2026 CPQCC Annual Impact Series

Advancing Quality Improvement Through Data, Partnership, and Innovation

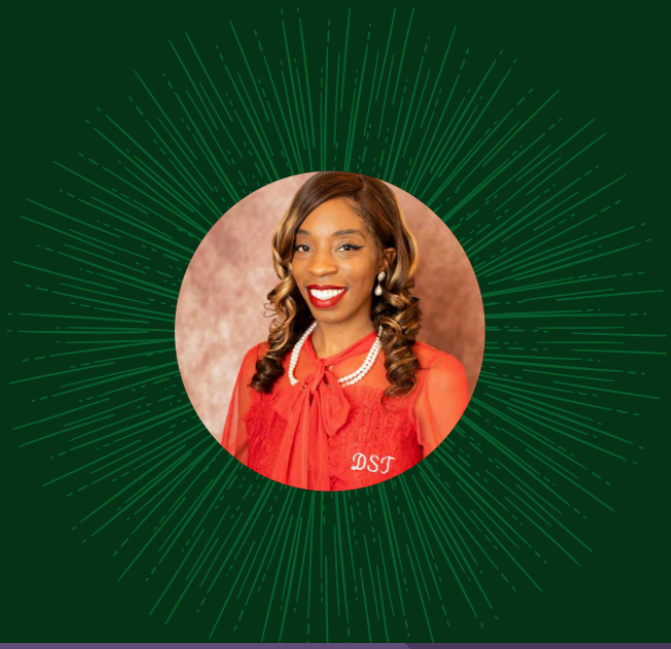
California Perinatal
Quality Care Collaborative

COMMUNITY ENGAGEMENT SPOTLIGHT

Why is respectful care important?

"In the hospital, my family and I experienced a lot of trauma, a lot of neglect, a lot of bias. Probably even some racism, too. There is a dire need for Black maternal and infant health to be increased. There is a lack of quality care and our death rates, unfortunately, are higher."

Ra'Niesha Bratton, MPH, CHES
NICU Mom, Preeclampsia Survivor &
CPQCC California NICU Family Advisory Council Member





Araya Bratton
Birth Age: 32 weeks &1 day
Current Age: 3 years

Welcome & Opening Remarks

Fulani Davis





NICU: Using Data to Improve NICU Care

Welcome

October 21, 2026 | 12:00–1:30 PM

Today: How member data, reports, site visits, and research support NICU improvement.

Today's conversation

How member data, reporting resources, site visits, and research support NICU care

1. **NICU Family Story & Welcome**
   12:00 | FAC Member, Fulani Davis
2. **NICU Data Highlights & Member Contributions**
   12:10 | Fulani Davis
3. **Reports, Dashboards & Data Resources**
   12:20 | Jessica Liu
4. **MOMMS NICU Site Visits: Preliminary Observations**
   12:40 | Audrey Buckland
5. **Research, Publications & Emerging Findings**
   12:55 | Jessica Liu
6. **Panel Discussion & Audience Q&A**
   1:05 | All panelists

We'll reserve the final 25 minutes for panel discussion and audience questions.

Today's speakers & panelists

NICU: Using Data to Improve NICU Care



Fulani Davis

Presenter & Panelist
CPQCC



Jessica Liu

Presenter & Panelist
CPQCC



Audrey Buckland

Presenter & Panelist
CPQCC



Ra'Niesha Bratton

Special Guest
NICU Family Advisory Council Member
CPQCC

Co-host / slide moderator: Marci Treadwell

Before we begin

A few quick logistics

Questions

Please use the Q&A feature. We'll hold time for discussion at the end.

Recording & materials

Presentation materials and resources will be available through the Annual Impact Series webpage.

Contact hours

Attend the full live session and complete the evaluation to receive continuing education (CE) credit

Thank you for being here — and for the work you do every day to support mothers, babies, families, and communities.

Continuing Education Information

MCCPOP
Mid-Coastal California
Perinatal Outreach Program

- If you attend as a team, please contact contactmccpop@stanford.edu to request the group sign-in form. The form must be reviewed and approved by a supervisor or nurse educator.

- Attendees are eligible for contact hours through the Mid-Coastal California Perinatal Outreach Program (MCCPOP). MCCPOP is approved as a provider of continuing education by the California Board of Registered Nurses, Provider #3104. This 90-minute webinar has been approved for up to 1.5 contact hours.

- To receive contact hours, attendees must remain on the webinar for the full live session and complete the post-session evaluation. The evaluation will be available within 2-4 days following the session.



cpqcc California Perinatal Quality Care Collaborative
CMQCC California Maternal Quality Care Collaborative
Stanford MEDICINE School of Medicine
Stanford MEDICINE Children's Health

Our members are the strength of this network.

Families are at the heart of why it exists.

Data help us learn, improve, and move forward together.

