

# SOOTHE

Supporting **Optimal Outcomes**  
Through a **Healing Environment**



## FPQC SOOTHE Initiative

*QI DATA TOOLS AND PROCESSES 10/29/2025*



# WELCOME!



Please mute yourself



If you have a question, please enter it in the chat or raise your hand (Reactions)



This webinar is being recorded

# Meet the Data Team



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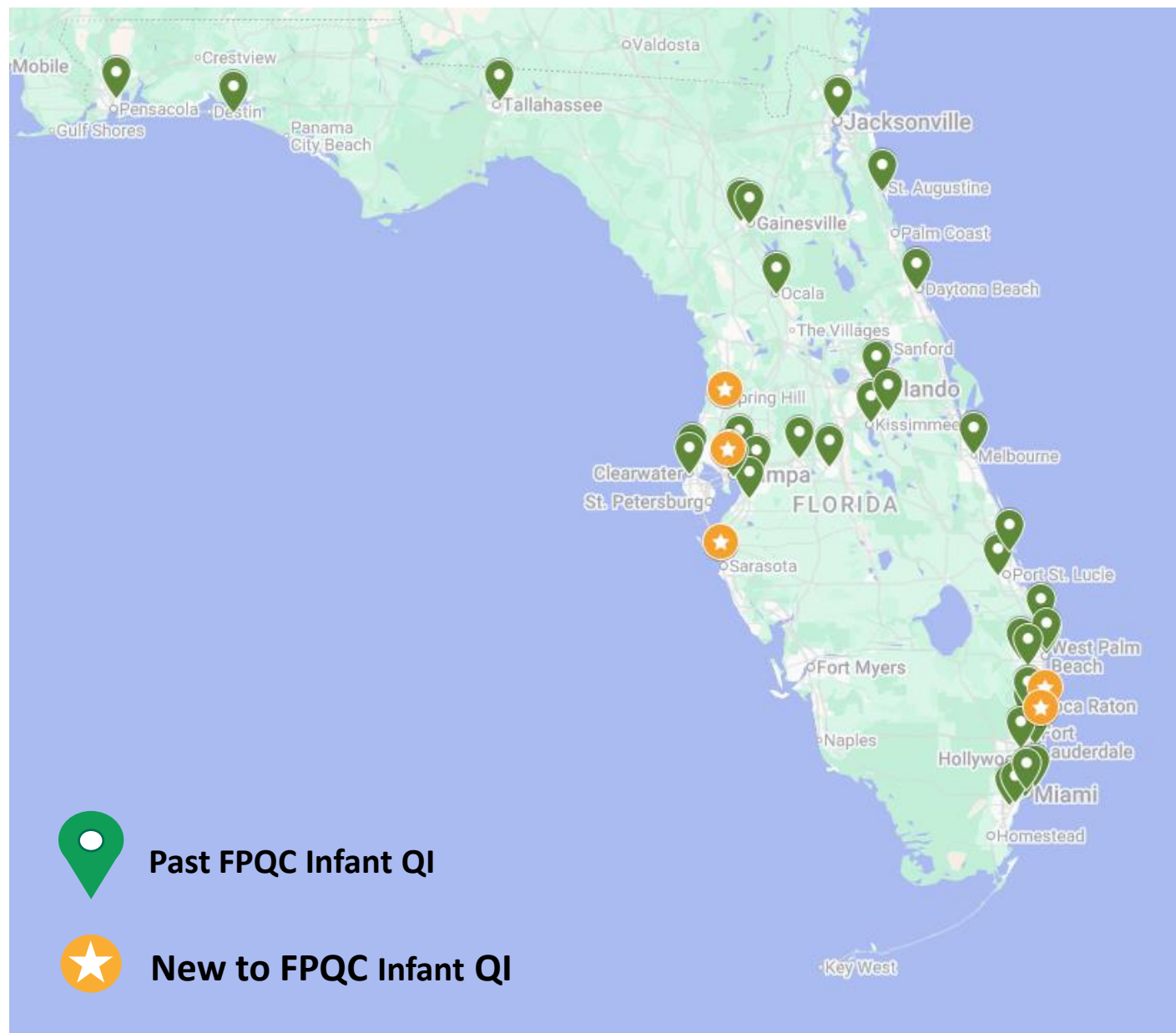
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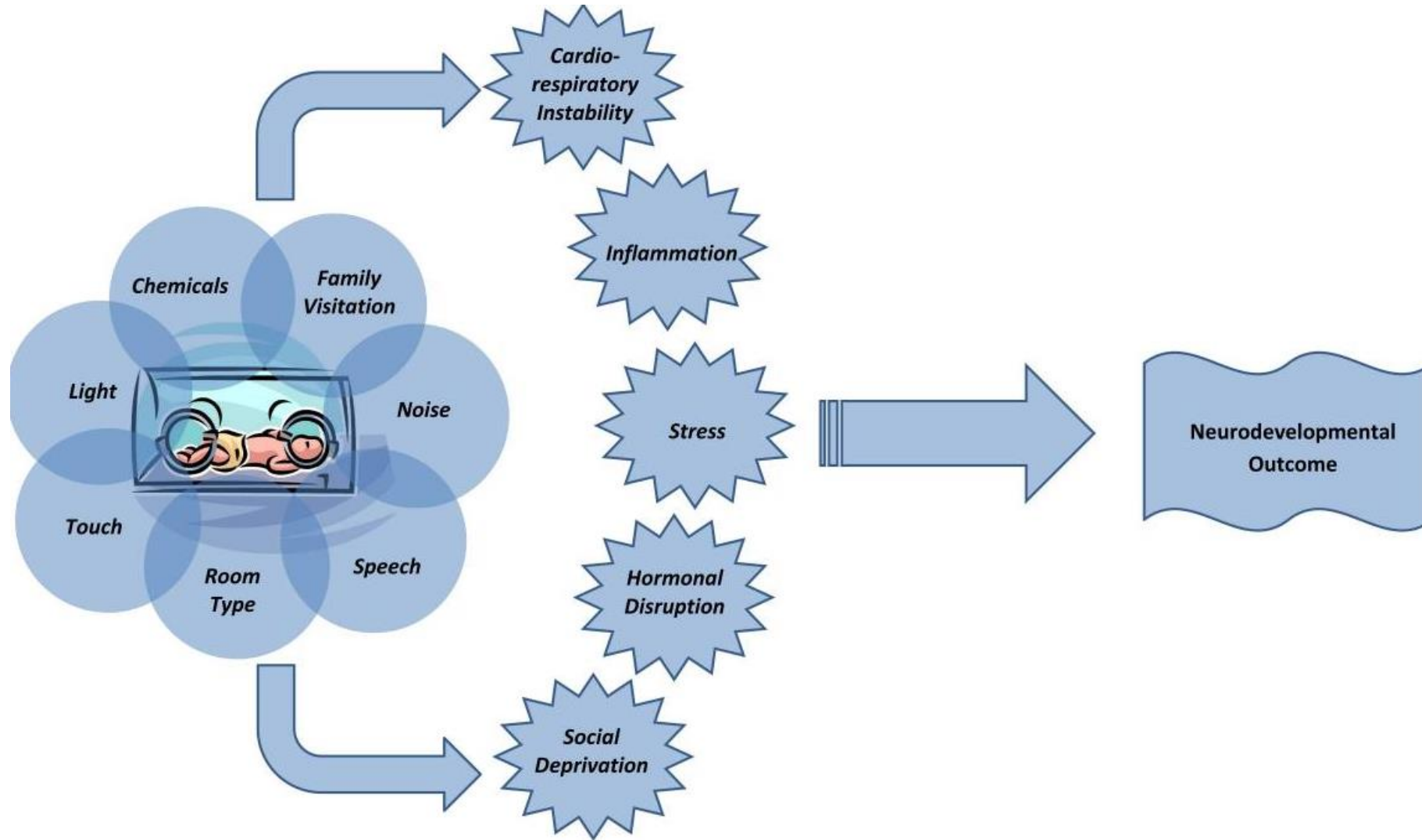


