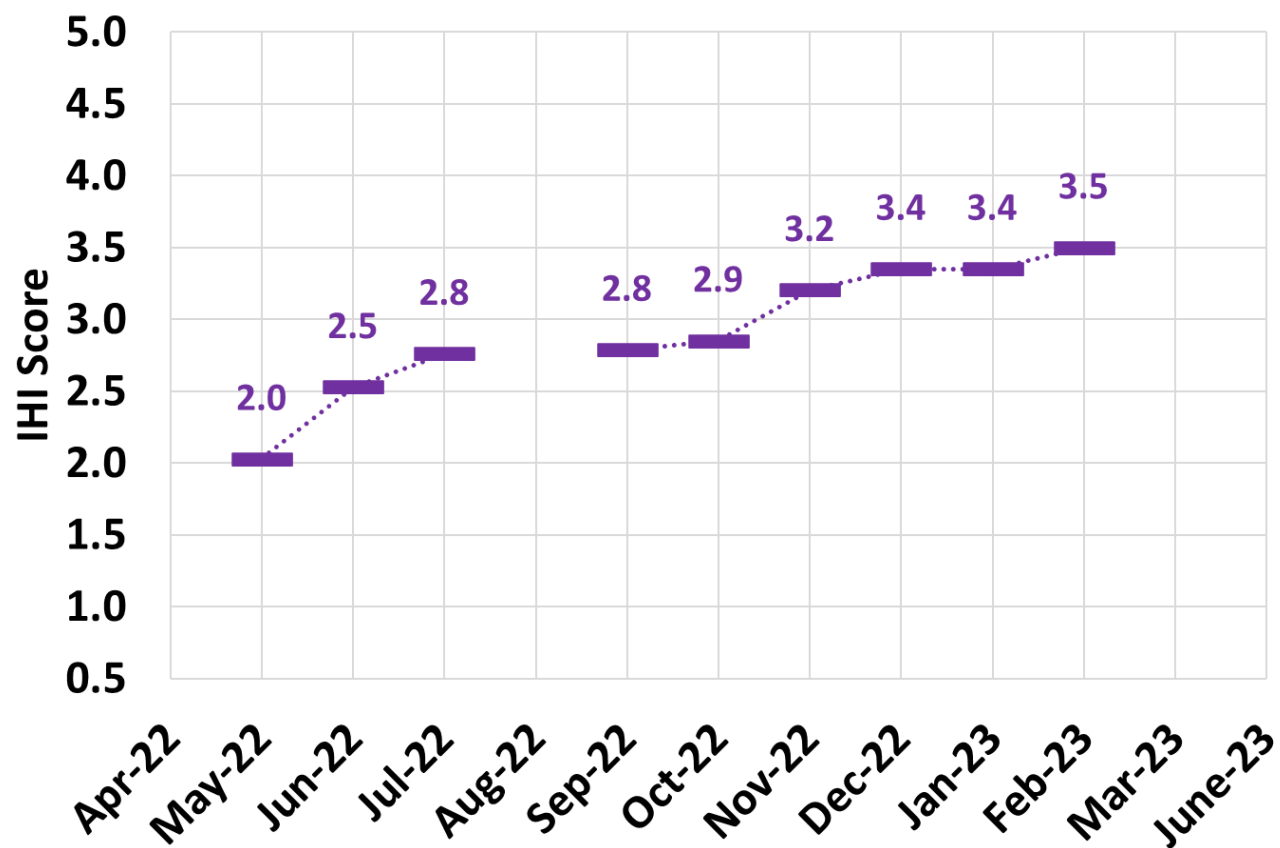
Monthly Huddle ATTENDANCE



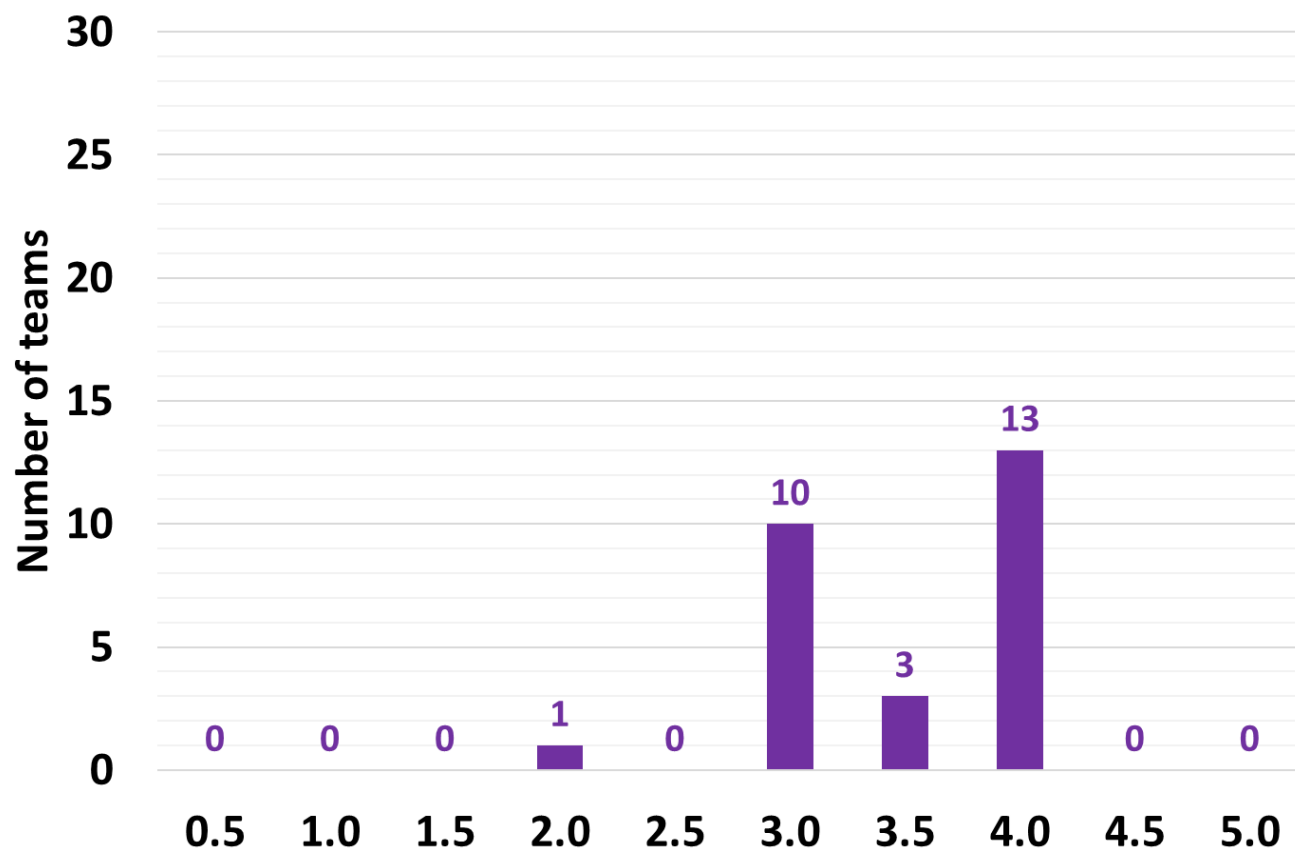
Monthly LEADERSHIP REPORTS



AVERAGE IHI SCORES

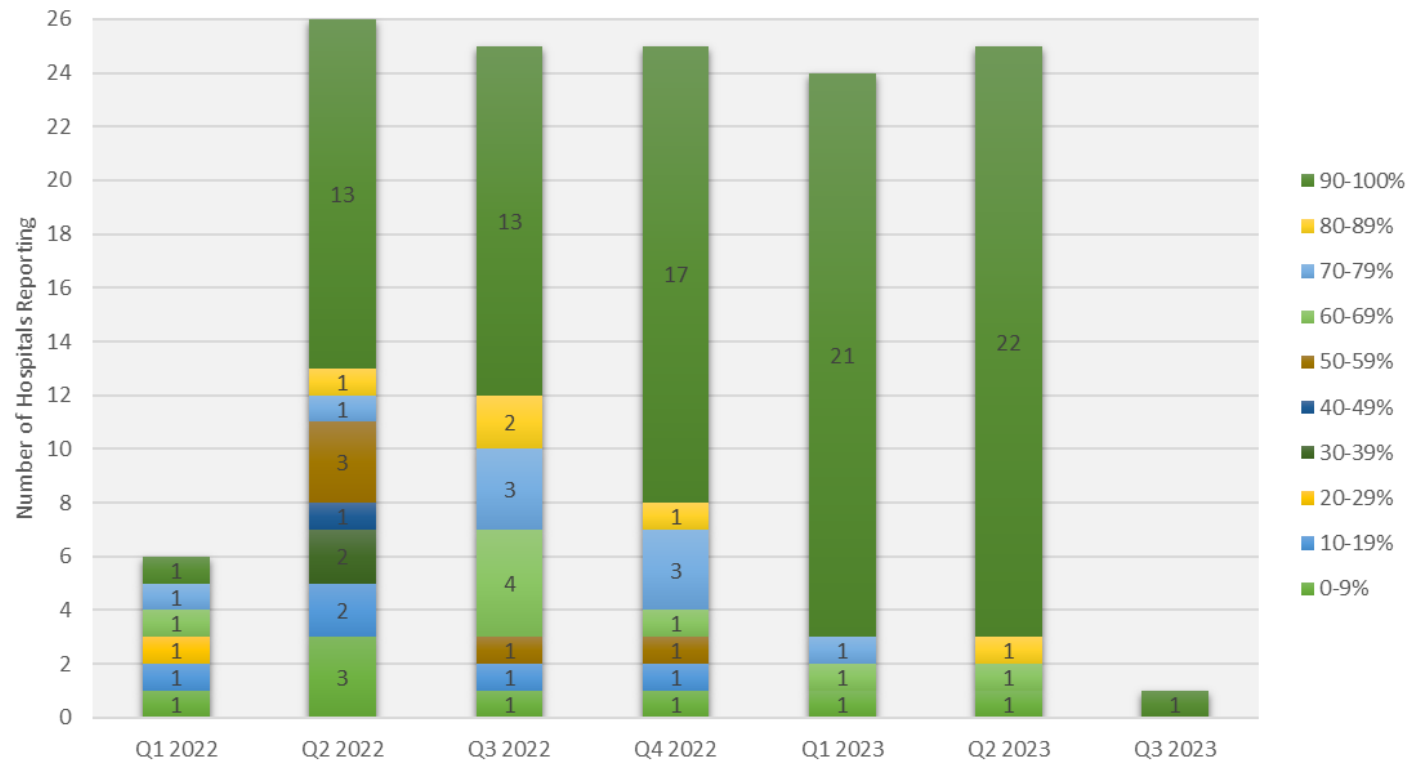


CURRENT IHI SCORES

