

FCC Taskforce July 2023 Webinar

FCC WEBINAR

July 20th

11-12:30 PT



The I-Rainbow: A flexible, evidence-based care path for providing developmental care in the NICU

1



Melissa Scala, MD

Clinical Associate Professor of Pediatrics
Lucile Packard Children's Hospital
Stanford University
Director of Inpatient Infant Neurodevelopmental Care

Pronouns: she/her



Eilish Byrne, MSPT

Physical Therapist, El Camino Hospital
Assistant Professor at the University of Saint Augustine for Health Sciences

Pronouns: she/her

Social Media: A Tool for Connecting with Families

2



Daphna Barbeau, MD

Neonatologist ICA University Hospital
Director, High Risk Infant Follow Up Clinic

Pronouns: she/her

How Mamha is Closing Gaps in Maternal Mental Health Care in NICUs

3



Maureen Fura

CEO & Founder, Mamha
Member of National Coalition for Maternal Mental Health (NCMMH)
Member of Postpartum Support International (PSI) Miami

Pronouns: she/her

To register, click [here](https://fctaskforce.org) or scan the QR code above

fctaskforce.org



FAMILY-CENTERED CARE
TASK FORCE

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Co-Chairs



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Stanford School of Medicine
FCC Committee Chair
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Founder & Executive
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NICU Parent Network



Colby Day, MD

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Neonatology
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Program Manager



Morgan Kowalski

Family Partner



FAMILY-CENTERED CARE
TASK FORCE

Organizational Partners

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

Section on Neonatal Perinatal Medicine



california perinatal
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National
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Neonatal
Nurses



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Acknowledgements

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a member of the Roche Group"

&

Partially funded by "Prolacta Bioscience Foundation"



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Attending Neonatologist,
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**Advocacy Committee
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Dr. Kerri Machut
Attending Neonatologist,
Lurie Children's Hospital



Advocacy Work

First Advocacy Effort:
"Parents and family caregivers
are not visitors."

Thank you to Dr. Colby Day, Dr.
Kerri Machut, and Nicole Nyberg
for spearheading this effort.

Thank you to Dr. Munish Gupta
and Dr. Lily Lou for your review
and support from SONPM.

AAP Members are able to
provide their support by July 21st
(login required).



Resolution #	2023 Annual Leadership Forum
TITLE:	Parents and Family Caregivers are Not Visitors
SPONSORED BY:	Section on Neonatal-Perinatal Medicine
DATE:	March 31, 2023
DISPOSITION:	
Whereas,	consistent presence and engagement of parents or primary guardians, herein referred to as family caregivers, in neonatal and pediatric clinical settings positively impacts the child's overall health and long-term outcomes.
Whereas,	family caregivers who are actively involved in their child's care and shared decision-making have increased confidence, decreased stress, and improvement in the transition of clinical caretaking to the home environment.
Whereas,	during the COVID-19 pandemic, children and family caregivers were unnaturally separated from one another due to visitation restrictions since family caregivers were considered "visitors" rather than essential care team members.
RESOLVED,	that the American Academy of Pediatrics (AAP) recognize family caregivers as valued contributors to their child's health, declare family caregivers as parents, not visitors, and ensure children and family caregivers are not separated in clinical settings (while following appropriate infection control guidelines).
RESOLVED,	The AAP commits to this in the form of policy statements, recommended guidelines for care, and advocates for legislation for family caregiver right the healthcare system.



FAMILY-CENTERED CARE
TASK FORCE

FCC Taskforce Website

A year ago, we had 50 individuals participating in the Family-Centered Care Taskforce.

Involvement has grown to 500+ individuals representing more than 200 NICUs from 36 states and 14 countries committed to learning more about Family-Centered Care.



Follow us @FCCTaskforce



International Family Integrated (FiCare) Conference



6th International Family Integrated Care Conference
Moving Forward Together - Parents as Partners in Care
September 30, 2023 | Peter Gilgan Centre for Research and Learning

[Home](#) [Program](#) [Workshops](#) [Speakers](#) [Registration](#) [Call for Abstracts](#) [Posters](#) [Sponsors](#) [Committee](#) [Venue & Accommodation](#)



Event Date & Time
Saturday, September 30, 2023

Event Location:
Peter Gilgan Centre for Research and Learning
686 Bay Street
Toronto, ON M5G 0A4
Located beside The Hospital for Sick Children



2024 Gravens Conference

Gravens Conference offers and opportunity to share your work and experiences with colleagues.

The theme of the 2024 Gravens Conference is "The Power of Voice: Using Your Voice for Babies, Family, Staff and Beyond.

Abstracts may include any applicable NICU topic, please use the QR code below for more information.



Join Us!
For the 37th International GRAVENS meeting on the Environment of Care for High Risk Newborns and their Families

March 6-9, 2024



Sheraton Sand Key Resort
Clearwater Beach, Florida

For more information go to <https://paclac.org/https-paclac-org-gravens-conference/> or [PACLAC.org](https://paclac.org)
Abstracts due October 1, 2023



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Stanford
MEDICINE



UNIVERSITY of
ST. AUGUSTINE for
HEALTH SCIENCES

i-Rainbow

A developmental Care Path for
Preterm Infants

Developed by: Eilish Byrne, PT, DSc; Allison Freccero OTD, OTR/L;
Melissa Scala, MD

Development of the *i-Rainbow*

1. Extensive literature review
2. Merging elements of The Infant Care Path for Physical Therapy in the NICU described in detail by Byrne & Garber (2013)¹ and an unpublished care path written by M. Scala
3. Presented at Graven's (2018) where feedback was received & used to further guide development

**1. *Physical and Occupational Therapy in Pediatrics*. 2013
Feb;33(1):27-38**

Phase I- Nurse education & training

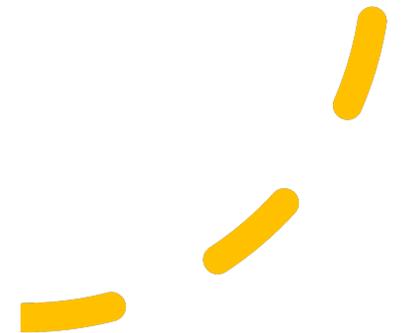
In-person instructional training sessions occurred over a 6-week period.