43 Florida NICUs

58% of Level II, III & IV Florida NICUs



# Impact of Environmental Exposures



Preterm infants face sensory overload and social deprivation: conditions we can change.

Source: Santos J, et al. *Impact of hospital-based environmental exposures on neurodevelopmental outcomes of preterm infants.* *Curr Opin Pediatr.* 2015.

# Reducing Noxious Stimuli

- Disordered or reduced quiet sleep in neonates is associated with adverse cognitive and behavioral outcomes later in life. (Seminars in Perinatology, Paciello LM et al., 2025)
- Infants in the NICU are exposed to high levels of pain and stress, with one study reporting an average of **7–17 painful procedures each day** (*Journal of Pediatric Nursing*, Kyololo et al., 2019).

# Promoting Soothing Experiences

- **Preterm infants in the NICU** experience *much less language exposure* and *much higher electronic sound levels* than fetuses → an estimated **loss of >150 hours of language input** during the preterm period. (*J Pediatr; Monson et al., 2023*)
- An additional **20 minutes of daily skin-to-skin contact** is associated with a **10-point increase** in 12-month neurodevelopmental scores. (*J Pediatr; Lazarus et al., 2024*)

# SOOTHE: Supporting Optimal Outcomes Through a Healing Environment

**Global aim:** Support hospitals and care teams in fostering a neuroprotective NICU culture by training staff and providers, engaging families, optimizing developmentally appropriate sensory care, and minimizing unnecessary interventions to promote a nurturing environment for infants.

## Aim

By 6/2027:

- 80% of participating NICUs will implement at least 1 evidence-based strategy from each of these sensory domains (sight, sound, touch, and taste/smell) to improve the sensory environment
- Achieve a 20% increase in families educated on recognizing and responding to infant stress cues

*\*Respectful care is a universal component of every driver and activity*

## Primary Drivers

Readiness

**Sensory Environment**

Recognition

**Noxious Stimuli**

Response

**Positive Touch/Interactions**

## Secondary Drivers

Modulate sound and provide positive auditory input in the NICU

Promote a developmentally appropriate light environment

Enhance early olfactory and oral sensory experiences

Optimize developmental positioning and transition to safe sleep

Protect and preserve skin integrity

Provide cue-based care

Minimize pain from interventions

Promote developmentally supportive positive touch

Encourage nurturing and developmentally appropriate feedings

Establish structures and systems that promote full family participation and partnership



## Aim

**By 6/2027, 80% of participating NICUs will:**

**Implement at least 1 evidence-based strategy from each of these sensory domains (sight, sound, touch, and taste/smell) to improve the sensory environment**

**Achieve a 20% increase in families educated on recognizing and responding to infant stress cues**

\* Q4 2025 data will be collected as baseline data.

# Data Type and Frequency of Reporting

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Patient Level Data

Hospital Level Data

# Data Type and Frequency of Reporting



## Patient-Level Data

- Patient Demographics
- Developmental and Supportive Care Activities
- Family Caregiver Involvement
- Skin Management
- Number of Laboratory Test Results

## Hospital-Level Data

- Staff Training
- Standardized Documentation
- Policies and Guidelines to Support SOOTHE
- Sound Levels

# Demographics

Patient Demographics					
<b>Discharge month</b> _____ <b>Discharge year</b> _____		<b>Length of stay</b> _____ <b>days</b> (count if patient was in bed at midnight)		<b>Discharge to:</b> <input type="checkbox"/> Another hospital <input type="checkbox"/> Home <input type="checkbox"/> DCF	
<b>Primary caregiver preferred language</b> <input type="checkbox"/> English <input type="checkbox"/> Haitian Creole <input type="checkbox"/> Spanish <input type="checkbox"/> Other: _____ <input type="checkbox"/> Unknown	<b>Primary caregiver race</b> (check all that apply) <input type="checkbox"/> Asian <input type="checkbox"/> Black <input type="checkbox"/> White <input type="checkbox"/> Other: _____ <input type="checkbox"/> Unknown		<b>Primary caregiver ethnicity</b> <input type="checkbox"/> Hispanic <input type="checkbox"/> Non-Hispanic <input type="checkbox"/> Unknown		
<b>GA at birth</b> (complete weeks only) _____	<b>Type of insurance</b> (check all that apply) <input type="checkbox"/> Medicaid/Medicaid plans <input type="checkbox"/> Tricare <input type="checkbox"/> Private <input type="checkbox"/> Self-pay <input type="checkbox"/> Other: _____ <input type="checkbox"/> Unknown		<b>Inborn</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Birth weight</b> (grams) _____					

- Inform case composition and track population change over time
- Disaggregate measures to identify differences between population groups

# REDCap Survey

## Patient Demographics

Discharge month

Discharge year

☐ 2025

reset

Length of stay \_\_\_\_ days

(count if patient was in bed at midnight)

Discharge to:

- ☐ Another Hospital  
☐ Home  
☐ DCF

reset

Primary caregiver's preferred language

- ☐ English  
☐ Spanish  
☐ Haitian Creole  
☐ Other (specify)  
☐ Unknown

reset

Primary caregiver's race

(check all that apply)

- ☐ Asian  
☐ Black  
☐ White  
☐ Other (specify)  
☐ Unknown

Primary caregiver's ethnicity

- ☐ Hispanic  
☐ Non-Hispanic  
☐ Unknown

reset

Gestational age at birth

(complete weeks only)