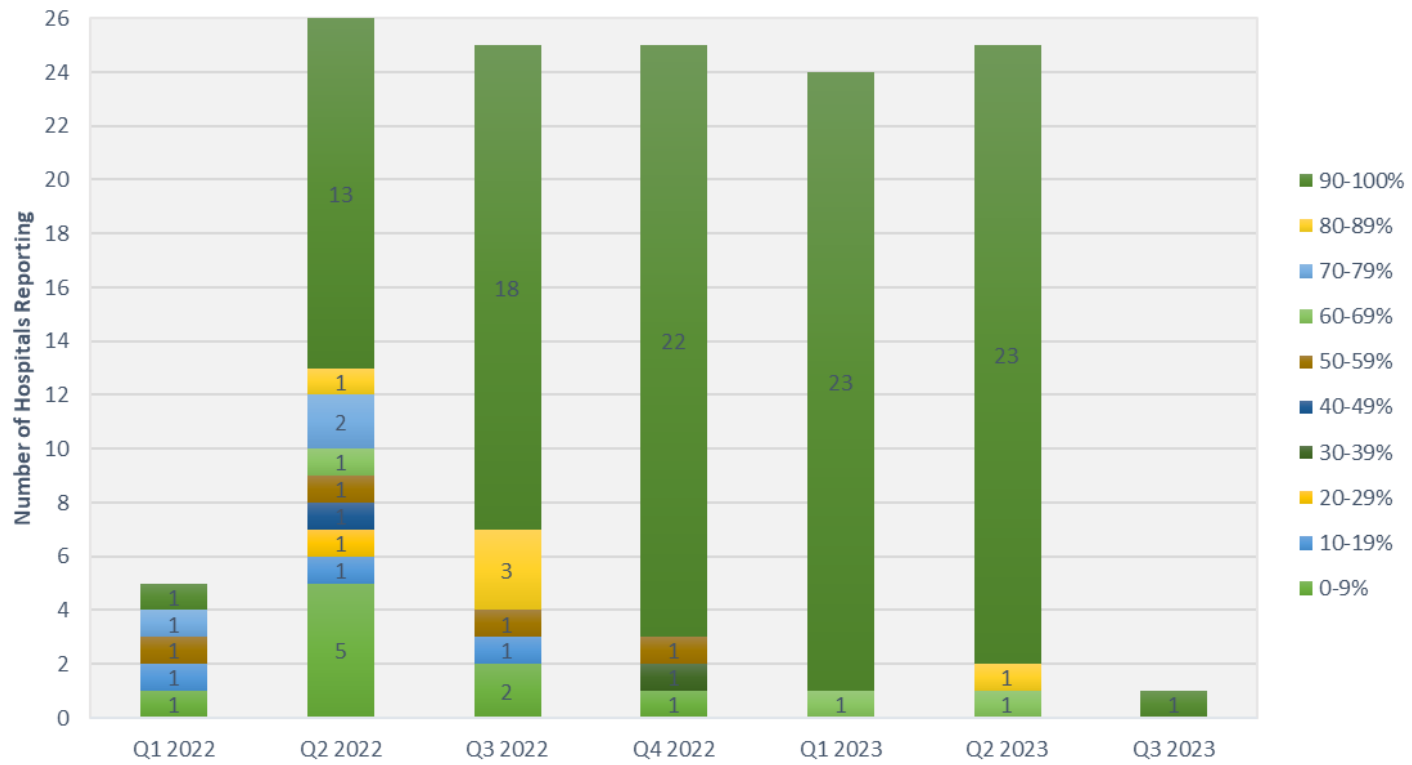


Structure Measure	Completion % (Count)
S1. Parent Engagement & Education	88% (23/26)
S2. Policy & Procedure	69% (18/26)
S3. Flow Chart	69% (18/26)
S4. EMR Integration	100% (26)
S5. Reporting of Performance	100% (26)