“Just in time training” provided by *i-Rainbow* champions during the first month of implementation



Phase 2

1. Parent instruction & survey
2. Parent & nurse feedback surveys
3. Developmental care rates data collection pre & post implementation



Phase 2 Parent instruction on the *i-Rainbow* -Initial Visit-

- Verbal & written bedside instruction on the *i-Rainbow* by the first author
- Written-pictorial handouts, along with a copy of the *i-Rainbow* provided for reference
- Parents completed a survey

Phase 2 Parent Feedback Surveys

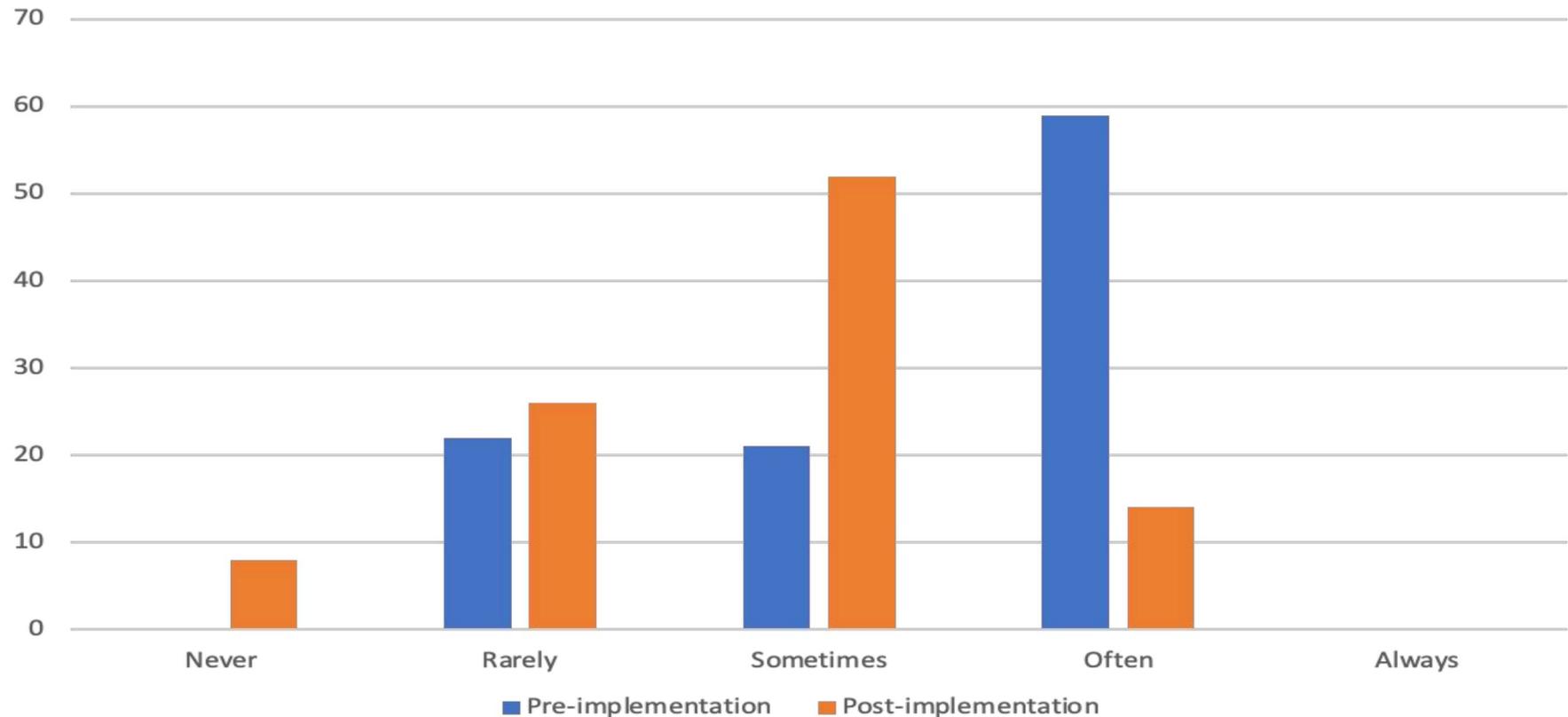
-Follow up visit-

9 Parents answered-

1. I interact with my baby more because of the *i-Rainbow*
7/9 respondents agreed (4) or strongly agreed (5)
2. I would recommend the *i-Rainbow* to other parents in the NICU
9/9 respondents agreed (4) or strongly agreed (5)

Phase 2- Nurse Feedback Surveys LPCH NICU

Percent Nurses reporting frequency of disagreement among staff regarding best Developmental Care Activity for infants



N=91, u pre = 3.1, u post= 2.7, $p= 0.003$

Phase 2- Demographics of sample

	Pre path (n=19)	Post path (n=30)	P value
GA at birth (weeks) Mean (SD)	26.3 (1.37)	26.3 (1.78)	0.93
Sex-n (percent female)	6 (31%)	11 (36%)	
BW (gm) Mean (SD)	952 (268.5)	883 (272.5)	0.38
Length of stay (days) Mean (SD)	89.0 (22.8)	93.4 (37.9)	0.65

Phase 2- Changes in developmental care rates

	Pre path (n=19)	Post path (n=30)	P value
Total dev care (min/infant/day) Mean (SD)	96.6 (44.2)	123.9 (38.2)	< 0.05*
Total dev care by RN (min/infant/day) Mean (SD)	33.7 (44.2)	44.1 (38.2)	0.05*
Total dev care by family (min/infant/day) Mean (SD)	62.8 (40.9)	79.8 (35.5)	0.13

Phase 2- Changes in developmental care rates

	Pre path (n=19)	Post path (n=30)	P value
KC (min/infant/day) Mean (SD)	22.5 (22.2)	29.8 (15.2)	0.17
Swaddled holding (min/infant/day) Mean (SD)	54.2 (25.2)	69.7 (21.9)	< 0.05*
Containment Touch (min/infant/day) Mean (SD)	17.7 (9.7)	22.6 (8.6)	0.06
Infant directed speech (min/infant/day) Mean (SD)	13.2 (12.8)	11.7 (5.5)	0.56

The i-Rainbow

©Byrne, Freccero, & Scala

The *i-Rainbow:*

- Is most appropriate for NICU infants \leq 44 weeks PMA
- Considers both cardiorespiratory stability & physiologic maturity
- Uses 6 color-coded stages of advancing infant stability w/ associated recommended evidence-based developmental activities
- Is on a continuum, allowing change in infant status
- Allows infants to enter at any stage

Staging a baby with *The i-Rainbow*

- Staging is based on infant response to graded sensory intervention
- Stage the infant daily
 - More often (e.g., each care time) for unstable infants or infants w/ changing clinical status

i-Rainbow Stage 1

Highly unstable infant:
episodic severe bradycardic & desat events in
response to minimal handling

Clinical criteria-

1. Requires multiple interventions to recover to baseline (e.g., bagging, suction, escalation in respiratory support, etc)
2. Recovers to baseline in > 10 min