Type of insurance

(check all that apply)

- ☐ Medicaid/Medicaid plans  
☐ Tricare  
☐ Private  
☐ Self-Pay  
☐ Other (specify)  
☐ Unknown

Inborn

- ☐ Yes  
☐ No

reset

Birth weight

(grams)



# Developmental and Supportive Care Activities

- 1) Measure:** Percentage of infants that received oral care in the first 3 days of life (DOL) that were also provided with breastmilk drops
- 2) Measure:** Percentage of infants who received SSC by family caregiver by DOL 7
- 3) Measure:** Percentage of patients with documented use of a validated positioning assessment tool (e.g., IPAT) at any time of their stay

Developmental and Supportive Care Activities					
Mark the timing of <u>the first</u> completed activity:	Within 3 DOL	4 - 7 DOL	> 7 DOL	Did Not Receive	Per Unit Guideline
Oral Care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provided breastmilk drops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skin-to-skin contact by family caregiver	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Documented</u> use of a validated positioning tool (e.g., IPAT)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Family Caregiver Involvement

**Measure:** Percentage of infants whose first oral feeding experience was provided by a parent or family member.

## Family Caregiver Involvement

Was the infant's first oral feeding experience from a parent/family member? ☐ Yes ☐ No

# Family Caregiver Involvement



**Measure:** Percentage of parents who received training on providing intentional, positive touch, with emphasis on responding to infant stress cues, and who demonstrated the ability to respond appropriately.

**Documentation:**

Record the date when the parent demonstrates intentional, positive touch **during any care activity** (e.g., before, during, or after a procedure, feeding, or diaper change). Examples include hand hugs, containment holding, facilitated tucks, or supporting the infant’s hands toward the mouth for self-soothing.

Family Caregiver Involvement		
Was the infant's first oral feeding experience from a parent/family member? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Regarding Family Caregiver training and inclusion in care, check only items with a <u>documented date</u> :	<b>Family Caregiver:</b>	<b>Caregiver who Completed Activity:</b>
	<input type="checkbox"/> Received training on recognizing infant cues	<input type="checkbox"/> Mother <input type="checkbox"/> Father <input type="checkbox"/> Other _____
	<input type="checkbox"/> Demonstrated ability to recognize infant cues	<input type="checkbox"/> Mother <input type="checkbox"/> Father <input type="checkbox"/> Other _____
	<input type="checkbox"/> Received training on intentional, positive touch	<input type="checkbox"/> Mother <input type="checkbox"/> Father <input type="checkbox"/> Other _____
	<input type="checkbox"/> Demonstrated ability to respond with intentional, positive touch to infant cues	<input type="checkbox"/> Mother <input type="checkbox"/> Father <input type="checkbox"/> Other _____
	<input type="checkbox"/> None	

# Family Caregiver Involvement

**Measure:** Percentage of patients whose parent/family caregiver met with a therapist or trained staff member to receive education on neurodevelopmentally appropriate care.

**Education should include:**

1. Setting individualized sensory/touch goals;
2. Provide anticipatory guidelines using structured tools (e.g., SENSE Program, Discharge Parent Pass)

**Must be provided by a therapist or trained staff**

**Which activities were completed with the Family Caregiver in collaboration with a therapist or trained team member?**

***Check all that apply***

- ☐ Setting individualized sensory/touch goals
- ☐ Providing anticipatory guidelines using structured tools (e.g., SENSE, Discharge Parent Pass, etc.)
- ☐ Other neuroprotective practices (please specify: kangaroo care, music/voice therapy, scent cloths, light/sound regulation, PT/OT/SLP interventions): \_\_\_\_\_
- ☐ None

# Family Caregiver Involvement

## Other Neuroprotective Practices:

- Choose which practices your team will focus on and report consistently
- You may add new practices over time but continue reporting those you've already started
- Each reported separately

**Which activities were completed with the Family Caregiver in collaboration with a therapist or trained team member?**

***Check all that apply***

- ☐ Setting individualized sensory/touch goals
- ☐ Providing anticipatory guidelines using structured tools (e.g., SENSE, Discharge Parent Pass, etc.)
- ☐ Other neuroprotective practices (please specify: kangaroo care, music/voice therapy, scent cloths, light/sound regulation, PT/OT/SLP interventions): \_\_\_\_\_
- ☐ None



# Family Caregiver Involvement

**1) Measure:** Percentage of patients whose parent/family caregiver was screened for HRSN

**2) Measure:** Percentage of patients whose parent/family caregiver with positive HRSN screening received appropriate resources/referrals

<b>Family caregiver HRSN screening was</b>	<div><input type="checkbox"/> Positive    <input type="checkbox"/> Negative    <input type="checkbox"/> Declined    <input type="checkbox"/> Not documented</div> <div><div><div></div><div>→</div></div> If positive HRSN: <input type="checkbox"/> Appropriate resources/referrals provided for all +HRSN <input type="checkbox"/> Some resources/referrals provided <input type="checkbox"/> No resources/referrals provided</div>
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# REDCap

## Family Caregiver Involvement

Was the infant's first oral feeding experience from a parent/family member?

☐ Yes ☐ No

[reset](#)

Regarding Family Caregiver training and inclusion in care, check only items with a [documented date](#):

☒ Received training on recognizing infant cues

☒ Mother

☒ Father

☒ Other

☒ Demonstrated ability to recognize infant cues

☒ Mother

☒ Father

☐ Other

☐ Received training on intentional, positive touch

☐ Demonstrated ability to respond with intentional, positive touch to infant cues

☐ None

Which activities were completed with the Family Caregiver in collaboration with a therapist or trained team member? Check all that apply

☐ Setting individualized sensory/touch goals

☐ Providing anticipatory guidelines using structured tools (e.g., SENSE, Discharge Parent Pass, etc.)