Process Measure - Provider Education



Process Measure - Nurse Education





Process Measure: Cord Clamping Documentation

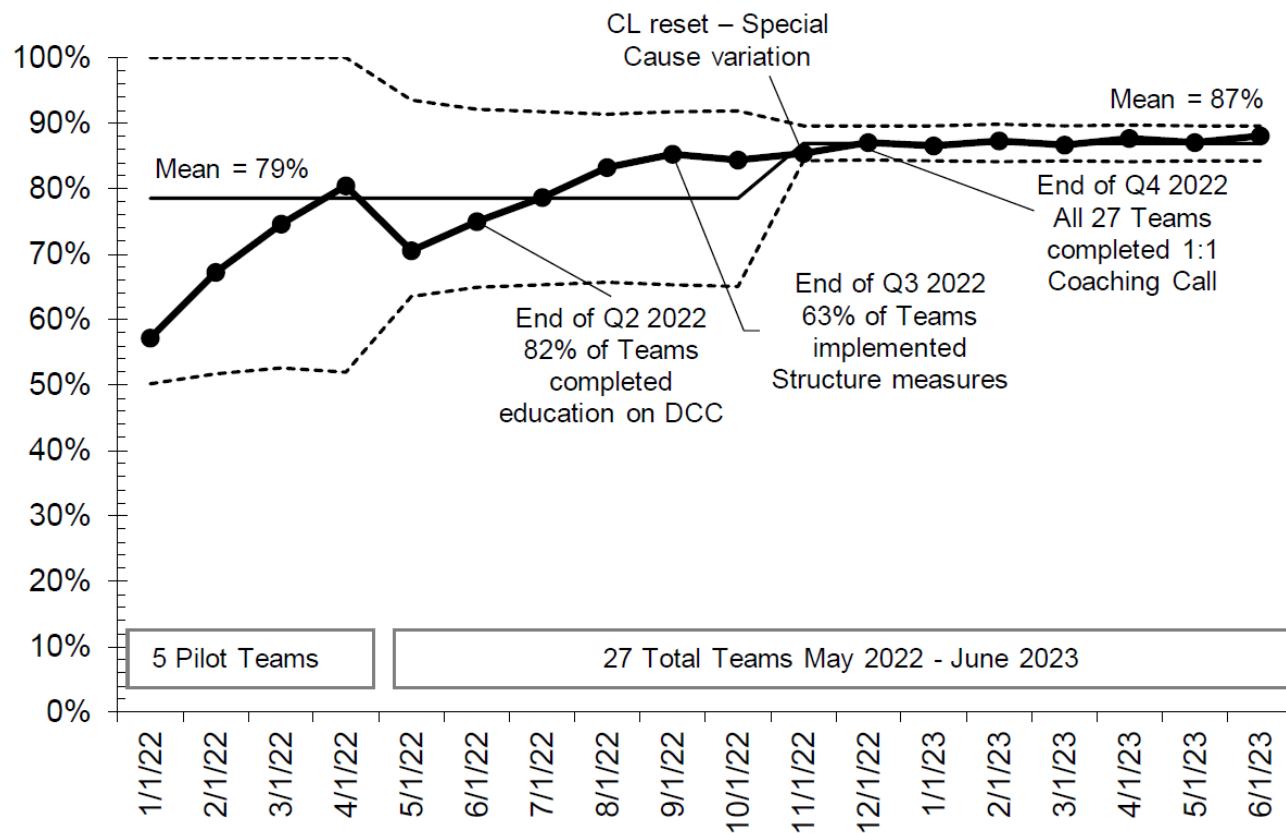


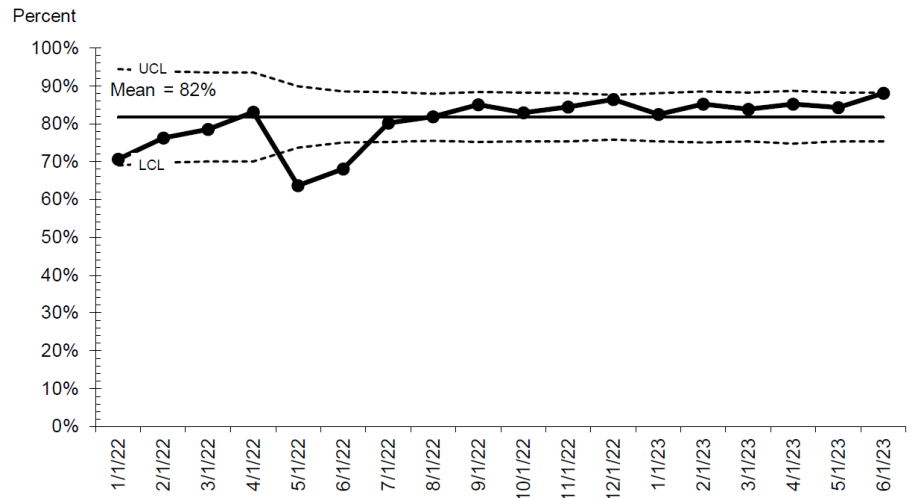
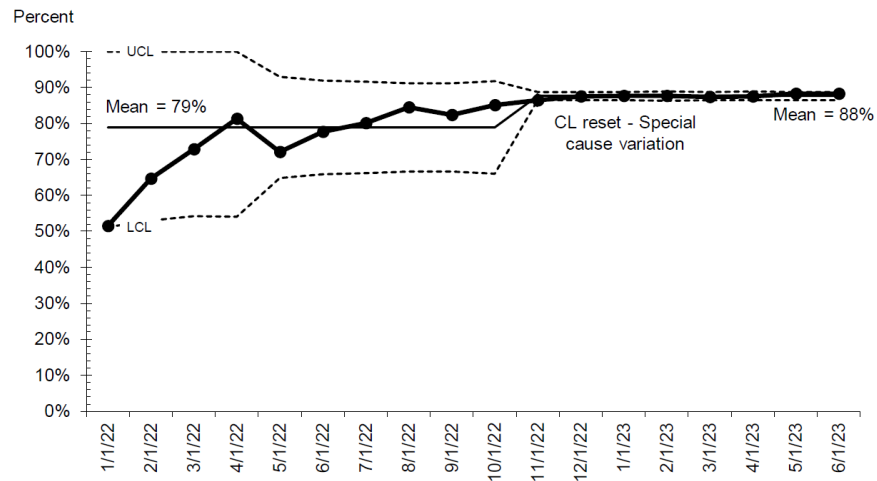
Cord Clamping Documentation in Charts