BABIES AND FAMILIES REMAIN AT THE CENTER

NICU Data Highlights & Member Contributions

Fulani Davis



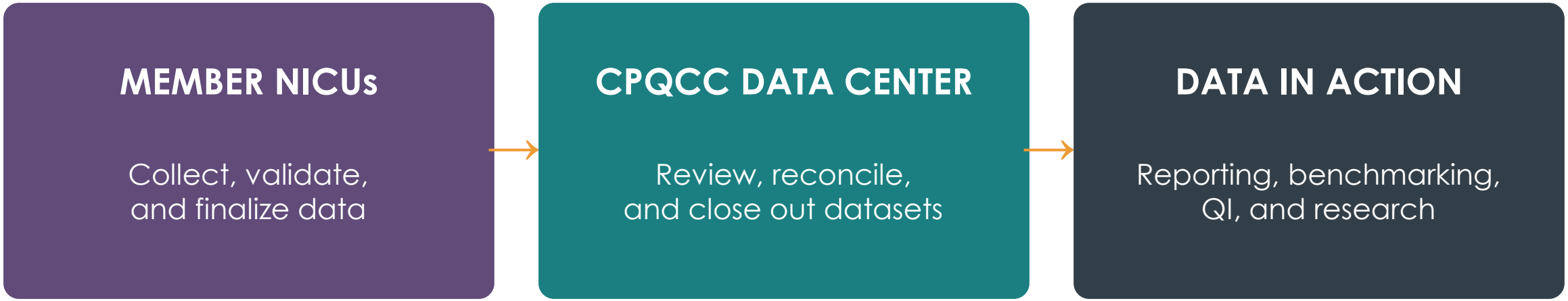
136 NICUs. One statewide network.

136

participating NICUs in 2026

86	Community
23	Regional
15	Intermediate
12	Non-CCS

From member data to meaningful impact



Reliable, complete information makes shared learning possible.

2025 closeout: A collective achievement

135 / 135

NICUs completed required finalization

112

NICUs earned at least one award

41

NICUs achieved the highest ANAD rating

49,059 NICU admissions

Listening to members: What is working

85.8%

satisfied with Help Desk support

98.3%

rated Close-out Checklist helpful

90.7%

rated CCS/ANAD Tip Sheet helpful

The survey included responses from contacts across 99 Hospitals

Member feedback: Where challenges remain

83.7%

EHR users without automatic download

45.7%

reported a submission barrier

57.9%

interested in / sought NICU EDS info

Strengthening the network, together

01

Support

Build on the Help Desk and one-on-one assistance

02

Simplify

Explain electronic submission and Data Sharing options

03

Equip

Strengthen onboarding, eligibility guidance, and report education

Next: Jessica will show how member data become practical reports and dashboards.

Reports, Dashboards & Data Resources

Jessica Liu



Putting member data to work

FOCUSBOARD

A quick view of your NICU's key measures

DASHBOARDS & METRICS

Explore performance across the network

FILTERS

Filter by year, metric, and infant population

Reports, dashboards, and data resources

CPQCC Reports: Getting the most out of your data

1. **Realtime Tracking**
   - Your center's performance and status in key metrics
   - Trends compared to the rest of the network

2. **Identify Disparities**
   - Health equity dashboard

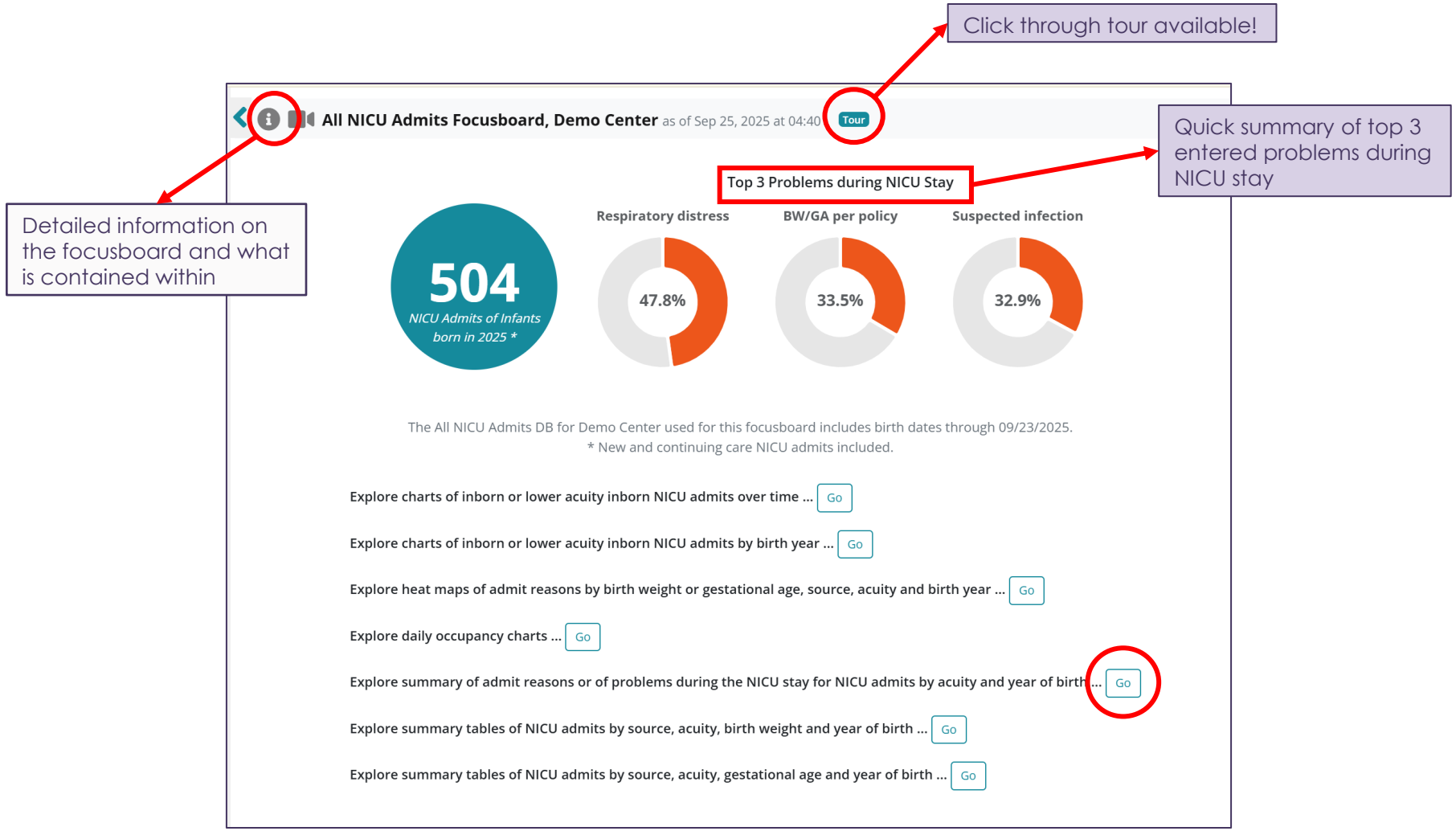
3. **Identify Opportunities for Improvement**
   - Quality indicators focusboard
   - All NICU admits dashboard