☐ Other neuroprotective practices (Please specify: kangaroo care, music/voice therapy, scent cloths, light/sound regulation, PT/OT/SLP interventions):

☐ None

Primary caregiver SDOH/HRSN screening was:

☒ Positive

☐ Appropriate resources/referrals provided for all +HRSN

☐ Some resources/referrals provided

☐ No resources/referrals provided

☐ Negative

☐ Declined

☐ Not documented

[reset](#)

[reset](#)

# Skin Management

**Measure:** Percentage of **infants who maintain intact skin with no documented injuries** such as pressure injuries, Medical Adhesive-Related Skin Injury (MARSI), CPAP-related injuries, or other non-surgical open wounds **throughout their NICU stay**

- **Exclude:** Diaper dermatitis
- Each condition will be reported separately **AND** as a combined measure

Skin Management	
Check any skin conditions documented throughout the entirety of the infant's NICU stay:	
<input type="checkbox"/> Pressure injuries	<input type="checkbox"/> Other non-surgical open wound: _____
<input type="checkbox"/> Medical Adhesive-Related Skin Injury (MARSI)	<input type="checkbox"/> None
<input type="checkbox"/> CPAP-related injuries	

# Number of Laboratory Test Results

**Measure:** Average number of laboratory test results during the first 7 days of life (DOL).

**Documentation:** Report the number of test results documented (total and per category).

Number of laboratory test results: see details in the back		
Total # _____	Hematology # _____	Chemistry # _____
	Coagulation # _____	Blood Gases # _____

# Number of Laboratory Test Results

**Where to Count:** Count lab results from the Review Summary tab using your EHR's built-in lab groupings

Results Review

Search

- BLOOD BANK
  - BLOOD BANK GROUP TYPE ...
  - BLOOD BANK PRODUCTS AN...
- RADIOLOGY/IMAGING
  - GENERAL DIAGNOSTIC
  - ULTRASOUND
- LAB
  - AUTOIMMUNE TESTING
  - BLOOD CHEMISTRY - WHOLE...
  - BLOOD GASES
  - CHEMISTRY
  - COAGULATION
  - GENETIC TESTING
  - HEMATOLOGY
  - INFECTIOUS DISEASE
  - NEWBORN SCREEN
  - URINALYSIS
- DIAGNOSTIC TESTING
  - CARDIAC STUDIES
  - ECHOCARDIOGRAPHY
- Others
  - Bilirubin -Ur
  - CMV NAA SOURCE
  - CMV NUCLEIC ACID AMPLIFICATION
  - Notified By
  - Notified To
  - PREPARE PLASMA (ML/KG AND ML)
  - PREPARE PLATELETS (ML/KG AND ML)
  - PREPARE RBC (ML/KG AND ML)
  - Specific Gravity, Urine
  - Urine Casts
  - Urine Epithelial Cells

6m ago All Rows

Most Recent All Results

NEONATAL ICU

	2025 8/22/25 05:04	8/21/25 05:02	8/20/25 08:44	8/18/25 14:07	8/18/25 05:37	8/14/25 05:11	8/12/25 09:29	8/11/25 08:36
<b>BLOOD GASES</b>								
pH Arterial Neonatal	08/09/25 7.40 ▲							
pH, Cap	05:04 7.31	7.31	7.28	7.27	7.29	7.19 ▼	7.34	7.35
pCO2 Arterial Neonatal	08/09/25 53							
pO2 Arterial Neonatal	08/09/25 56							
PO2 CAPILLARY	05:04 39.0	39.0	32.0	39.0	39.0	31.0	32.0	48.0
Calculated Bicarbonate	05:04 26.2	26.2	29.1 ▲	28.0	29.3 ▲	27.1	21.6 ▼	28.2
Calculated Base Excess	05:04 -0.8 ▼	-0.8 ▼	1.1	0.0	1.6	-2.5 ▼	-3.9 ▼	1.4
pCO2, Cap	05:04 52.0	52.0	62.0	61.0	61.0	71.0	40.0	51.0
Methemoglobin	05:04 0.6	0.6	0.5	0.6	0.8	1.0	0.6	0.7
Hgb, blood gas	05:04 12.8	12.8	11.8	11.8	11.4	12.1	13.7	16.3
SITE	05:04 HEEL	HEEL	HEEL	HEEL	RHEEL	HEEL	HEEL	HEEL
Fraction Inspired Oxygen	05:04 27	27	27	25	27	32	21	35
Allens Test	05:04 No	No	No	No	No	No	No	No
Temperature	05:04 98.60	98.60	98.60	98.60	98.60	98.60	98.60	98.60
pH, Cord Art	08/02/25 7.24 ▼							
PCO Cord Arterial	08/02/25 51							
Calculated O2	05:04 67.7	67.7	52.4	64.9	66.3	43.2	57.0	81.2
O2 Content	08/09/25 17.8							
Calcium Ionized	08/07/25 1.02							
O2 HEMOGLOBIN	05:04 68.6	68.6	57.8	67.2	70.3	60.7	59.7	81.4
LACTIC ACID	08/07/25 1.7							
CHLORIDE, BLOOD GAS	08/07/25 102							
GLUCOSE, BLOOD GAS	08/07/25 80							
Potassium, Bld	08/07/25 2.9 ▼							
Sodium	08/07/25 143.0							

Only count the first DOL

👉 Count columns (or rows, depending on your EHR view)



# Number of Laboratory Test Results

## Lab Test Result: Count all lab results for first 7 DOL

- Panels = **1 result each** (e.g., BMP = 1, CMP = 1).
- If multiple panels are drawn at the same time (e.g., CBC + blood gas), count each separately.
- Include all statuses: valid, hemolyzed, clotted, insufficient/QNS, unable to analyze, or other “no result.”
- If a test is repeated, count each occurrence.
- If the same result appears in more than one EHR built-in group (e.g., Chemistry and Coagulation), count it once (e.g., under Chemistry - be consistent!).

**Consistency is important: Pick one method and apply it consistently across all patients and throughout the initiative.**

# Number of Laboratory Test Results

## REDCap Submission – Warning Message

A **warning** appears below the fields, **AND** the **submit button** remains hidden until:

- The **Total #** cell contains a value between **0** and **200** (inclusive)
- All **subcategories'** cells contain a value between **0** and **100** (inclusive)
- If zero, **do not leave blank, specify 0**

Number of Laboratory Test Results

**NOTE:** Please enter 0 when there are no tests to report.

Total #	Hematology #	Chemistry #
<input type="text"/>	<input type="text"/>	<input type="text"/>
	Coagulation #	Blood Gases #
	<input type="text"/>	<input type="text"/>

**Warning:** An above field is blank. Please ensure all fields contain data.  
The submit button will appear once all fields have valid responses.

**Acknowledgment**

**Acknowledgment of Accuracy**  
\* must provide value

☐ I have verified that there are no error messages outstanding on this form prior to submission.

# Number of Laboratory Test Results

## REDCap Submission – Error Message

- The **Total # of labs** must be **greater than or equal to** the sum of all subcategories (**Hematology, Coagulation, Chemistry, Blood Gases**)
- If the **Total # of labs** is **lower** than the sum of the subcategories, an **error** message will appear below the field, **AND** the **submit button** will stay hidden

$$5 < 50$$

**Number of Laboratory Test Results**

**NOTE:** Please enter 0 when there are no tests to report.

<b>Total #</b> 5	<b>Hematology #</b> 25	<b>Chemistry #</b> 15
	<b>Coagulation #</b> 10	<b>Blood Gases #</b> 0

**Calculation Error: Please recheck your entry.**  
"Total #" is less than the sum of "Hematology #", "Coagulation #", "Chemistry #", and "Blood Gases #".  
The submit button will appear once all fields have valid responses.