EMR Integration Structure Measure (documentation of cord clamping in hospital EMR)

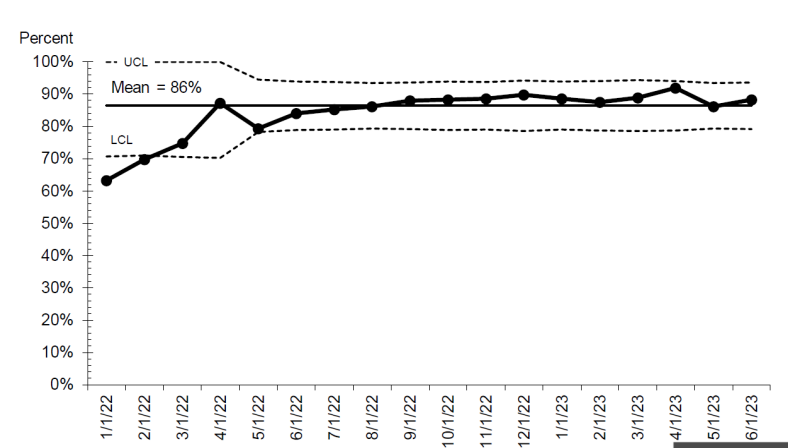
- Was delayed cord clamping performed? (Y/N)
- If No, Why not? (provide list of reasons, including contraindications; check all that apply)
- If Y, Second delayed (from birth)