Limit noxious environmental stimulation

Infants may have spontaneous events- if not during minimal handling & requiring multiple interventions to recover, proceed to Stage 2

i-Rainbow Stage 1

Get to know your baby
Comfort your baby with your smell

Appropriate Developmental Activities-

- Parent education (orientation to infant & unit)
- Parents use scent cloth to comfort baby with their smell
- Manage the environment to promote rest
- Optimize positioning for comfort, alignment, respiration

i-Rainbow Stage 2

Less severe episodic bradycardic & desat events
with handling

Clinical criteria-

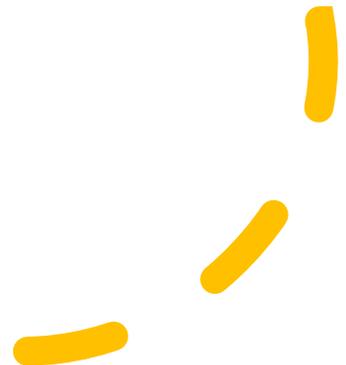
1. Does not require multiple interventions to recover
2. Returns to baseline in < 10 min

i-Rainbow Stage 2

Observe what your baby likes & dislikes
Help calm your baby with touch

Appropriate Developmental Activities-

- Containment touch during cares (4-handed care) and as needed
- **Continue** to promote rest, optimize positioning & use scent cloth & provide parent education



i-Rainbow Stage 3

Tolerates developmental touch

Clinical criteria-

1. Tolerates containment touch without desaturation or brady

Movement between Stages 2-3 occurs as soon as the infant is ready. The goal is to offer one sensory modality at a time initially.

© Byrne, Freccero, & Scala

i-Rainbow Stage 3

Help your baby's language development
Help with your baby's cares
Calm & comfort your baby

Appropriate Developmental Activities-

- Intentional voice: talk/read/sing to baby 2-3 x day for 5-10 min each time
- Parents provide containment touch during baby's cares & prn
- Parents do diaper changes
- Continue** Parent education, promoting scent cloths, infant rest & optimize positioning

i-Rainbow Stage 4

Tolerates prior developmental interventions
without desat or brady

Clinical criteria-

1. Tolerates intentional voice w/o desat or brady
2. Tolerates basic cares w/ recovery to baseline \leq 5 min
3. Tolerates KC w/ recovery to baseline \leq 15 min. of transfer

Introducing containment touch followed by voice exposure, is designed to prepare the infant for the multimodal sensory experience of holding.

i-Rainbow Stage 4

Time to enjoy holding
your baby!

Appropriate Developmental Activities-

- Hold your baby everyday as able
- Talk, read, or sing to your baby x 20-30 min/day during cares & at diaper changes
- Provide guided movements & allow baby to move freely at diaper change (exploratory movements)
- **Continue** scent cloths, containment touch, & positioning

© Byrne, Freccero, & Scala

i-Rainbow Stage 5

Tolerates holding well
Attempts to engage you socially

Clinical criteria-

1. Alert with prior interventions & does not desat or brady



i-Rainbow Stage 5

Your baby is ready for more developmental activities & social interaction

Choose which developmental activities are right for your baby today:

- Massage baby: 1-2 x per day for 5-10 min each time*
- Play recorded music: 10 min lullaby exposures 1-2 x daily
- Make eye to eye contact w/ baby during feeds & diaper changes
- Do modified tummy time: 1-2 x day for 3-5 min each time
- Hold and gently rock baby per PT/OT recommendations
- Talk, sing, or read to baby for 20-30 minutes a day during cares
- Continue prior activities as desired**

*Recommended for infants > 32 weeks PMA

i-Rainbow Stage 6

Baby is engaged & alert during cares

Clinical criteria-

1. Tolerates Stage 5 interventions w/o desat or brady, while in an engaged & alert state

* Near term & term infants: progress to rocking, mobiles, swings if infant maintains engaged, alert state with other interventions in Stage 6

i-Rainbow Stage 6

Your baby is ready for some developmental strengthening activities

Choose which developmental activities are right for your baby today:

- Active tummy time: 2-3 x daily for 3-5 min each time
- Active supported sit for head lifting while holding and before feeds & during burping
- While talking to your baby, promote visual fixing/following during diaper changes or at feeds
- Massage baby 1-2 x day for 10-15 minutes each time
- Continue** prior activities as desired

The *i-Rainbow*:

Is Descriptive- staging gives accurate snapshot of infant's developmental tolerance

Excels- in a highly complex NICU w/ critically ill infants where other programs and paths may not

Is Modified- for cardiac infants. The Cardiac

i-Rainbow was presented at PCICS Annual Mtg

Is Unique- using cardiorespiratory stability & behavioral cues vs post menstrual age

Is Effective- increased developmental care in our unit & helped parents interact more with their baby

Is free, flexible & easy- to use with little training for qualified personnel

Is infant led & parent friendly- by following the infant journey & allowing parents to choose

Standardizes- communication & approach to dev care

Thank you-

- Thank you to the nurses, providers, and parents who contributed to this work
 - Thank you for attending this talk!
- 

Thank you-

i-Rainbow Starter Kit Available Soon

- 1. A more professional kit for a nominal cost***
- 2. A “hand made” kit for free***

Please contact us:

Melissa Scala: mscala@Stanford.edu

Eilish Byrne: ebyrne@usa.edu

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Mammha

Because every mother
deserves to thrive.

The Most At-Risk

NICU mothers have the highest rates of developing maternal mental health complications like depression and anxiety. Research suggests rates are between **28% - 70%**. [Citation](#)