DATA IN ACTION

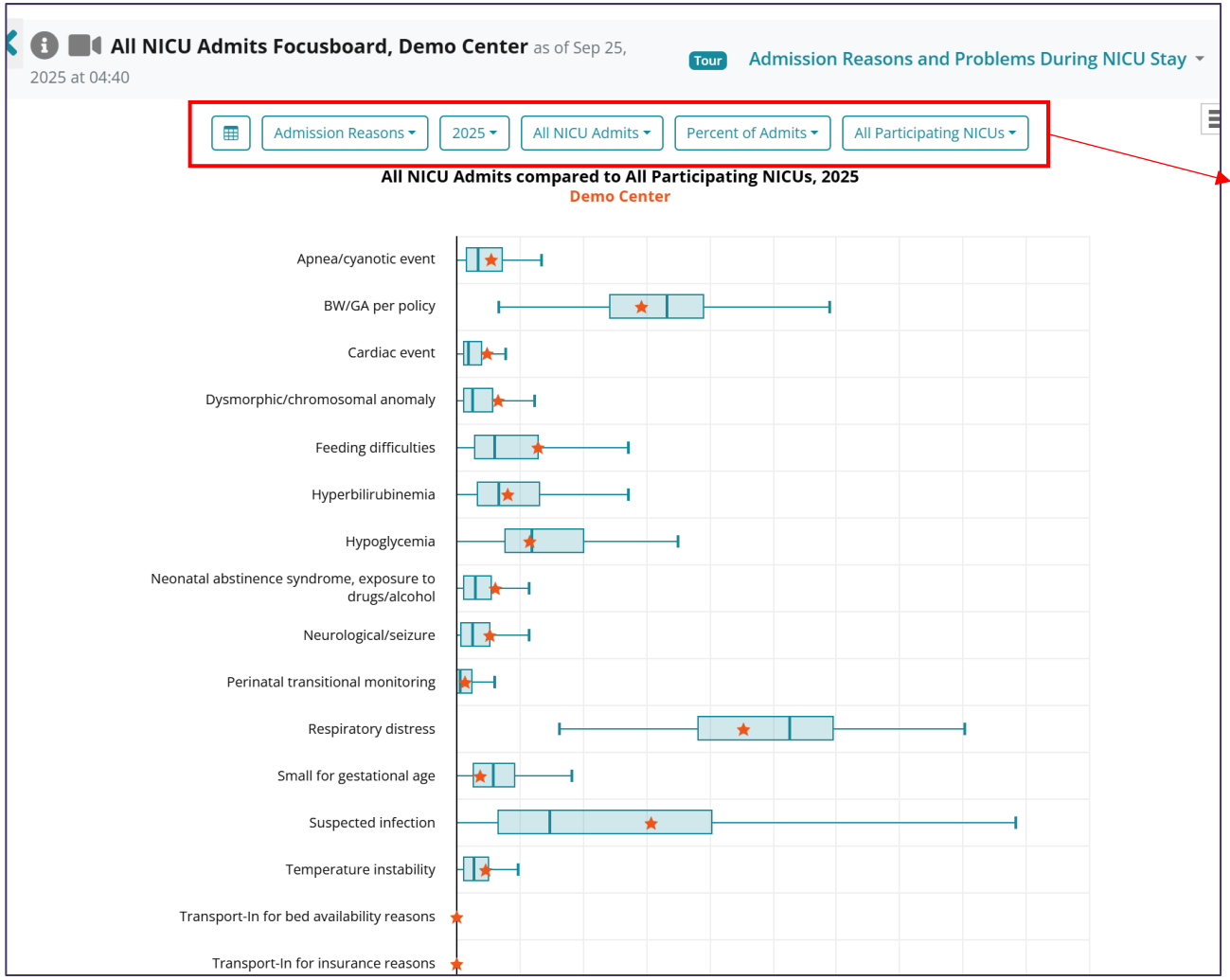
CPQCC Reports: Getting the most out of your data