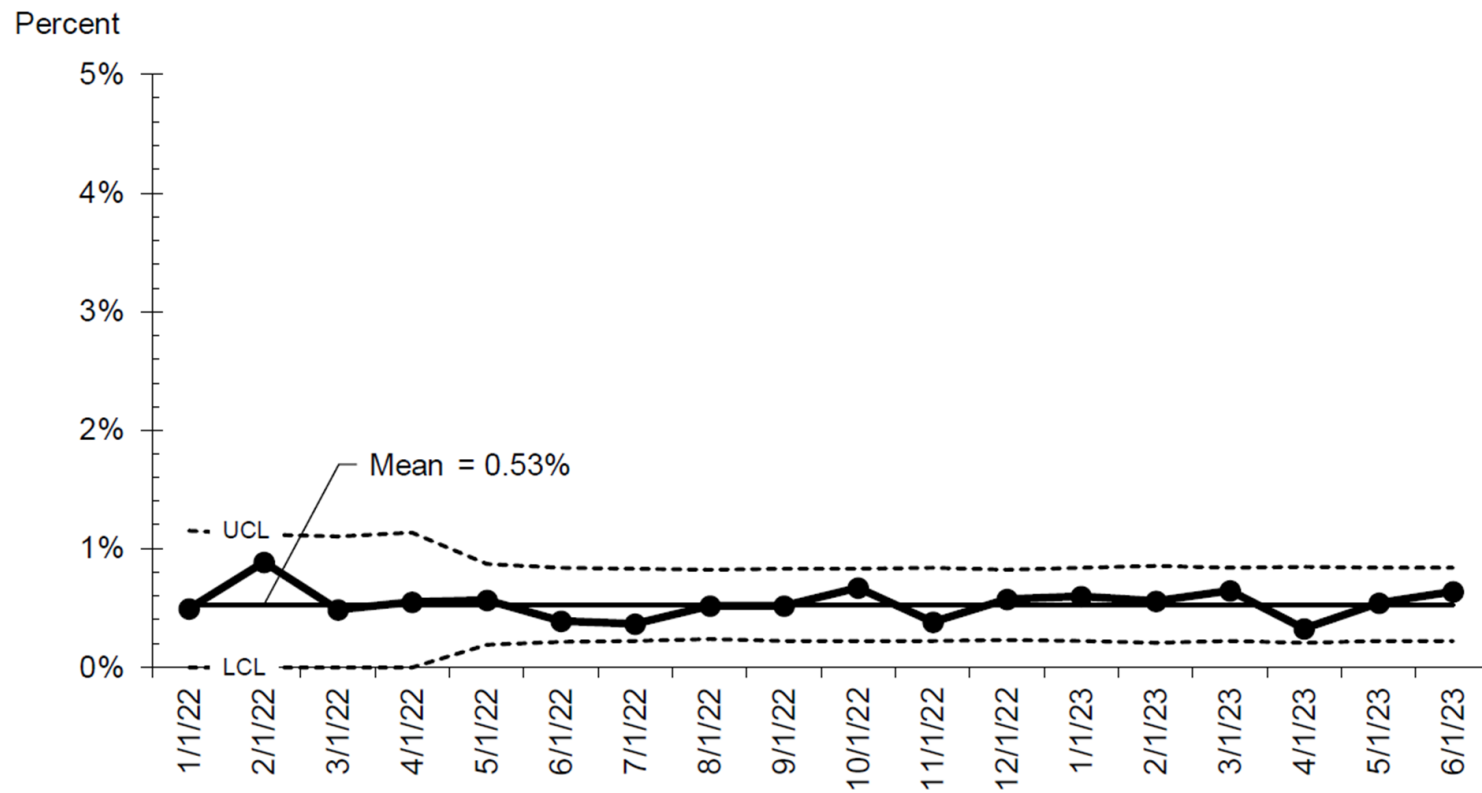




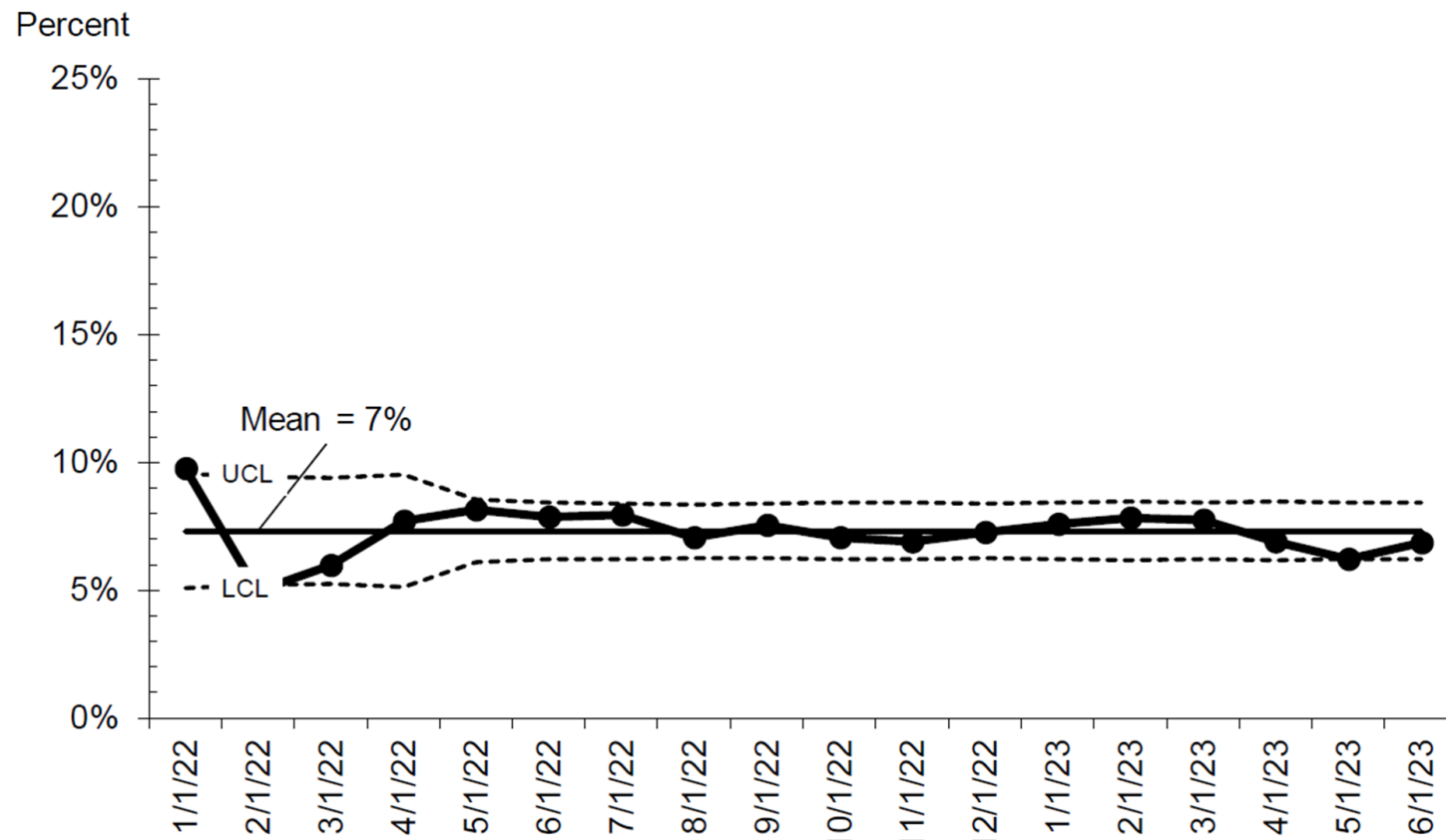
All Cord Clamping by Race & Ethnicity

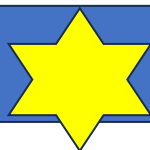


Balancing Measure: % 5-minute Apgar Score ≤ 3



Balancing Measure: % Hypothermia on First Temperature





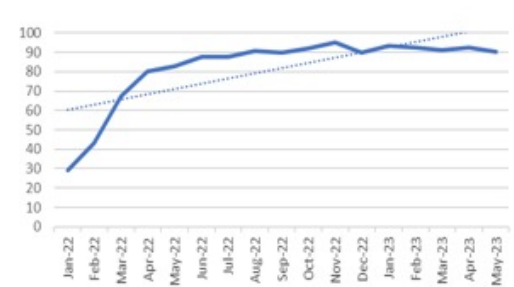
Quality Improvement Efforts



Jan 22 – May 23: 258% Increase
May 22 May 23: 72% Increase



May 22 – May 23: 35% Increase



Jan 22 – May 23: 210% Increase
May 22 May 23: 8.4% Increase

Optimal Cord Clamping

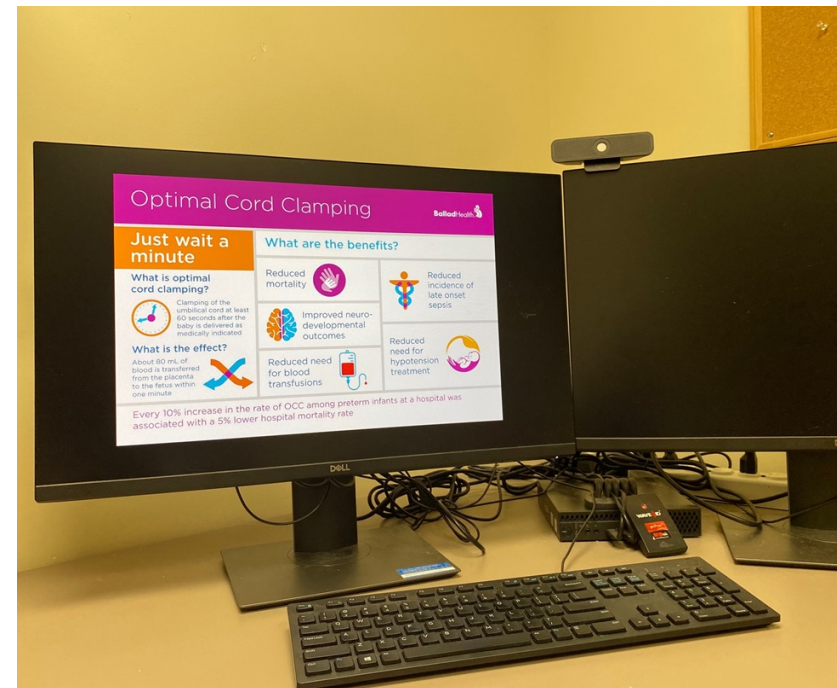
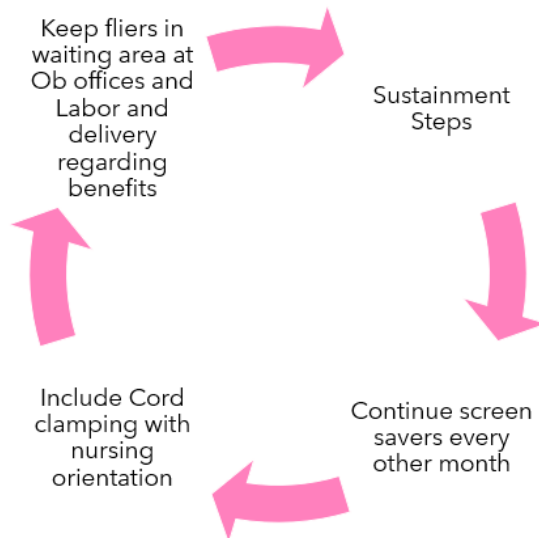


Chart it
to
Count it!