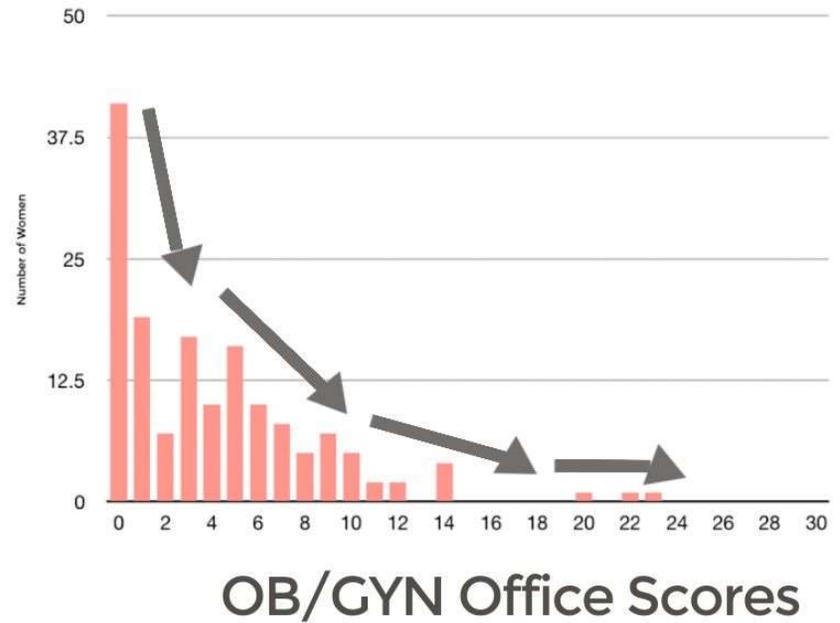
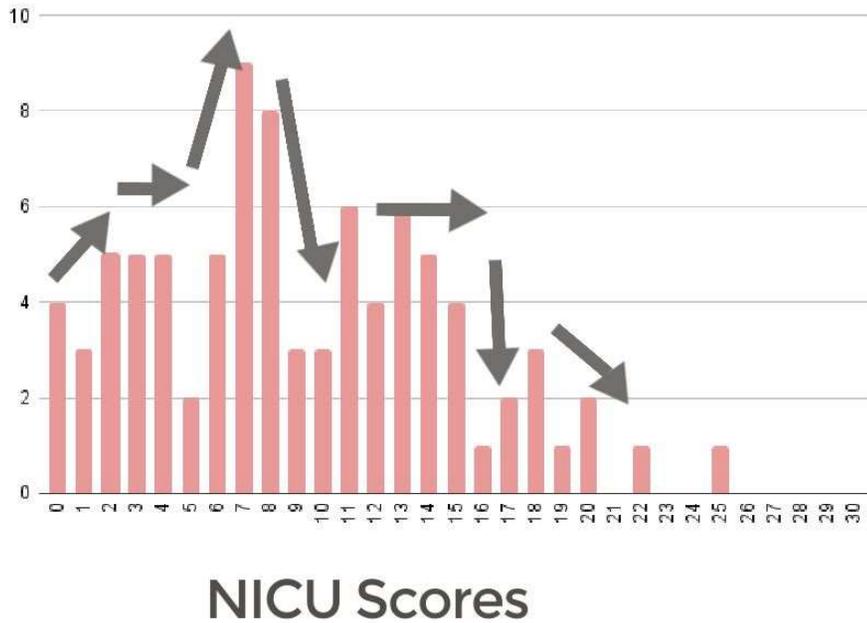