Focusboard: All NICU Admits at a glance



Compare admission reasons across all NICUs



Changes the graph display by metric, year, and filters infant population, and NICUs

CPQCC Reports Live Demo

MOMMS NICU Site Visits: Preliminary Observations

Audrey Buckland





MOMMS NICU Site Visits: Preliminary Observations

Audrey Buckland, PhD MSPH

Presentation Overview

Purpose: Provide examples of how safety-net NICUs use data to improve NICU care through QI and describe the ways leadership and team conditions make it possible.

Methods: Preliminary qualitative thematic analysis of observational data from structured visits to 12 safety-net NICUs participating in a QI collaborative aimed at improving human milk feeding in the NICU.

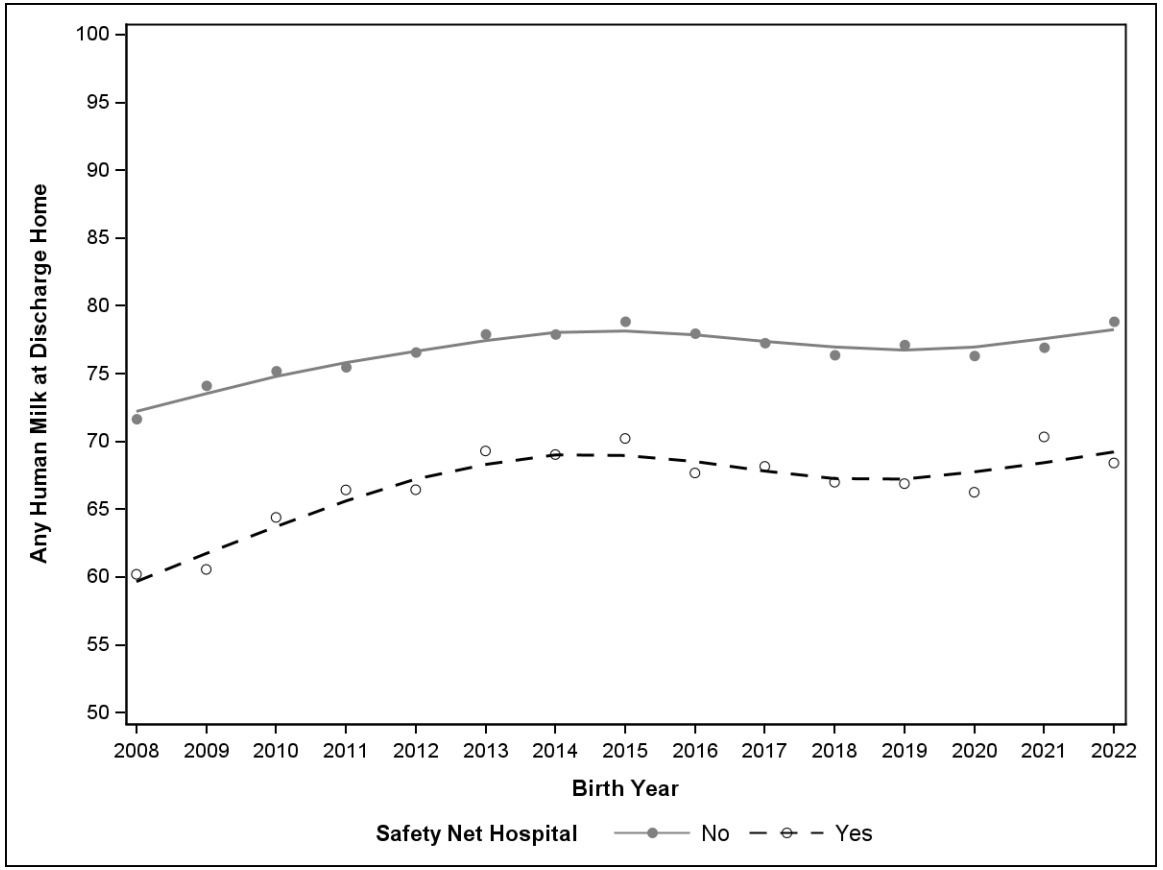
This presentation highlights themes related to enablers of strong QI and data use for QI.

Background: MOMMS QI Collaborative

- In 2024, CPQCC launched the Motivating and Optimizing Maternal Milk in Safety Net NICUs (MOMMS) QI collaborative.
- 48 CPQCC member NICUs were classified as safety-net[1] NICUs and invited to join the collaborative at no cost.
- 25 safety-net NICUs registered to participate in the collaborative.