Optimal
Endorsed
by AAP and
WHO

Wait!
at least

60s

at least
60s...

then clamp

clamp

ACOG
Committee
Opinion #814

Clamping

Patient
Education



- improved transitional circulation
- better establishment of RBC volume
- decrease need for blood transfusion
- lower incidents of

at transitional
circulation
establishment of
RBC volume
decrease need for blood
transfusion

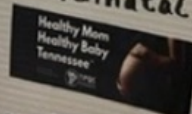
Long-term Outcome

- DCC on infants < 32 wks associated with improved motor function c. 18-22 months corrected age
- 4 yrs. of age → higher scores in social + fine motor domains



* Pre-term infants greatly benefit *

TIPQC
Podcast
All things
Perinatal



DCC



Episodes
23-33





Recognition Awards Criteria



Optimal Cord Clamping (OCC) Project

Potential FIVE STAR status



**Project
Participation**



**Project
Data**



**Data
Driven QI**



**Clinical
Change Ideas**



**Statewide
Aim**

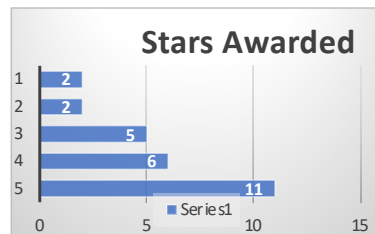


Ascension St. Thomas
Rutherford

Optimal Cord Clamping

Optimal Cord Clamping is waiting at least 60 seconds to clamp the baby's umbilical cord after birth benefitting mom and baby.

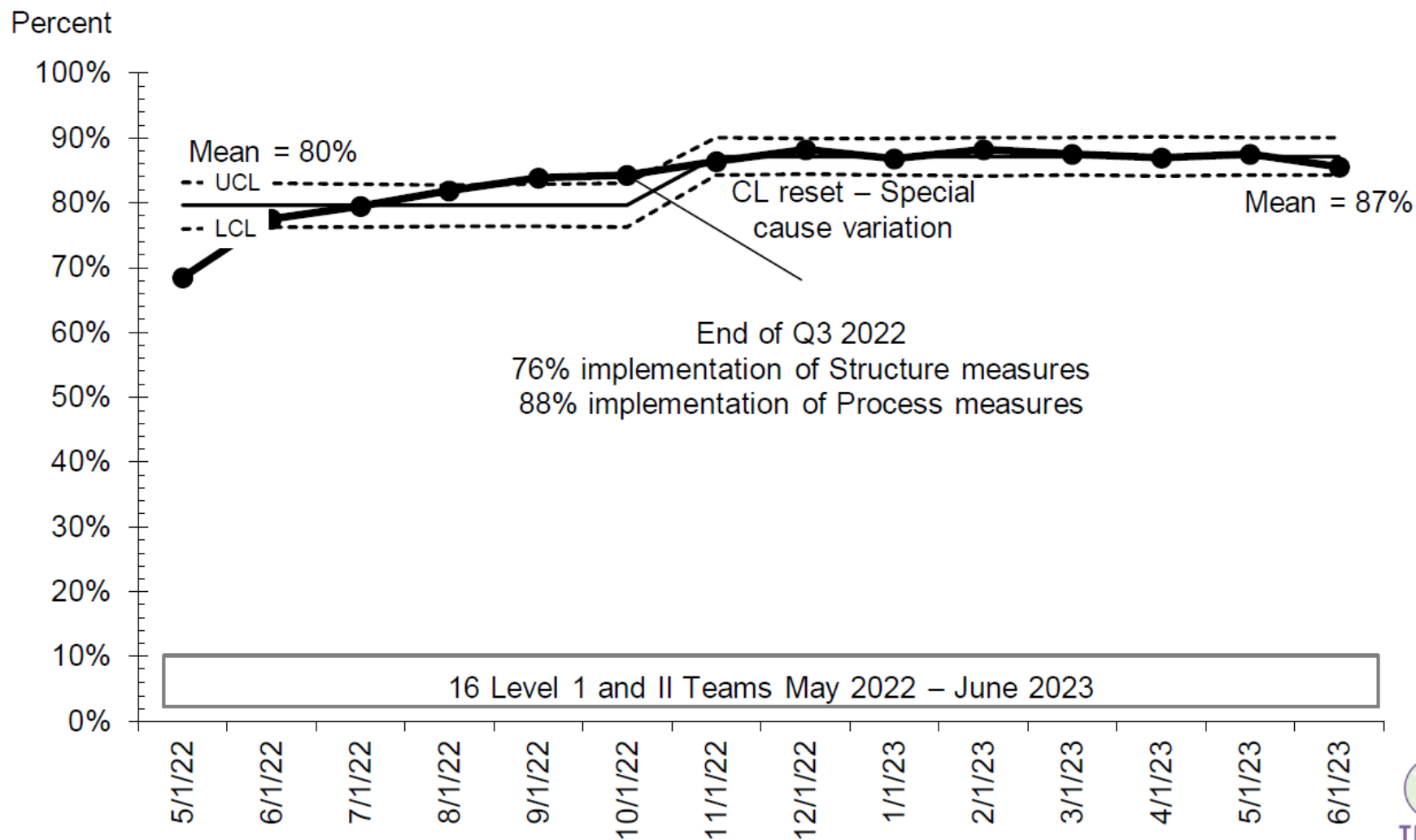
Committed to Improving the Quality of Care for Moms and Babies