**Acknowledgment**

**Acknowledgment of Accuracy**  
\* must provide value

☐ I have verified that there are no error messages outstanding on this form prior to submission.

# Questions?

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# Which of the following family participation activities is consistently documented in your NICU?

- A. Parents providing scent cloths for infants
- B. Parents trained on infant stress cues
- C. Parents providing skin-to-skin care
- D. Parents providing first oral feeding experience
- D. Parents reading to their infants at each visit
- E. None
- G. Don't know



# Submitting Data to FPQC

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# Inclusion and Exclusion Criteria

## Include (qualifying infants):

- NICU admissions with a minimum 7-day stay who survived to discharge.

## Exclude:

- Infants who are discharged as deceased.

# Reporting and Sampling

## Step 1 – Select Birth Weight Categories to Report

Count infants who **stayed in the NICU at least 7 days** and **survived to discharge**, grouped by birth weight:

	Q4 2024	Q1 2025	Q2 2025	Q3 2025
≥2500 g	12	10	14	11
1500–2499 g	10	9	12	9
750–1499 g	4	6	6	7
<750 g	3	2	1	1

Option to 'opt out'

At the beginning of the initiative, your hospital has the option to opt out of reporting information on smaller birth weight categories if the number of infants in a specific category is consistently less than 5 per quarter.

# Reporting and Sampling

- **Report up to 5 infants for each birth weight category:**
  - 2500 grams and above
  - 2499-1500 grams
  - 1499-750 grams
  - less than 750 grams
- **Up to 20 eligible patients total each month**
- **Report the first 5 discharges per birth weight category for the reporting month or as many as you have**

# Study ID

<b>STUDY ID # _____</b> (start with 001 and number sequentially until the end of the initiative)		
<b>PATIENT DEMOGRAPHICS</b>		
Discharge month _____ Discharge year _____	Saturday/Sunday/ Holiday discharge <input type="checkbox"/> Yes <input type="checkbox"/> No	Length of stay _____ days (count if patient was in bed at midnight)

- Assign Study ID # 001 to the first patient whose data will be submitted to FPQC
- Number consecutively all patients submitted to FPQC throughout the initiative

# Keep Track of Your Cases

Please keep a [log](#) of the patients whose data is submitted to FPQC.

Hospital Name: \_\_\_\_\_

Medical Record #	Study ID #	Survey Return Code	Data lead name

# Process to Collect and Submit Your Data

1


## Identify Cases

Qualifying discharges/month

Each month, submit data for the **first 5 qualifying infants discharged** in each birth weight category, or as many as available

2

## Abstract medical record

 SOOTHE Initiative

Complete for up to 20 infants (Sampling in the back)

STUDY ID # \_\_\_\_\_ (start with 001 and number sequentially until the end of the initiative)

**Patient Demographics**

Discharge month _____ Discharge year _____	Length of stay _____ days (count if patient was in bed at midnight)	Discharge to: <input type="checkbox"/> Another hospital <input type="checkbox"/> Home <input type="checkbox"/> DCF
Primary caregiver preferred language <input type="checkbox"/> English <input type="checkbox"/> Creole <input type="checkbox"/> Spanish <input type="checkbox"/> Other _____ <input type="checkbox"/> Unknown	Primary caregiver race (check all that apply) <input type="checkbox"/> Asian <input type="checkbox"/> Black <input type="checkbox"/> White <input type="checkbox"/> Other _____ <input type="checkbox"/> Unknown	Primary caregiver ethnicity <input type="checkbox"/> Hispanic <input type="checkbox"/> Non-Hispanic <input type="checkbox"/> Unknown
Gestational age at birth (complete weeks only) _____	Type of insurance (check all that apply) <input type="checkbox"/> Medicaid/Med. plans <input type="checkbox"/> Private <input type="checkbox"/> Self-pay <input type="checkbox"/> Other _____ <input type="checkbox"/> Unknown	Inborn <input type="checkbox"/> Yes <input type="checkbox"/> No
Birth weight (grams) _____		Did the pt. have a chest tube on DOL 7: <input type="checkbox"/> Yes <input type="checkbox"/> No

**Developmental and Supportive Care Activities**

Mark the timing of each completed activity:	Within 3 DOL	4 - 7 DOL	> 7 DOL	Did Not Receive
Oral Care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provided expressed breast milk (oral swabs and/or milk drops)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skin-to-skin contact by family caregiver	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Documented use of a validated positioning tool (e.g., IPAT)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Family Caregiver Involvement**

Was the infant's first oral feeding experience from a parent/family member? ☐ Yes ☐ No

Family Caregiver:  
☐ Received training on recognizing infant cues  
☐ Demonstrated ability to recognize infant cues  
☐ Received training on intentional, positive touch  
☐ Demonstrated ability to respond with intentional, positive touch to infant cues  
☐ None

Regarding Family Caregiver training and inclusion in care, check only items with documented date:  
☐ Setting individualized sensory/touch goals  
☐ Providing anticipatory guidelines using structured tools (e.g., SENSE, Discharge Parent Pass, etc.)  
☐ Other neuroprotective practices (Please specify: kangaroo care, music/voice therapy, scent cloths, light/sound regulation, PT/OT/SLP interventions): \_\_\_\_\_  
☐ None

Which activities were completed with the Family Caregiver in collaboration with a therapist or trained team member? Check all that apply  
☐ Pressure injuries  
☐ Medical Adhesive-Related Skin Injury (MARS)  
☐ CPAP-related injuries  
☐ Other non-surgical open wound: \_\_\_\_\_  
☐ None

**Skin Management**

Check any skin conditions documented throughout the entirety of the infant's NICU stay:  
☐ Pressure injuries  
☐ Medical Adhesive-Related Skin Injury (MARS)  
☐ CPAP-related injuries  
☐ Other non-surgical open wound: \_\_\_\_\_  
☐ None



**Number of laboratory test results: see details in the back**

Total # _____	Hematology # _____	Chemistry # _____
	Coagulation # _____	Blood Gases # _____

3

## Enter data in the REDCap data portal

SOOTHE Patient Level Data

**Goal:** Support hospitals and care teams in fostering a neuroprotective NICU culture by training staff and providers, engaging families, optimizing developmentally appropriate sensory care, and minimizing unnecessary interventions to promote a nurturing environment for infants.