**46% at INOVA in
Virginia**



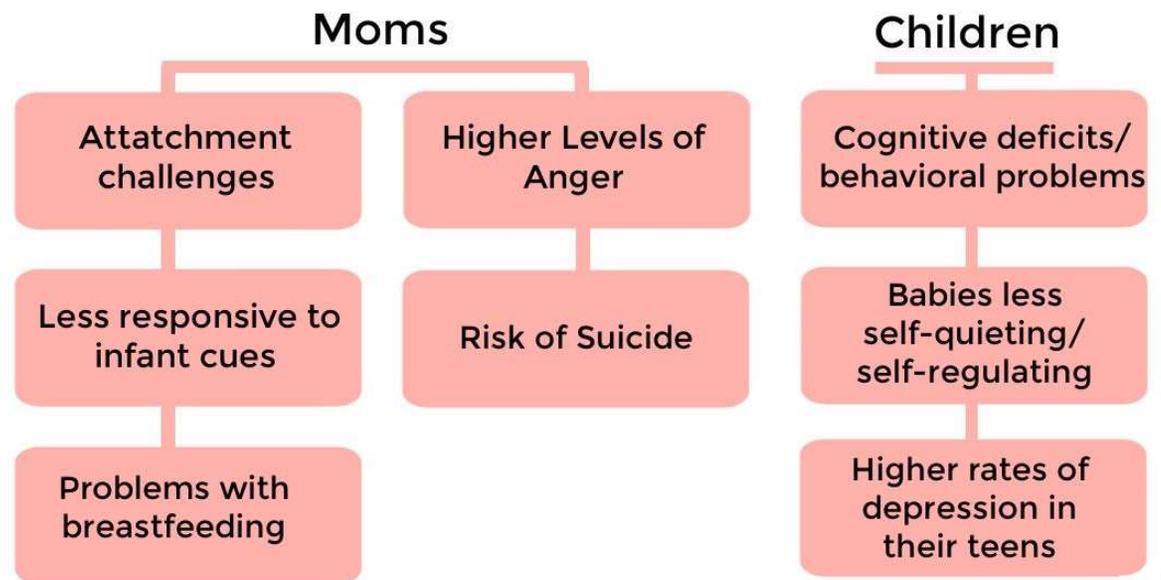
Mammha NICU Data

NICU Mothers Scores May Mirror NICU Experience



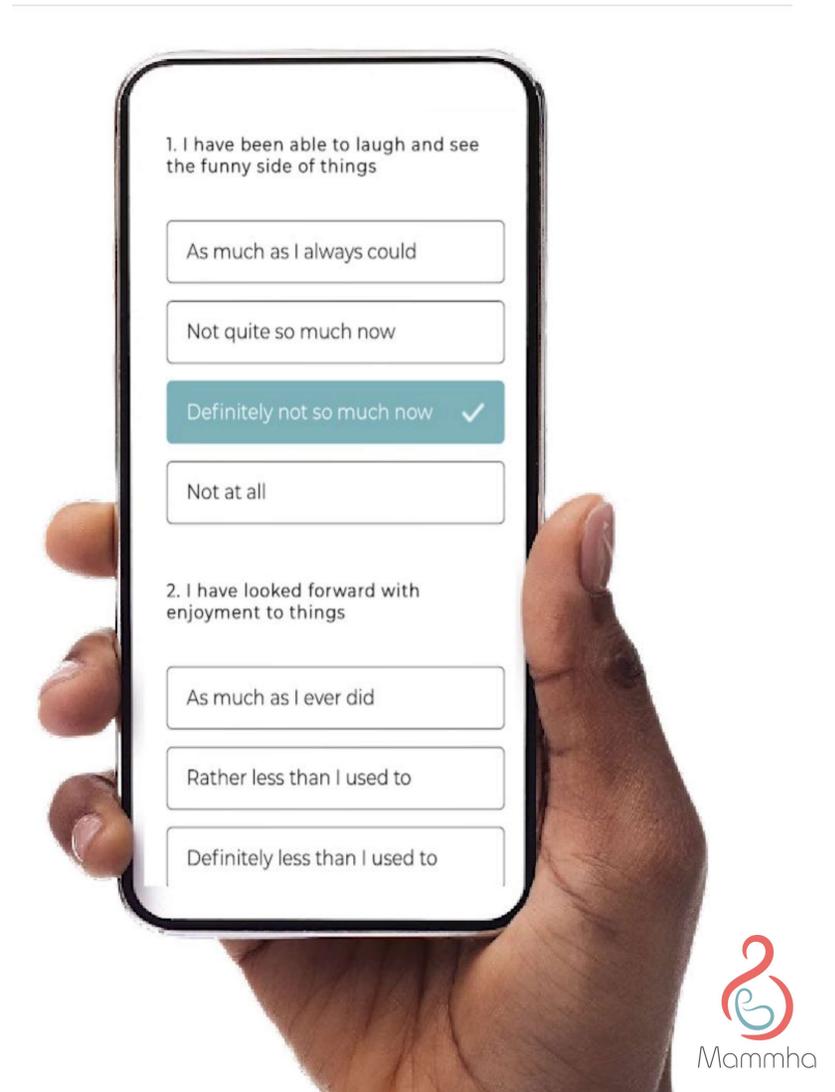


Impact Of Untreated MMH Complications



Mammha is seamless screening and instant care in **1 step.**

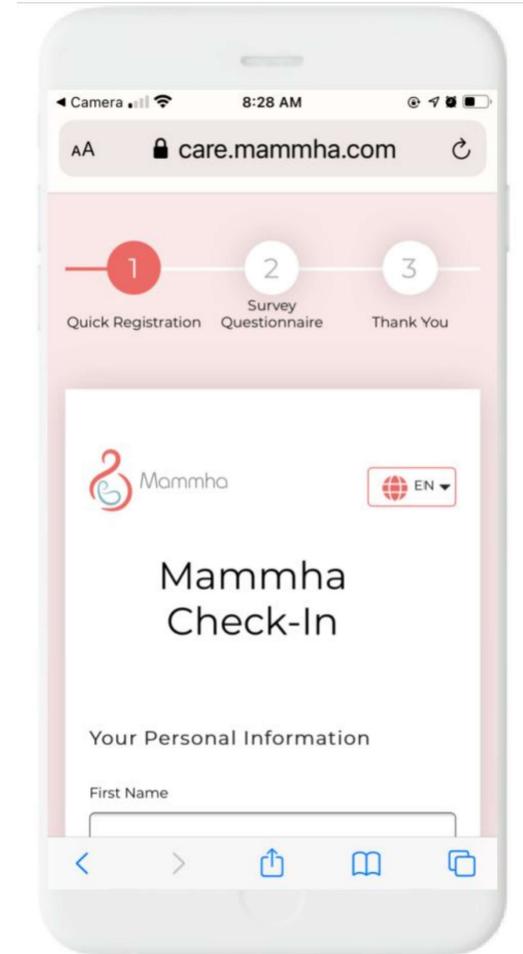
Mammha offers mothers and fathers complete **maternal mental health** care *round-the-clock*, with remote screening, a portal of curated resources, and on-demand robust care coordination and management.



Screening Is Discrete & Takes Place Where Parents Are Most Comfortable

Moms and dads screen with Mammha on their phone either in the NICU or at home.

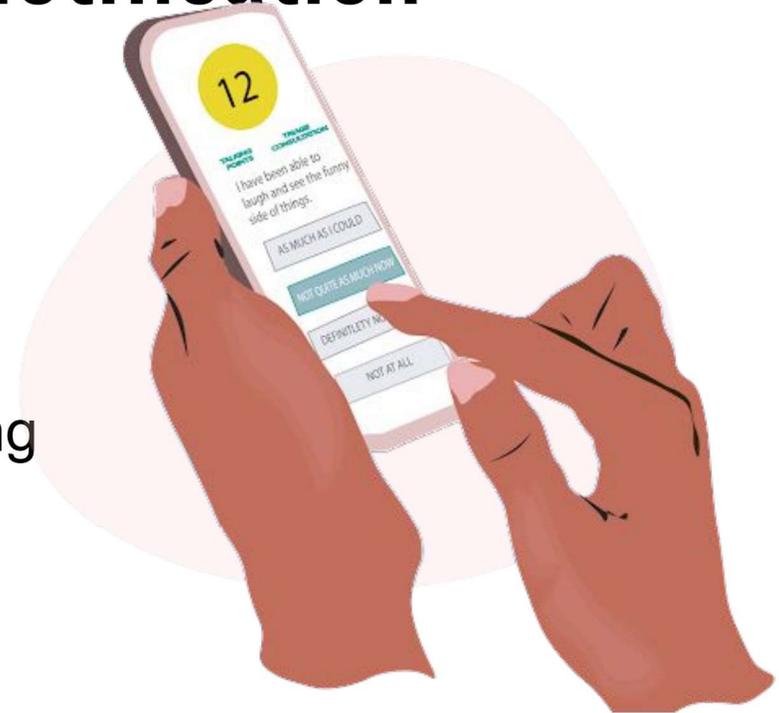
- EPDS
- English and Spanish
- HIPAA Compliant
- Automatic Re-Screening at set intervals



Instant Screen Result Notification

Providers and health system teams
get results back instantly

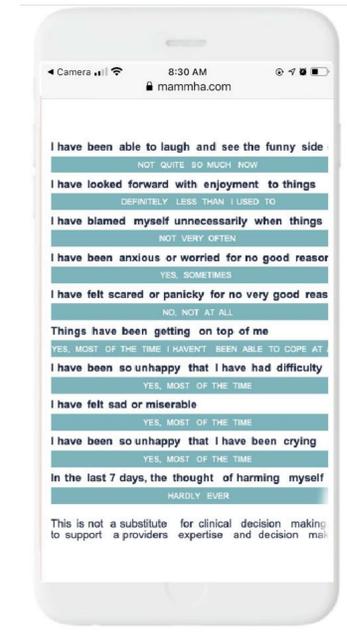
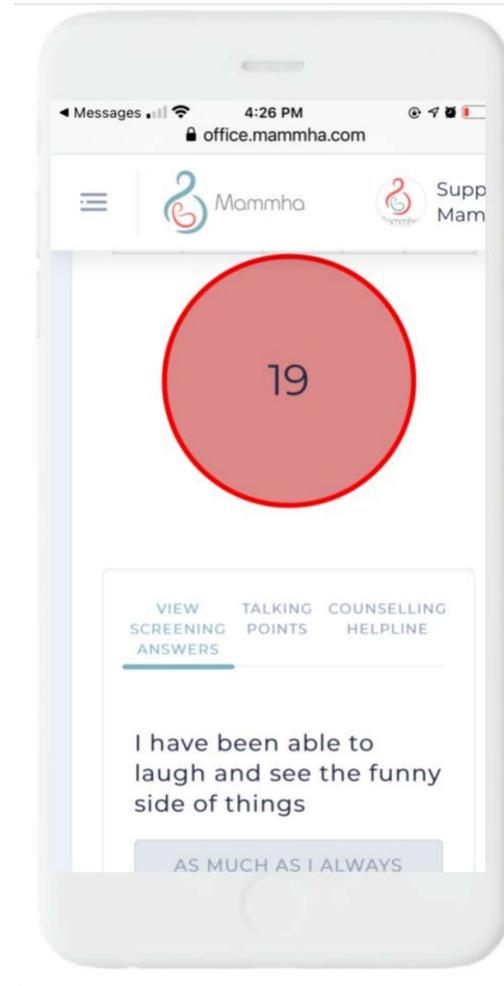
Once a parent screens, providers, social workers, or nurses get a notification via email and text alerting that screen results are ready to be reviewed.