[1]Defined as those serving >66% Medi-Cal patients and >15 VLBW infants annually.

Rate of Any Human Milk at Discharge Home



MOMMS Collaborative-Wide Aim

Increase MOMMS collaborative wide rates around human milk prior to discharge home from 67% to 75% for all eligible MOMMS VLBW infants by June 1, 2025.

Site Visit Objectives

1) Describe variation in the care environments, lactation support, and quality improvement activities across safety net NICUs.

2) Identify potential drivers of variation in quality care outcomes (e.g., process and outcome measures).

Methods: Site Visit Observations

Sampling

- 12 safety-net NICUs randomly selected from MOMMS collaborative
- Stratified by geography
  - 6 in Northern CA
  - 6 in Southern CA

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Data Collection

- Structured observation (~6 hours) at each NICU using the CPQCC Site Visit Tool
- Domains:
  - Physical environment
  - Human milk feeding support
  - Team collaboration and leadership
  - Family-centered care
  - Quality improvement capacity and activities

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Site Visit Team Members

Quality Support Faculty



Guadalupe Padilla-Robb, MD



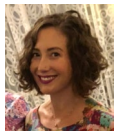
Kerri Covert, MSN RN RNC-NIC



Mindy Morris, DNP NNP-BC CNS



William Rhine, MD



Tanya Hatfield, MSN RNC-NIC

Social Scientists



Christine Morton, PhD



Audrey Buckland, PhD MSPH

Methods: Preliminary Analysis



Uploaded completed Site Visit Tools to Dedoose



Two coders applied a codebook (deductive and inductive codes)



Used thematic analysis to identify strengths and opportunities for improvement



Selected illustrative examples of strengths observed across sites

Characteristics of site visit snNICUs (n=12)

Selected characteristics	Mean	Range	SD
Average daily census[1] (n)	19.5	<10 to >30	21.6
Total live births[1] (n)	1,934	<1,000 to >3000	1,045
Preferred family language[2] (%)			
English	69	47-95	17.1
Spanish	26	5-45	16.1
Other	3.8	0.1-8	2.1
Infant race and ethnicity[2] (%)			
Non-Hispanic White	21	5-44	13.6
Hispanic	56	35-86	16.1
Black	6	0.5-18	6.8
Asian	6	0-13	4.8
Medi-Cal for L&D[3] (%)	68	57-92	10.2

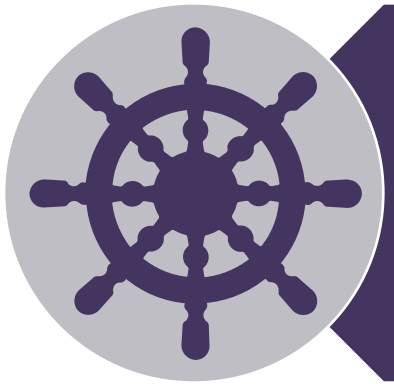
[1] 2025 CCS data
[2] Data is an average from 2023-2025
[3] 2020 data

Preliminary Observations:

Enablers of strong QI



Enablers of strong QI



Engaged NICU leadership



Team collaboration and buy-in

Engaged NICU leadership enables strong QI

Engaged and passionate about QI

- Very involved in QI initiatives
- "Showed great passion in caring and improving outcomes for their patients"
- "MD, RN, and hospital leadership fully committed"

Creative resource-seeking for QI initiatives

- MDs have applied for grants to support QI activities
- Developed community partnerships to support initiatives

Developed supportive structures for their teams

- Systems-based approach to improvement
- Active involvement in identifying barriers and bringing stakeholders together

Collaborative teams enables strong QI

Positive, collegial team culture

- Visible positive energy and pride in their work
- "Relationships appeared very comfortable and at ease"
- "Conversations felt collaborative rather than hierarchical"

Broad, well-coordinated collaboration

- Close working relationship and shared prioritization of human milk feeding across L&D, Postpartum, and NICU
- Lactation incorporated into rounds and multidisciplinary meetings
- Broad involvement in QI, including bedside staff

Shared commitment to the community served

- Sense of unity through their dedication to serve their community and a high-risk, under-resourced population



Preliminary Observations:

Data use for QI

Data use for QI

- Data are regularly reviewed
- Data and trends are shared with staff through multiple channels
- Quality is displayed and teams are celebrated
- Data drives change

Data use for QI: Data are regularly reviewed

Regular review

- CPQCC data are reviewed in monthly NICU Leadership meetings
- Routine incorporation of process and outcome metrics

NICU-OB collaboration

- NICU Educator and OB CNS: weekly review of breast milk feeding rates (collected daily)

Data use for QI: Data and trends are shared with staff through multiple channels

Team meetings

- Data dashboard reviewed at regular MOMMS team meetings
- CPQCC data presented at nursing staff meetings