**Instructions:** Abstract demographics/core neuroprotective care practices/referrals for **up to 20 infants** (5 per birth-weight category).  
( $\geq 2500$  g, 1500-2499 g, 750-1499 g,  $< 750$  g)

**Inclusion:** All NICU admissions with a minimum 7-day stay. **Exclusion:** Infants who die.

If you have any questions, please email Alexa ([alexamutchler@usf.edu](mailto:alexamutchler@usf.edu)) and Leomar ([leomarwhite@usf.edu](mailto:leomarwhite@usf.edu)).

**Abstractor Information**

Hospital name  
\* must provide value

Email of the person completing this form:  
\* must provide value

Complete for up to 20 infants

Link will be sent to the project and data lead once DUA is fully executed





# Data Type and Frequency of Reporting

## Patient Level Data

- Patient Demographics
- Developmental and Supportive Care Activities
- Family Caregiver Involvement
- Skin Management
- Number of Laboratory Test Results



## Hospital Level Data

- Staff training
- Standardized Documentation
- Policies and Guidelines to Support SOOTHE
- Sound Levels

# Structural Measures



These measures help us to assess where your facility is on implementation within our Initiative.

1 - Not Started 2 - Planning/Developing 3 - Started Implementing - Started implementing in the last 3 months 4 - Implemented - Less than 80% compliance after at least 3 months of implementation (not routine practice) 5 - Fully Implemented - At least 80% compliance after at least 3 months of implementation (routine practice)					
To what extent has your hospital:	Not Started	Planning/Developing	Started to Implement	Implemented	Fully Implemented
Implemented a reading program to promote a language-rich environment through shared reading (books and tools available) and engaging families in early communication with the infant?					
Implemented a policy, guideline, and/or procedure for routine use of evidence-based calming sounds (e.g., white noise, lullabies, or recorded parent voice) within recommended noise limits ( $\leq 45$ DBA) with an audio device available to support this practice?					
Implemented written lighting guidelines that include gestational age-appropriate dimming, light cycling for infants $\geq 32$ weeks GA, and special population guidance (e.g., procedures, ELBW, Golden Hour, and transitions)?					
Implemented a scent cloth program to promote soothing smell and parent-infant bonding, to include: 1. clean scent cloths available to families, 2. guidance on safe use given to staff and caregivers, and 3. inclusion of program in unit policies or care routines?					
Implemented a policy, guideline, and/or procedure to reduce negative taste and smell experiences? Policy should include the use of unscented products for premature infants and an annual inventory and monitoring strategy to assess scented product use in the NICU, including perfumes used by staff.					
Implemented written guidelines on optimizing central line use, including the maximum number of IV placement attempts by a single clinician and the use of a specialized team for central line placement?					
Implemented written guidelines for pre- and post-procedural pain management, including pharmacologic and non-pharmacologic comfort measures?					
Implemented a process for conducting and documenting procedure time-outs or huddles prior to invasive procedures, integrated into the chart or flowsheet?					
Implemented a process, guideline, and/or protocol to avoid duplicate or redundant tests?					
Implemented written guidance on parents holding the infant during and after enteral feedings once infant becomes eligible?					
Engaged a Patient Advisor in the QI team?					

# Progress Toward Implementation

Implement and/or reinforce key processes, guidelines, policies, and resources to support SOOTHE.

Report as follows:

1. **Not started**

2. **Planning**

3. **Started Implementing**

- Started implementation in the last 3 months

4. **Implemented**

- Less than 80% compliance after at least 3 months of Implementation (Not routine practice)

5. **Fully Implemented**

- At least 80% compliance after at least 3 months of Implementation (Routine practice)

# Sound Levels

## Report:

- The **Month** in which the daily spot checks were conducted
- The **Average Sound Level** in decibels
- The availability of **Educational Materials** within the NICU

Sound Levels	
Conduct daily spot checks of the sound level in the NICU (recorded in decibels) conducted within the 2-hour quiet time - once on day shift and once on night shift. In the section below, please record the monthly averages for the reporting quarter (Spreadsheet to track daily measurement available at fpqc.org)	
Month 1: _____	Average Sound Level (in dB): _____
Month 2: _____	Average Sound Level (in dB): _____
Month 3: _____	Average Sound Level (in dB): _____
Are environmental noise education materials* available to staff and families? <input type="checkbox"/> Yes <input type="checkbox"/> No	
* Include: 1. The impact of environmental noise on infant development; 2. The purpose and expectations of quiet time in the NICU; 3. Recommended noise thresholds; 4. A QR code/link to a Sound Level Meter app (e.g. NIOSH Sound Level Meter app) for awareness; 5. Unit's Quiet-Time schedule	

# Staff Training

- Report cumulative percents for each cell

Staff Education and Training			
NOTE: Count as “trained in a group” (A or B) <u>only if all topics in that group are completed</u> . Please add the percentage of nurses, physicians & therapists that are educated on the following topics:			
What % of your staff has received education on...	Nurses	Physicians	Therapists
<b>A. Developmentally appropriate care practices:</b> <ul style="list-style-type: none"><li>- Environmental noise in the NICU</li><li>- Midline flexion with 360-degree containment (including positioning guidelines, use of a validated positioning tool such as IPAT, observation, and supervised practice)</li><li>- Safe sleep modeling (e.g., “Clear the Crib” practice)</li><li>- Developmentally supportive infant handling and transfers (simulation, bedside observation, direct assistance), including the “two-person care” or “four-handed care” framework</li></ul>	_____ %	_____ %	_____ %

# Staff Training

- Report cumulative percents for each cell

NOTE: Count as “trained in a group” (A or B) <u>only if all topics in that group are completed</u> . Please add the percentage of nurses, physicians & therapists that are educated on the following topics:			
What % of your staff has received education on...	Nurses	Physicians	Therapists
<b>B. Minimizing stress or pain</b> - Unit’s central line use and guideline - Stress cue recognition and setting intention before physical contact (clear purpose, pre-arranging supplies, clustering care) - Pain recognition using a standardized pain management scale	_____ %	_____ %	_____ %
<b>C. Respectful Care Training</b> Respectful Care training since October 2025 and committed to Respectful Care practices	_____ %	_____ %	_____ %



# Reporting Schedule and Sample Reports

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# Reporting Schedule

## Baseline Data - *Due January 15th*

- Abstracted Patient-Level Data: **October – December 2025**
- Simplified Hospital-Level Data: **October – December 2025**

## Active Phase - *Starts January 1st*

- Abstracted Patient-Level Data: Collected **monthly**, due on the **15<sup>th</sup>** of the following month
  - *E.g., January data due February 15th*
- Hospital-Level Data: Collected **quarterly**, due on the **25<sup>th</sup>** of the month following the quarter
  - *e.g. Q1 (January – March) due April 25th*