Enhanced Screen Results

Screen reports come with:

- Talking points
- Triage numbers
- Can be uploaded to the EHR



If A Parent Screens Negative

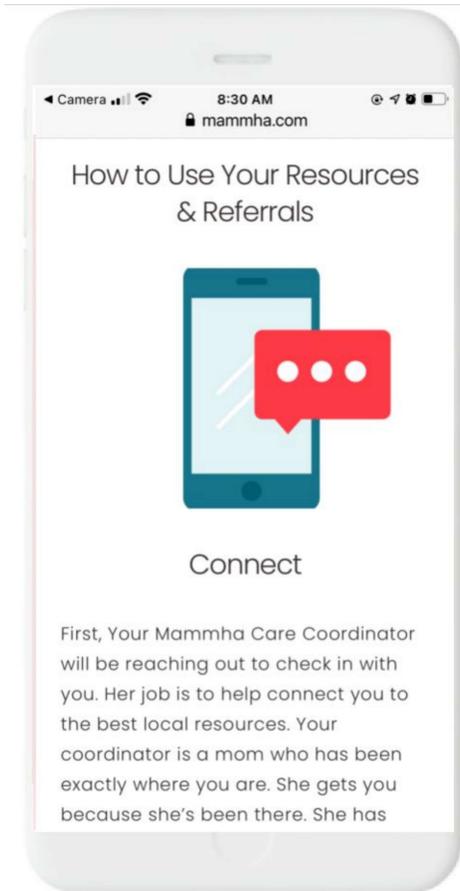
Parent gets a link with education on risk factors and what to watch out for.

They also get a follow up SMS with a discrete link if they want to connect with care confidentially.



If Positive: Immediate Resources

If positive, parent gets a link to a new parent portal that is filled with low to no cost resources and light education.



CBT & Coping Skills SMS

Parents get 5 months of gentle SMS nudges that were created for parents in the NICU. Messages are grounded in CBT techniques and mindfulness coping skills.



Everyone needs a moment to get back to the present. Can you notice 5 things you see, 4 things you feel, 3 things you hear, 2 things you smell, and 1 thing you can taste? STOP to cancel

Instant Care

After a parent screens positive they are immediately followed up by a Mammha Care Coordinator.

- Average response time is less than 10 minutes.
- Not AI - a real person



Mammha Care Coordination

Peer support specialist trained in CBT techniques and coping skills.



Help connect women and partners with resources.



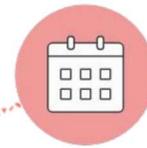
Help facilitate placement with trained clinicians and therapists, matching patients by insurance type, needs, and clinician availability at no cost to the patient.



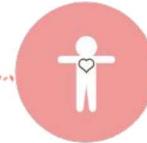
Conduct weekly check-ins, average interactions 63.



Remind the patient of support groups.



Celebrate when she is feeling better, and offer help when she is not.



Patients stay connected an average of 6 weeks but the duration can be longer depending on a patient's needs.

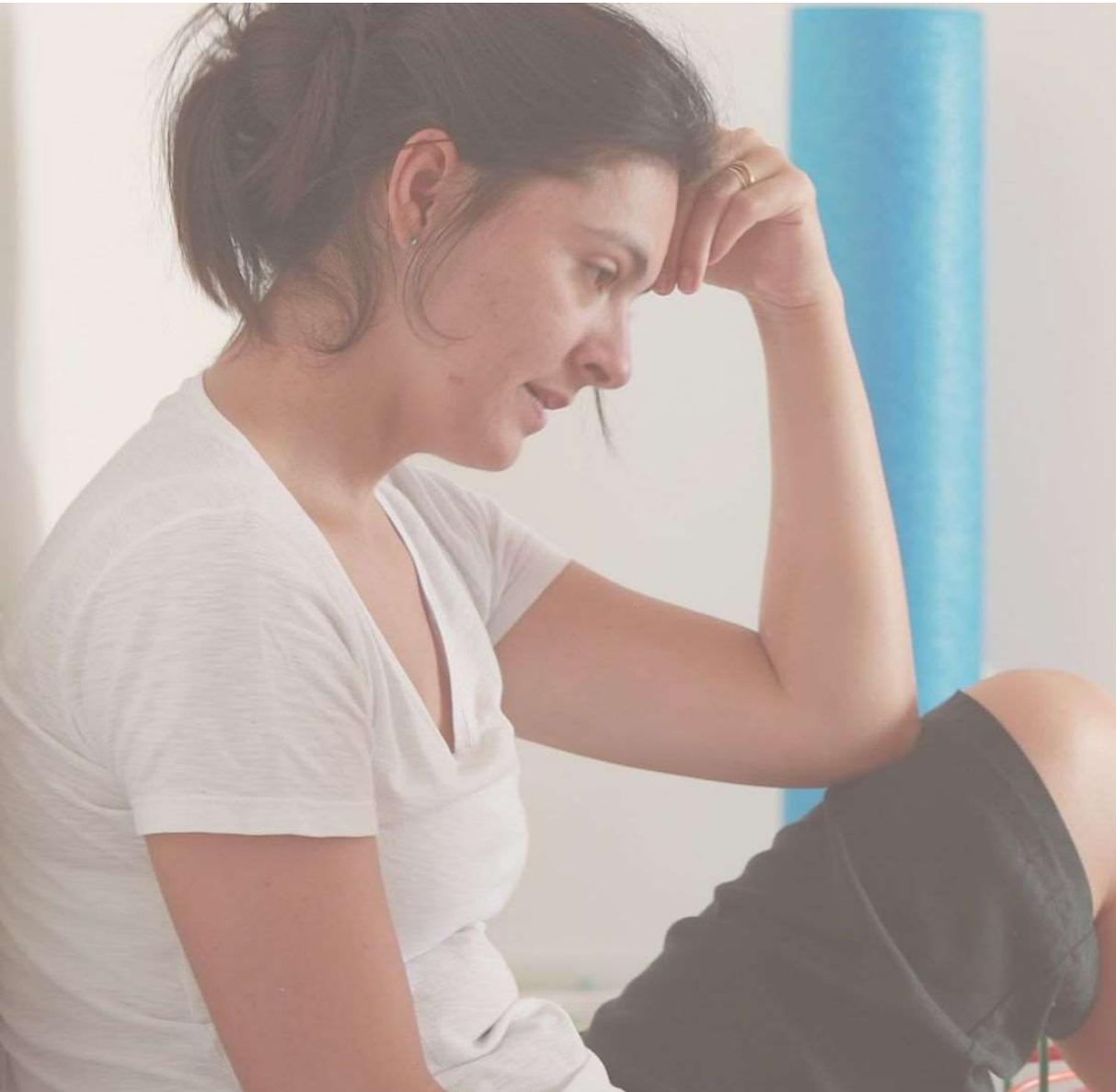




MammhaWorks!