Strategic information-sharing

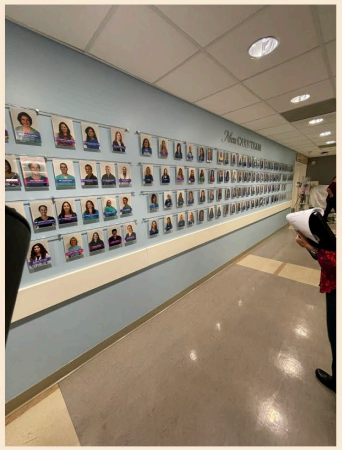
- QI Data Coordinator meets with NICU Medical Director to identify key points, then shares them with nurse mentors, who disseminate to bedside nurses

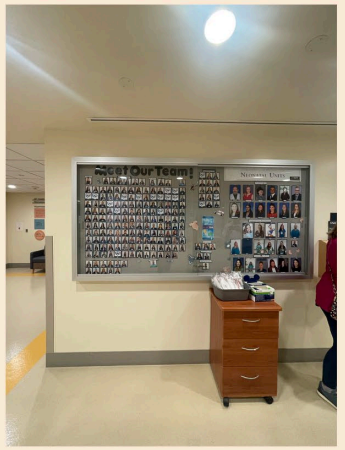
Broader dissemination

- QI posters presented at hospital research symposium

Data use for QI:
Quality is displayed and teams are celebrated

- Data display boards on the walls
- Hospital and unit quality awards
- Staff certification recognition
- Photographs of care team members







Data use for QI: Data drives change

Resource changes

- Added dedicated lactation consultant staffing for the NICU
- Hospital-grade pumps available to families

Process/protocol changes

- Colostrum expression prioritized (within 6 hours of birth)
- Breastfeeding algorithm and order sets developed to promote breastfeeding
- Lactation Time Outs integrated into NICU care

Staff-led improvement

- Bedside nurse-led QI project to decrease time to first skin-to-skin

What can I do in my NICU?

1. How can you engage leadership in data use for QI?
2. How can you review data regularly?
3. What are some ways you can display QI data and celebrate wins?

Next steps

- Completing in-depth interviews with MOMMS teams from site visit NICUs
- Continuing qualitative analysis
- Sharing aggregated findings through additional presentations
- Publishing findings in peer-reviewed journals

Acknowledgements

- **MOMMS NICUs who hosted us for a visit:** THANK YOU! We appreciate your hospitality and all the planning that went into us being there in person.

- **PI:** Jochen Profit

- **Co-investigators:** Kurlen Payton, Christine H. Morton, Janice Seto, Jessica Liu, Courtney C. Breault

- **Quality Support Faculty:** Guadalupe Padilla-Robb, William Rhine, Mindy Morris, Tanya Hatfield, Kerri Covert

Research, Publications & Emerging Findings

Jessica Liu



RESEARCH HIGHLIGHTS

Research and QI made possible by member data

01

REVEAL INEQUITIES

Population-based data help identify where outcomes differ across infants and care settings.

02

EVALUATE IMPROVEMENT

Collaborative data help examine change over time and whether gains are sustained.

Liu et al. Pediatrics. 2024;154(6):e2024066439 | doi:10.1542/peds.2024-066439

Morris et al. Pediatrics. 2025;156(6):e2024069320 | doi:10.1542/peds.2024-069320

STUDY 01 / HEALTH EQUITY

Statewide progress—with important gaps

Liu et al. · Pediatrics (2025) · CPQCC VLBW births/admissions, 2008–2021

66,786

unique infants

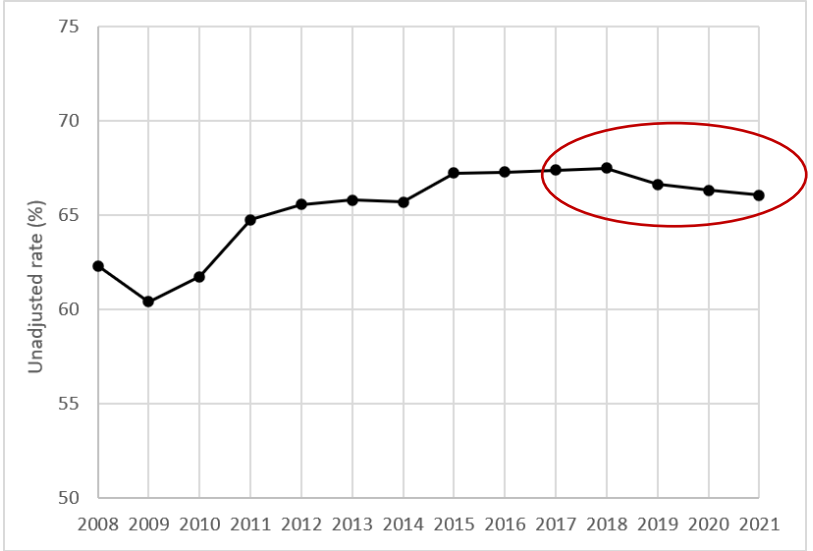
146 California NICUs

2017

improvement plateaued

62.2% → 66.1%

survival without major morbidity





Disparities in Survival Without Major Morbidity Among Very Low Birth Weight Infants in California