	Baseline Phase	Baseline Due Date	Active Phase Frequency (starts January 1st)	Active Phase- Due Date
Patient-Level	October – December 2025	January 15th	Monthly	The 15th of the following month
Hospital-Level	October – December 2025	January 15th	Quarterly	The 25th of the month following the

# Sample Report

## Attendance at Coaching Calls

Coaching Call Attendance

100%

Total # of Coaching Calls Attended

3

Total # of Coaching Calls

3

Your Hospital

Has Presented

Their PDSA This Quarter

## Abstracted Patient-Level Data

Due monthly

Most Recent Patient-Level Submission

April 2026

Total # of Months Submitted

5

Total # of Months Due

6

Your patient-level baseline data Oct-Dec 2025 is:

Submitted

## Hospital-Level Data

Due quarterly

Most Recent Hospital-Level Submission

Baseline (Oct-Dec 2025)

Total # of Quarters Submitted

1

Total # of Quarters Due

2

Your hospital-level baseline data Oct-Dec 2025 is:

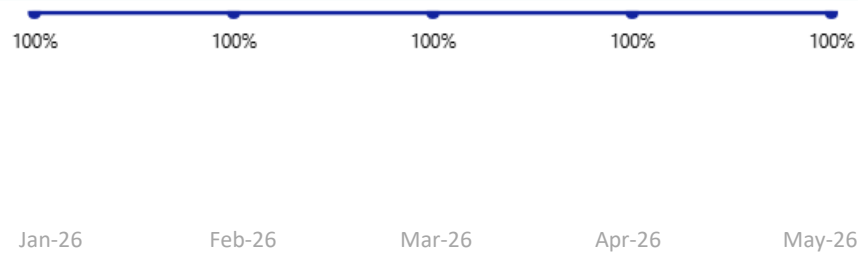
Submitted

# Sample Report

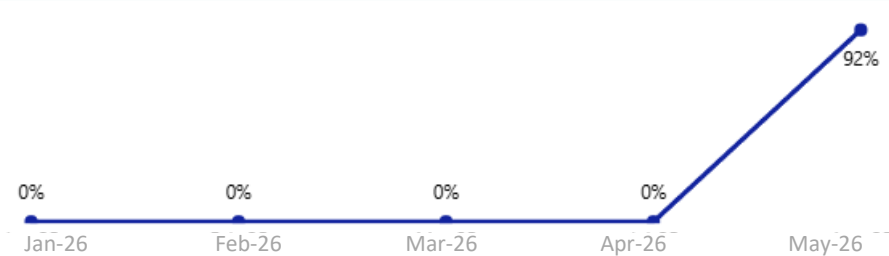
## Key Measures

% of Patients - Abstracted Sample

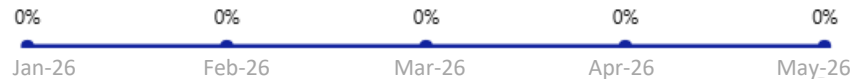
### Family Trained on Infant Cues (%)



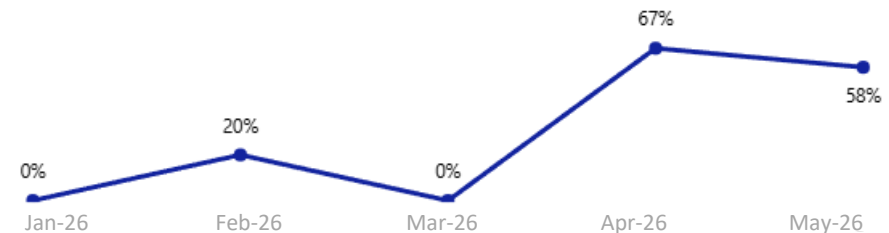
### Parent-Led First Oral Feeding (%)



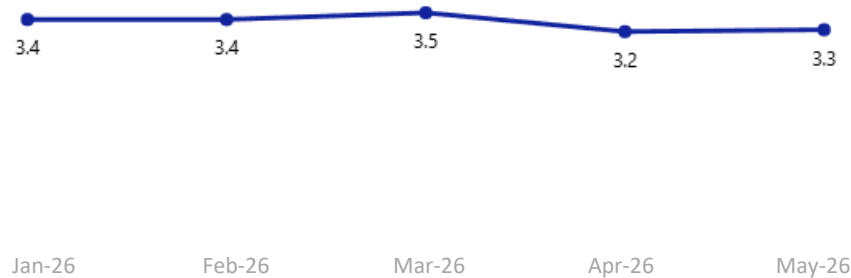
### Skin Injury Documented (%)



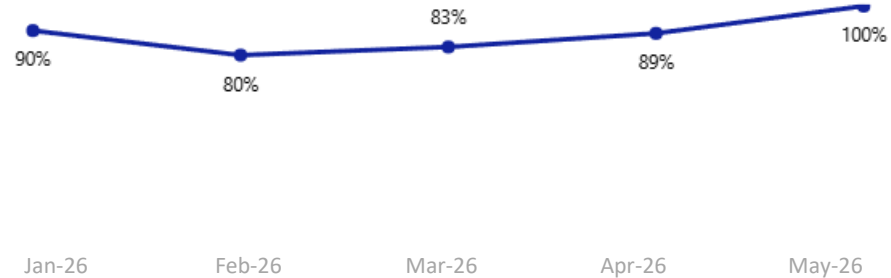
### Use of Validated Positioning Tool (%)