Parents are **5 times** more likely to engage in care which means parents feeling better faster.



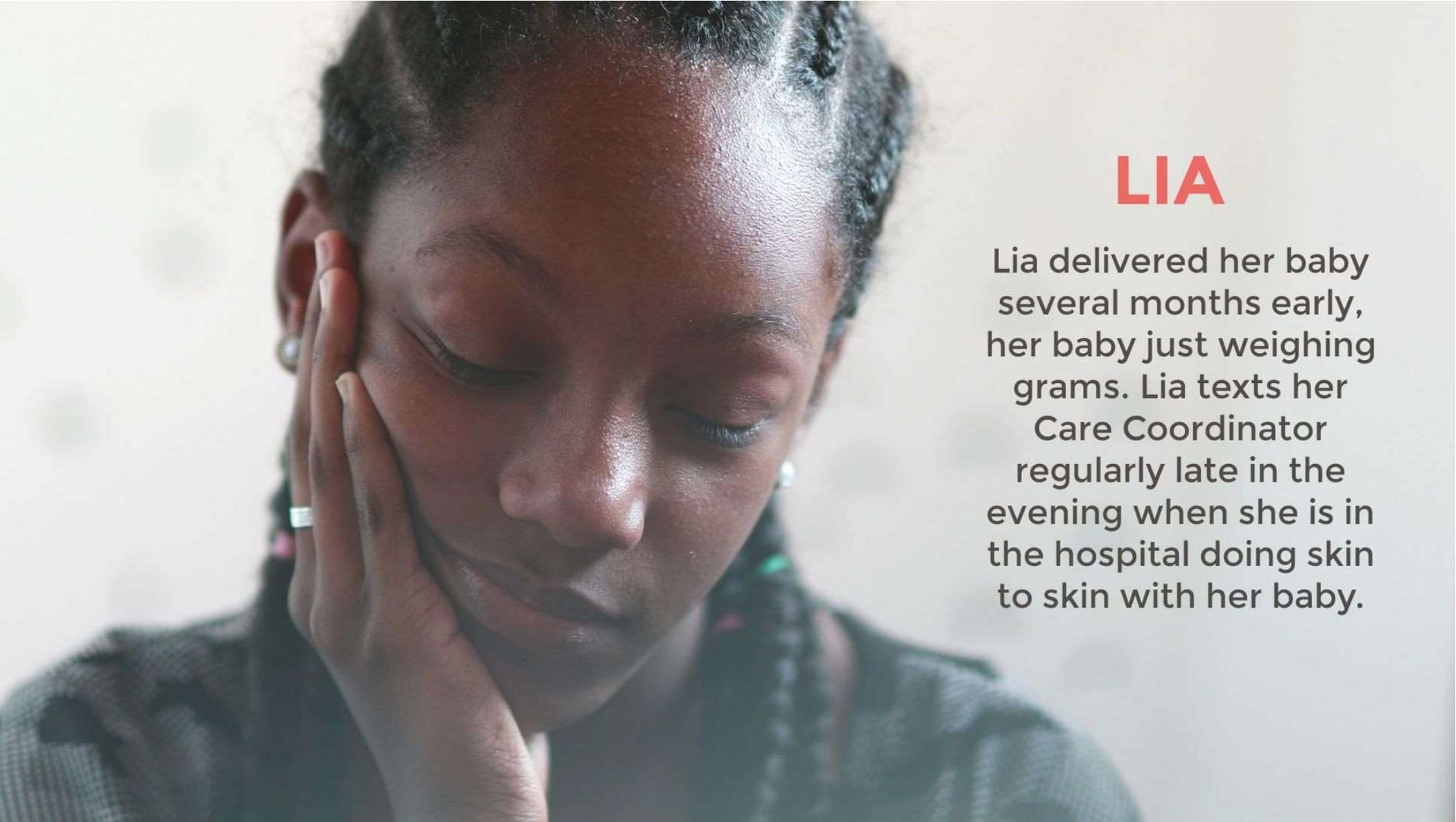


LISA & JERRY

Lisa had to have an emergency C- Section when she was 6 months pregnant. Her son was placed in the NICU and from complications from the birth, Lisa had to be transported to another hospital for the risk she would lose her life. Twenty-two months later, Lisa was still not better.