Jessica Liu, MPH, PhD,[a,b] Jochen Profit, MD, MPH,[a,b] Susan R. Hintz, MD, MS,[a,b] Jeffrey B. Gould, MD, MPH,[a,b] Elliott K. Main, MD,[c] Henry C. Lee, MD[b,d]

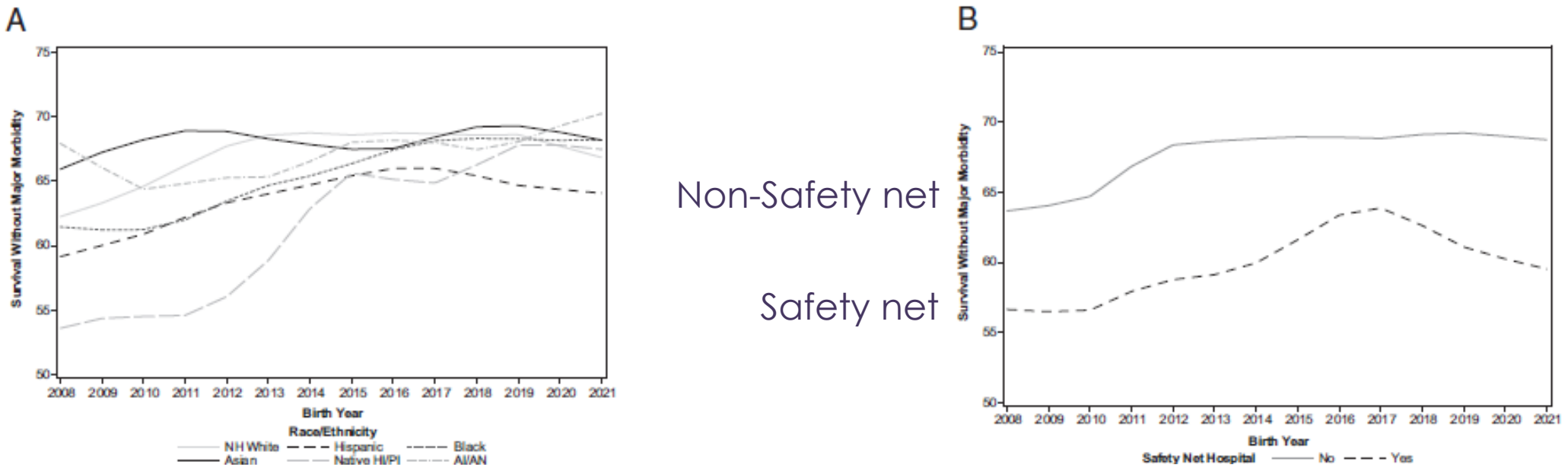
abstract

BACKGROUND AND OBJECTIVES: Very low birth weight infants in the NICU are more susceptible to adverse outcomes. We recently described improving survival without major morbidity among

Source: Liu J, et al. Pediatrics. 2024;154(6):e2024066439. doi:10.1542/peds.2024-066439

STUDY 01 / WHAT THE DATA REVEAL

The statewide average masks disparities



- Significant disparities found in improvement
- Safety net NICUs consistently lower

Source: Liu J, et al. Pediatrics. 2024;154(6):e2024066439. doi:10.1542/peds.2024-066439

STUDY 02 / QUALITY IMPROVEMENT

Improvement through collaboration

Morris et al. · Pediatrics (2025)



Improving and Sustaining VLBW Infant Growth Through a Quality Collaborative in California

Mindy Morris, DNP,[1] Xin Cui, PhD, MPH,[1,2] Courtney Breault, RN, MS,[1,2] Jae H. Kim, MD, PhD,[3] Maria C. Hetherton, RD, CSP, CSPCC,[4] Jenny Quinn, PhD,[5] Jochen Profit, MD, MPH,[1,2] Kurlen S.E. Payton, MD[1,6]