### Family-Therapist Collaborative Activities (#)

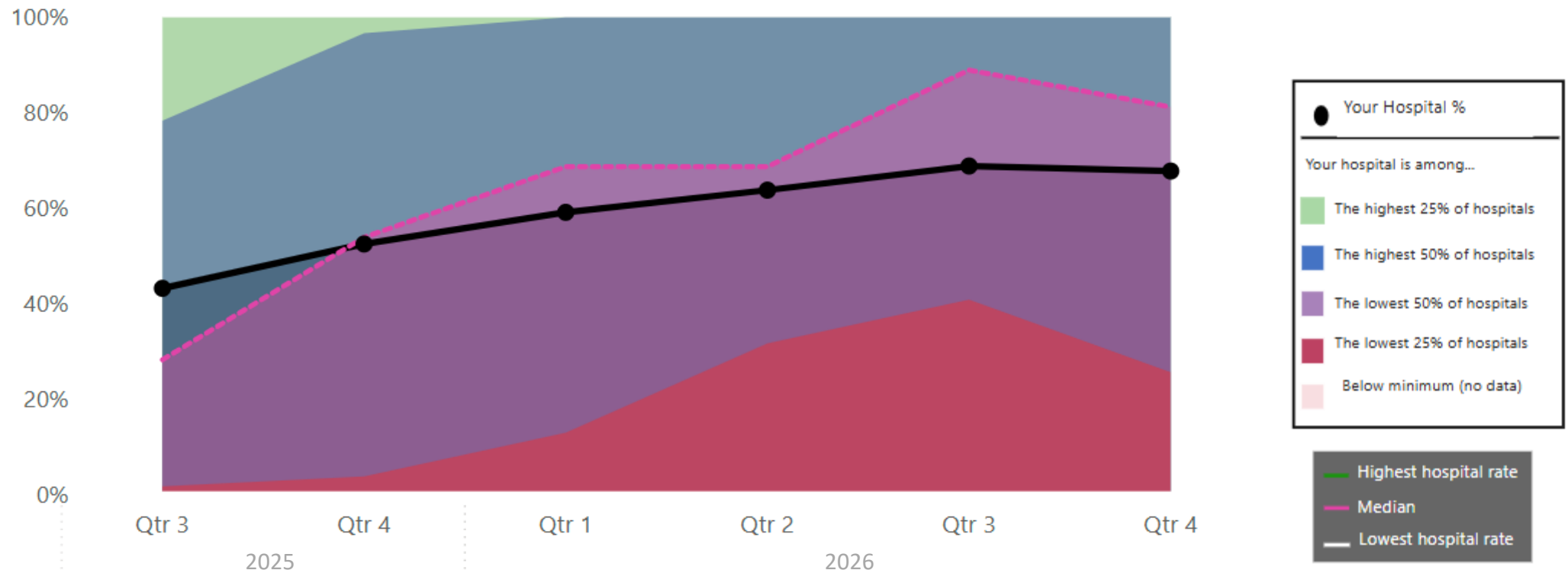


### HRSN Screening Completion (%)



# Sample Report

## % of infants who had their first oral experience from a parent/family member



Year	2025		2026			
	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
# of patients	838	1061	1074	1176	1123	779
% First Oral Experience by Parent	43%	52%	59%	64%	69%	68%

# Data in Quality Improvement

The “WHY” and “HOW”

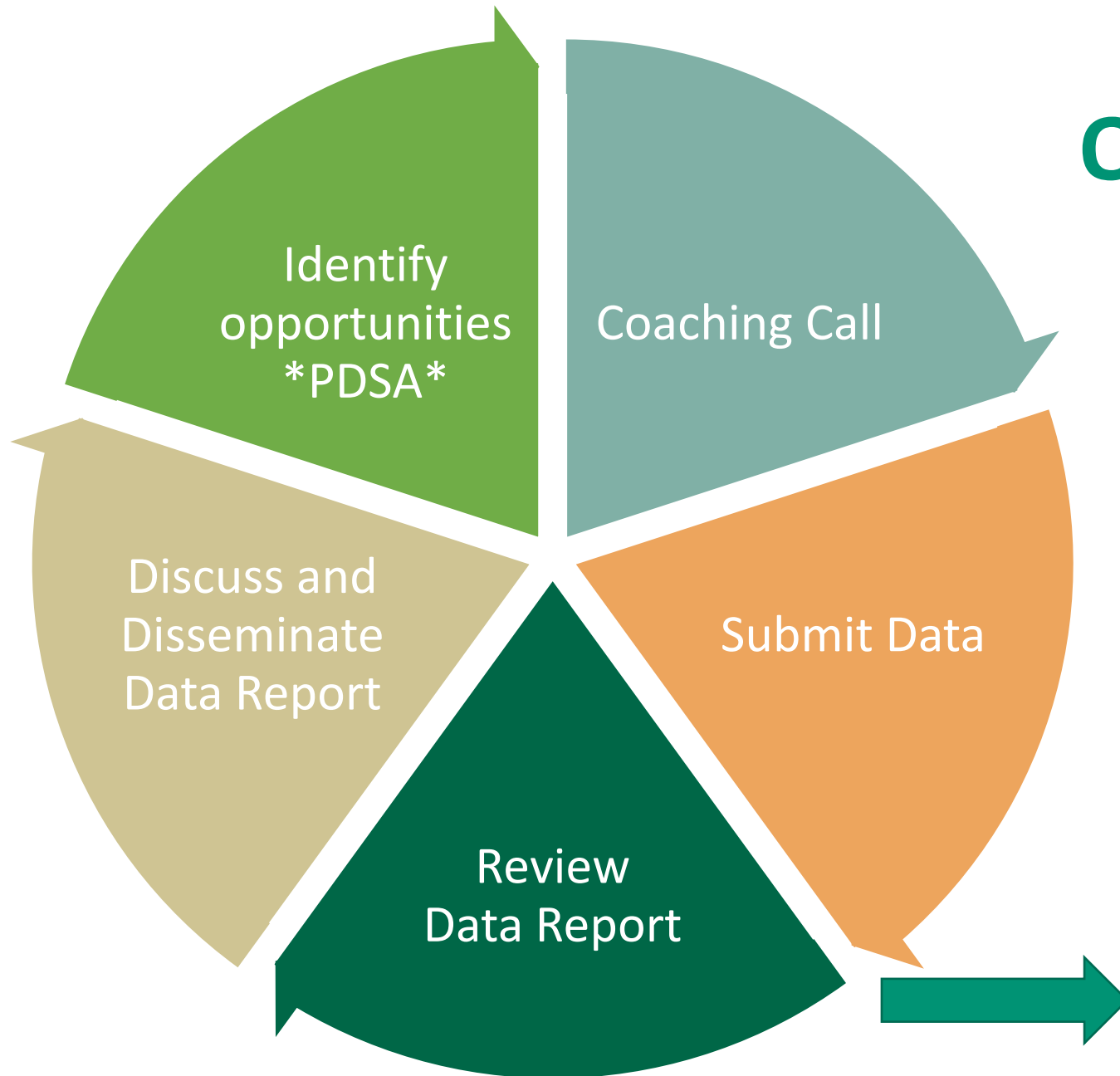


# Why do we collect data for QI?

- Informs progress and outcome of your work
- Identify areas of opportunity and strength
- Create a system that can be maintained long after the project ends: check if you are holding your gains overtime!

Data for learning not for judgment- Maximize learning

# QI MONTHLY CYCLE



## QI REPORTS

- Aim
- Run Charts
- Tracks Process, Structural, and Outcome Measures
- Add your PDSAs



If your NICU wanted to make *one change* tomorrow to improve the neuroprotective environment, which would you choose?

- A. Reducing background monitor noise
- B. Using a positioning tool for every infant
- C. Decreasing the number of painful procedures
- D. Increasing daily skin-to-skin time by 20 minutes
- E. Other (please specify)

# Questions?

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Florida Perinatal  
Quality Collaborative