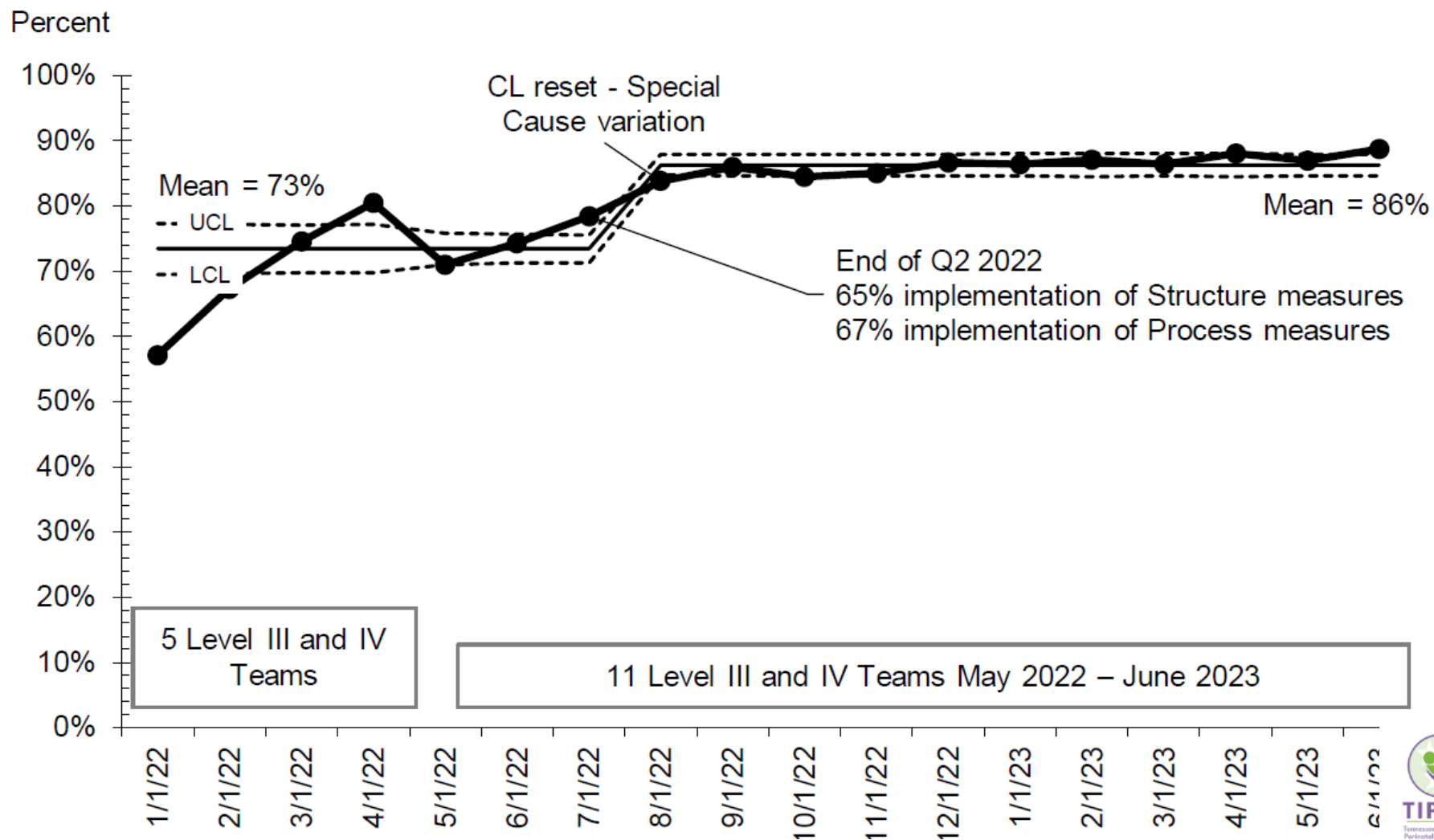


Delivery Levels

Level 1	4.2
level 2	4
level 3	4.2
level 4	3.8







How did we do?



28/27 Teams



61,642 infants
(86%)



Improvements

The Impact of the Tennessee Initiative for Perinatal Quality Care

"Optimal Cord Clamping Improvement" Project



PROBLEM

The World Health Organization has recommended that at birth, neonates receive at least 60 seconds of placentally transfused blood before the umbilical cord is clamped. This practice has been shown to have many benefits for the newborn, including reducing morbidity and mortality, improving neurodevelopment outcomes for the infant, reducing the incidence of late-onset sepsis, reducing the need for blood transfusions, and reducing the need for hypotension treatment. Despite this, low rates of delayed cord clamping occur. According to Quinn, et al,* every 10% increase in the rate of delayed cord clamping among preterm infants at a hospital was associated with a 5% lower hospital mortality rate.

ACTION

The aim of this project was to increase the percentage of infants born in participating TN delivering facilities that have their umbilical cord clamped at least 60 seconds after birth to 90% by May 2023.

The project was launched by five (5) pilot teams in January 2022. Detailed educational instruction occurred at TIPQC's Annual Conference and the project was made available in May 2022. An additional 22 hospitals joined and all 27 have remained active. The participating hospitals were provided a toolkit, QI education, data collection tools, content education from nationally recognized experts, and a road map for implementation. Teams participated in monthly huddles, quarterly learning sessions, and annual state-wide meetings, as well as coaching calls from TIPQC. Based on their current practice, these teams implemented evidence-based procedures, protocols, and potentially best practices.

Monthly outcome measures captured by each facility included: all livebirths, infants who had their cord clamped after 60s, and race. Balancing measures included: 5-minute Apgar and first temperature. Monthly data capture began in January 2022 for the pilot teams and in May 2022 for the non-pilot teams. Data was shared in aggregate and by facility to evaluate current practices and opportunities for improvement.

EXPLANATION OF IMPACT

As shown in Figure 1, (January 2022 – June 2023) the average number of infants receiving delayed cord clamping at 60 seconds or longer increased from a mean percentage of 82% to 88% upon completion of the project. Data collection was conducted by five pilot teams from January 2022 to April 2022, and an additional 22 teams joined the project in May 2022, bringing the total number of teams to 27.

During the project, 61,642 infants, representing 83% of the live births in the participating hospitals, received cord clamping ≥ 60 seconds after birth.

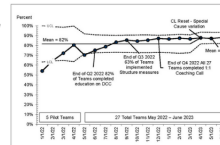


Figure 1

Upon completion of the project, provider and nurse education process measures were completed at the goal level of 90% in 88% and 92% of the participating facilities, respectively. By June 2023, 26 out of 27 (96%) of teams reported integration of DCC documentation into the EMR.

WHO WAS RESPONSIBLE

The collaborative and statewide efforts of TIPQC and the participating hospitals have all contributed to this improvement.

CONTACT

For more information, please contact Brenda Barker, TIPQC Executive Director, at brenda.barker@tipqc.org, or visit our website at www.tipqc.org.

*Quinn, et al, *Delayed Cord Clamping Uptake and Outcomes for Infants Born Very Preterm in California*, AM J Perinatology. 2022 Nov. DOI:1055/A-175-4607.

Project Statistics



83%

Infants had their umbilical cord clamped ≥60 seconds after birth

61,642

Infants impacted by this project, who received optimal cord clamping

88%

Upon completion of the project, an average of 88% of infants in participating hospitals were receiving cord clamping at 60 seconds or more after birth.

27

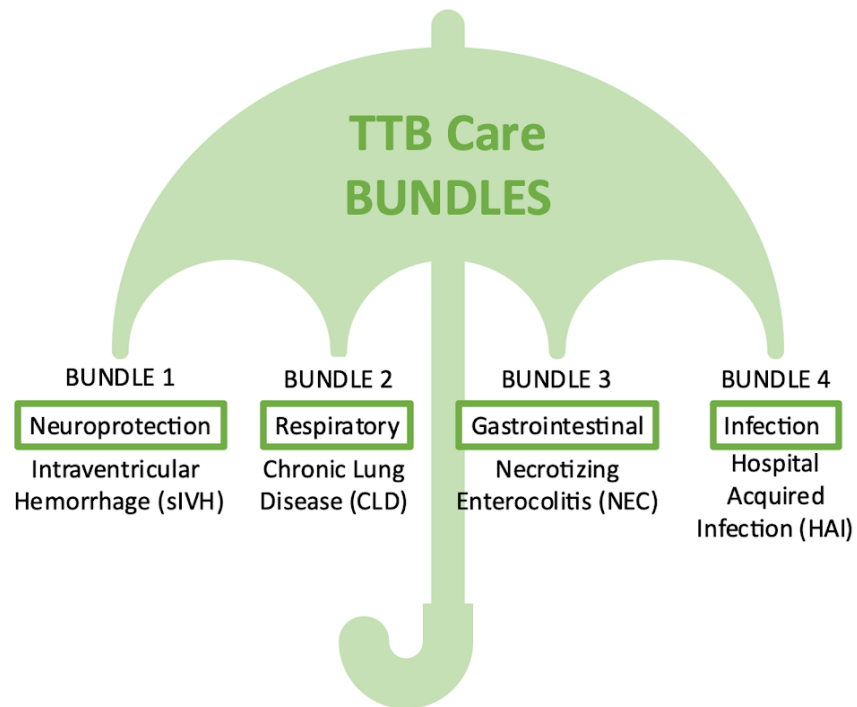
All eleven of Tennessee's Maternal Level of Care III and IV hospitals participated in the project and sixteen Maternal Level of Care I and II hospitals.