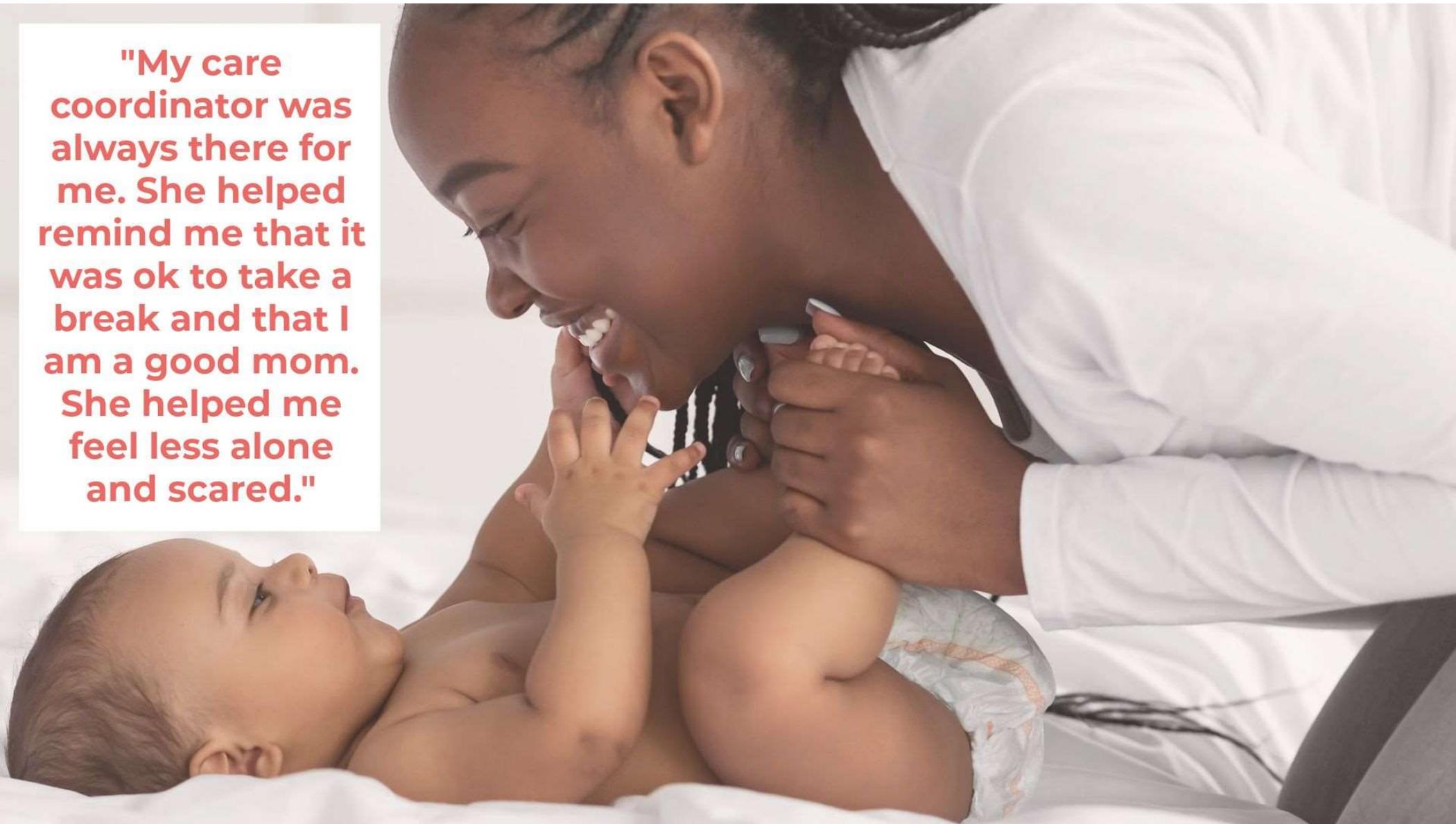
"For the first time, I am hopeful."



LIA

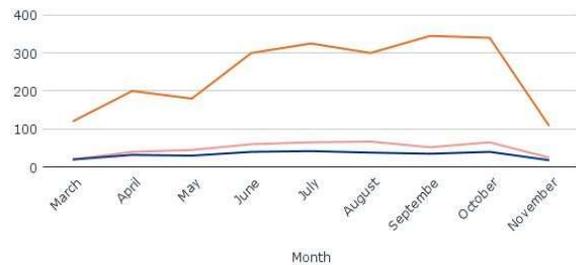
Lia delivered her baby several months early, her baby just weighing grams. Lia texts her Care Coordinator regularly late in the evening when she is in the hospital doing skin to skin with her baby.

"My care coordinator was always there for me. She helped remind me that it was ok to take a break and that I am a good mom. She helped me feel less alone and scared."

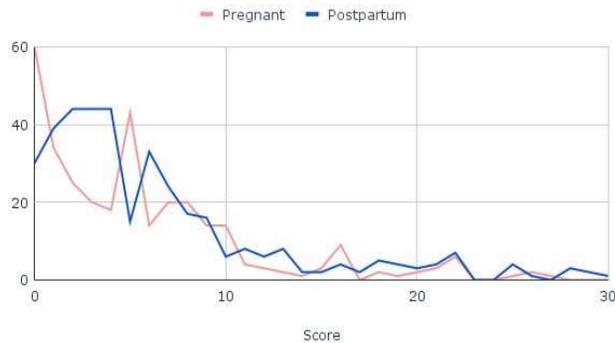


Instant Data

Screening Frequency - Comparison Between Sites



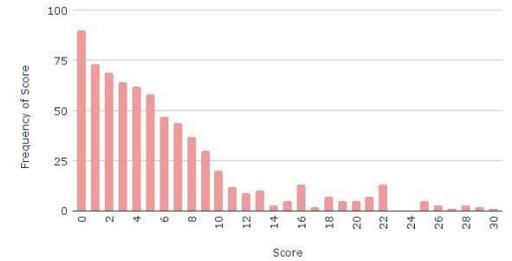
Pregnant vs Postpartum Scores



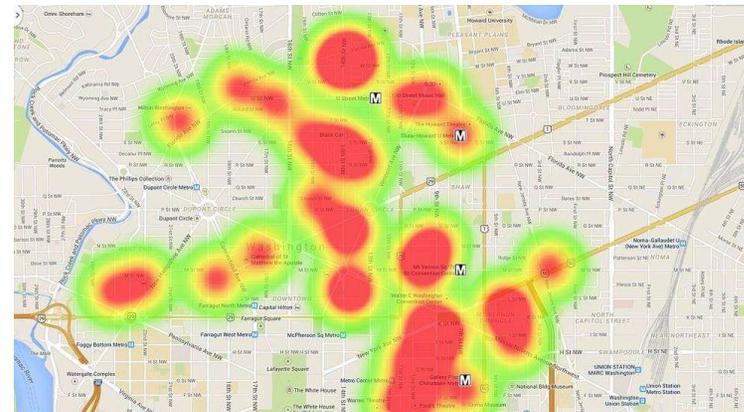
Total Screens Pregnant vs Postpartum All Sites



Score Frequency XYZ Practice



Positivity Rates in Different Zip Codes



Safety Measures



Screen Access Time Limits



Collect Location



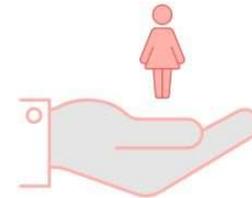
Emergency Contact



Urgent Notifications



Self-Harm Special Messaging



**Self-Harm Care Coordinator
Contact W/I 1 Hour**



Thank you

For more information: maureen@getmammha.com

Future Webinars

September 28th:

- "Family Integrated Care" with **Dr. Karel O'Brien**
- "Non-Birthing Parent Support" with **Mr. Alex Zavala**

November 9th:

- "Helping Families Cope and the Ethics of FICare" with **Dr. Annie Janvier**
- "Family Integrated Care Interventions May Improve Preterm Infant and Maternal Outcomes Compared with Family-Centered Care in U.S. NICUs" with **Dr. Linda Franck**

January 11th 2024:

- Social Determinants of Health Screening with **Dr. Erika (Gaby) Cordova Ramos**
- SafetyNet NICU's Comprehensive Family-Centered Care Program with **Dr. Priya Jegatheesan and Dr. Sangeeta Malik**



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