22

participating NICUs

2018–2020 collaborative

7,856

VLBW infants

78-month analysis

45% → 37.6%

growth restriction at discharge

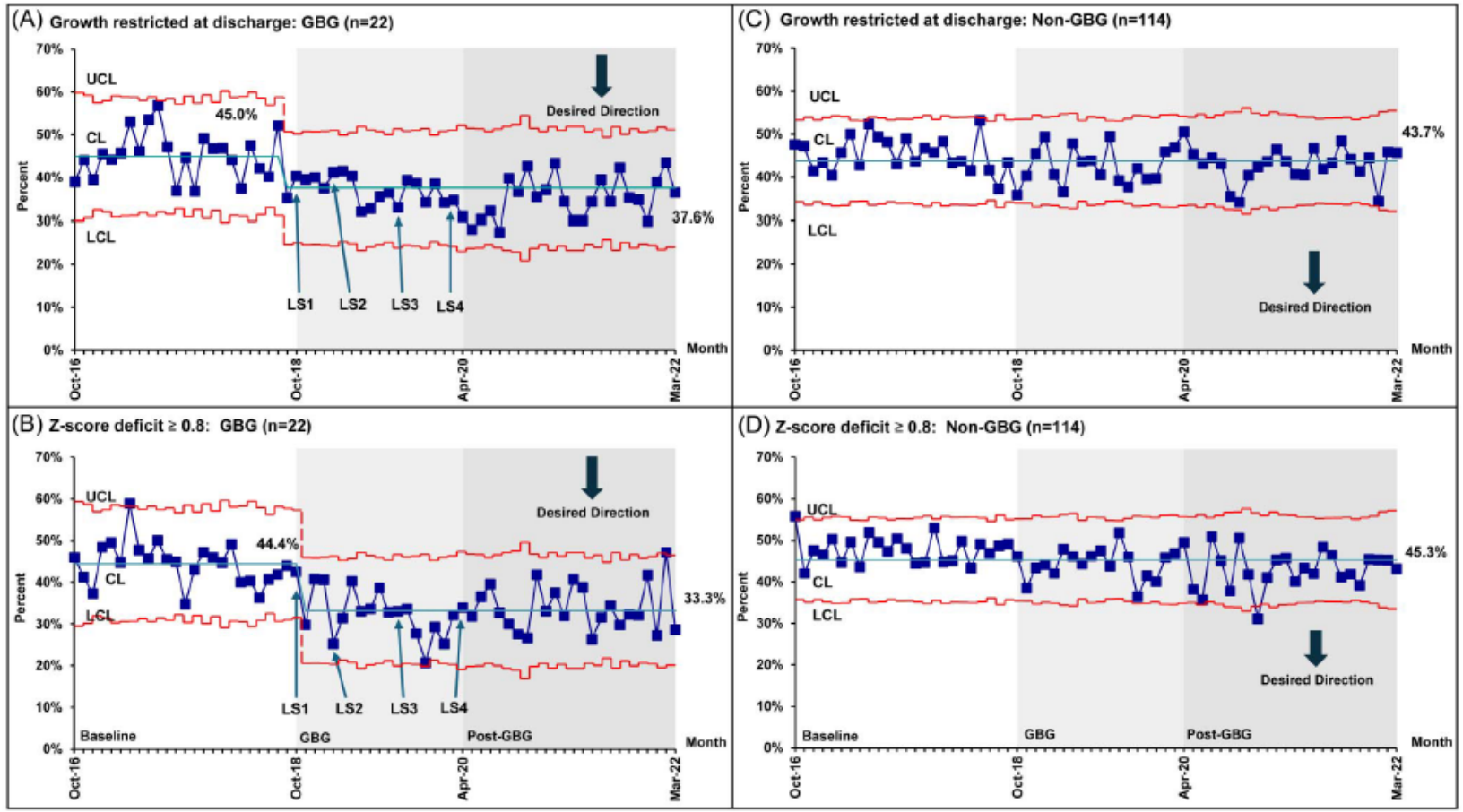
weight <10th percentile at discharge

- Improvements were sustained 24 months after the collaborative
- No improvement seen in non-participants
- Improvement in nutrition rounds and adherence to nutrition guidelines

Source: Morris M, et al. Pediatrics. 2025;156(6):e2024069320. doi:10.1542/peds.2024-069320

STUDY 02 / QUALITY IMPROVEMENT

Gains in participating NICUs held after the collaborative



Source: Morris M, et al. Pediatrics. 2025;156(6):e2024069320. doi:10.1542/peds.2024-069320

TAKEAWAYS / REFERENCES

From data contribution to learning

Qualitative observations and quantitative studies offer complementary perspectives

01 REVEAL Reveal outcome differences across groups and care settings.

02 IMPROVE Run PDSA cycles and evaluate improvement over time.

03 MONITOR Monitor outcomes, balancing measures, and generate new questions.

Liu et al. Pediatrics. 2024;154(6):e2024066439 • doi:10.1542/peds.2024-066439
Morris et al. Pediatrics. 2025;156(6):e2024069320 • doi:10.1542/peds.2024-069320

From data to impact, together

1

Families

Babies and families stay at the center of improvement

2

Member data

Member NICU contributions build a reliable statewide resource

3

Reports

Focusboard and dashboards help teams explore performance

4

Site visits

Engaged leadership and teamwork support strong QI

5

Research

Member data drives research on disparities and infant growth

Behind every data point is a baby and a family.

Panel Discussion & Audience Q&A



Panel discussion & audience Q&A

What questions are coming up about NICU data, reports and dashboards, site-visit findings, or research?

Please continue submitting questions through the Q&A.

Before you go

Complete the evaluation

Your feedback helps us improve future sessions. Please scan the QR code below.

Contact hours

Attend the full live session and complete the evaluation to receive credit.

Please reference the continuing education information for more details.

Recording & slides

Materials will be posted on the Annual Impact Series webpage.

Thank you for taking a few minutes to share your feedback.

Next in the series

JOIN US NEXT WEDNESDAY

OCTOBER 28, 2026

HRIF:

Data and Reports Beyond the NICU

12:00–1:30 PM PT

Follow-up outcomes, family-centered care, and long-term impact

Thank you

for joining us today

We appreciate the work you do across the CPQCC community and look forward to continuing the conversation next week.