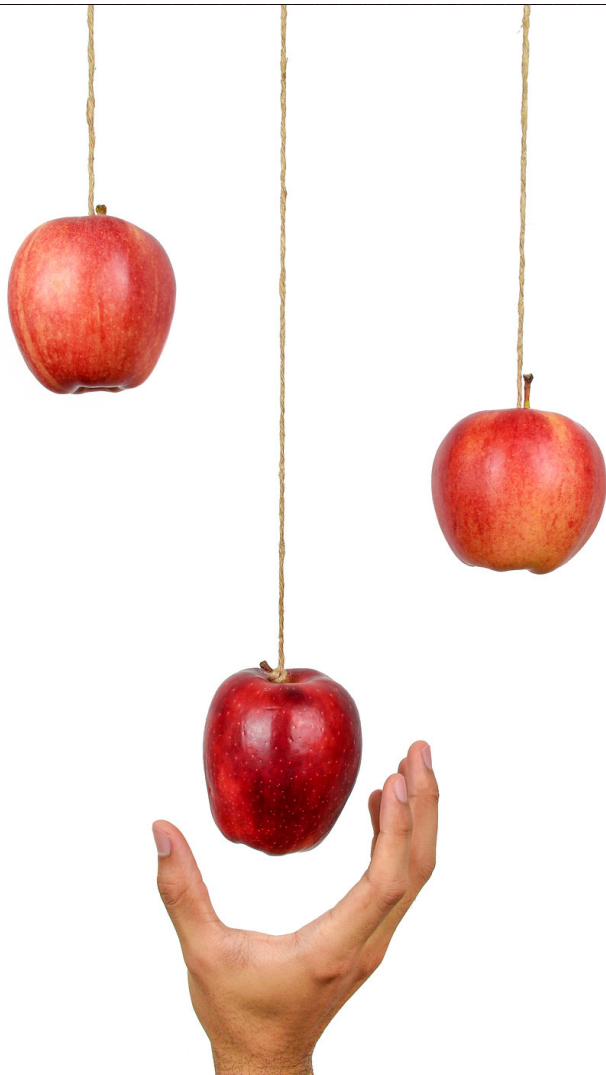


Tennessee's Tiniest Babies (TTB)

Infants born 29.6 wks or less gestation admitted to Level 3/4 TN NICU



<https://tipqc.org/occ/>



Optimal Cord Clamping

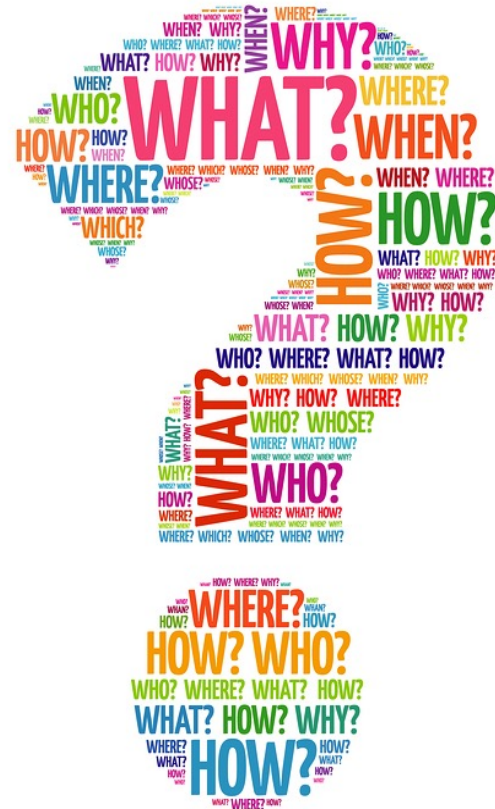
It's easy!

It's free!

It's effectiveness is proven!

There is no harm!

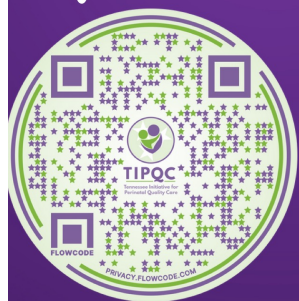
What can you do
by next Tuesday?



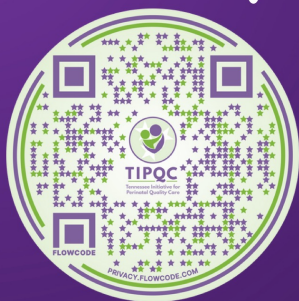


Healthy Mom Healthy Baby Tennessee

Optimal cord clamping Project



Episode 032
Dr. Howard Herrell



Episode 033
Dr. Anup Katheria



Episode 042
The Pilot Teams



Brenda.Barker@TIPQC.org



TIPQC
Tennessee Initiative for
Perinatal Quality Care

TIPQC Leadership Team



Scott Guthrie, MD
Infant Medical Director



Howard Herrell, MD
State Project Leader



Patti Scott, DNP
*Infant
Quality Improvement Specialist*



Bonnie Miller, RN, MSN
*Maternal
Quality Improvement Specialist*



Danielle Tate, MD
State Project Leader



Sharon Wadley, BSN, RN, CLS, CCRP



Brenda Barker, MBA, M Ed
Executive Director





Partners



Questions?

brenda.barker@TIPQC.org



www.tipqc.org



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Q&A

Q&A



Please feel free to **unmute** and ask questions

You may also enter comments or questions in the “chat” box



Reminders

- Hospital Shares are encouraged!
 - A great way to celebrate your successes or share your challenges
 - Fosters collaboration and builds relationships
 - Sign-up sheet will be sent out with follow up email
 - Please sign up to share:
 - on the sign-up sheet or
 - by emailing info@alpqc.org
 - We look forward to hearing from everyone!

Stay Connected!



Website:

<http://www.alpqc.org>

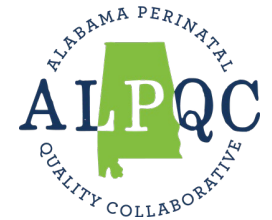
Email:

info@alpqc.org

X (Twitter): @alpqc

<https://twitter.com/alpqc>

Next Meeting



Wednesday, October 23rd at 12pm

Action Period Call Evaluation

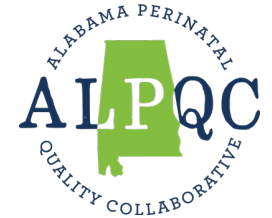


- Please scan the QR code below to receive the evaluation link for this Action Period call.



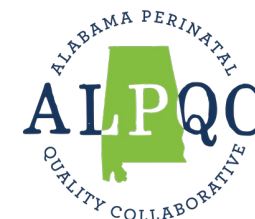
- [ALPQC - AP Call Evaluation - 2024-2025 \(qualtrics.com\)](https://qualtrics.com)

Thank you!



**Thank you for all your hard work!!
We will see you next month!**

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