

A Supportive Environment for Infants and Parents in the NICU

The NIDCAP Way



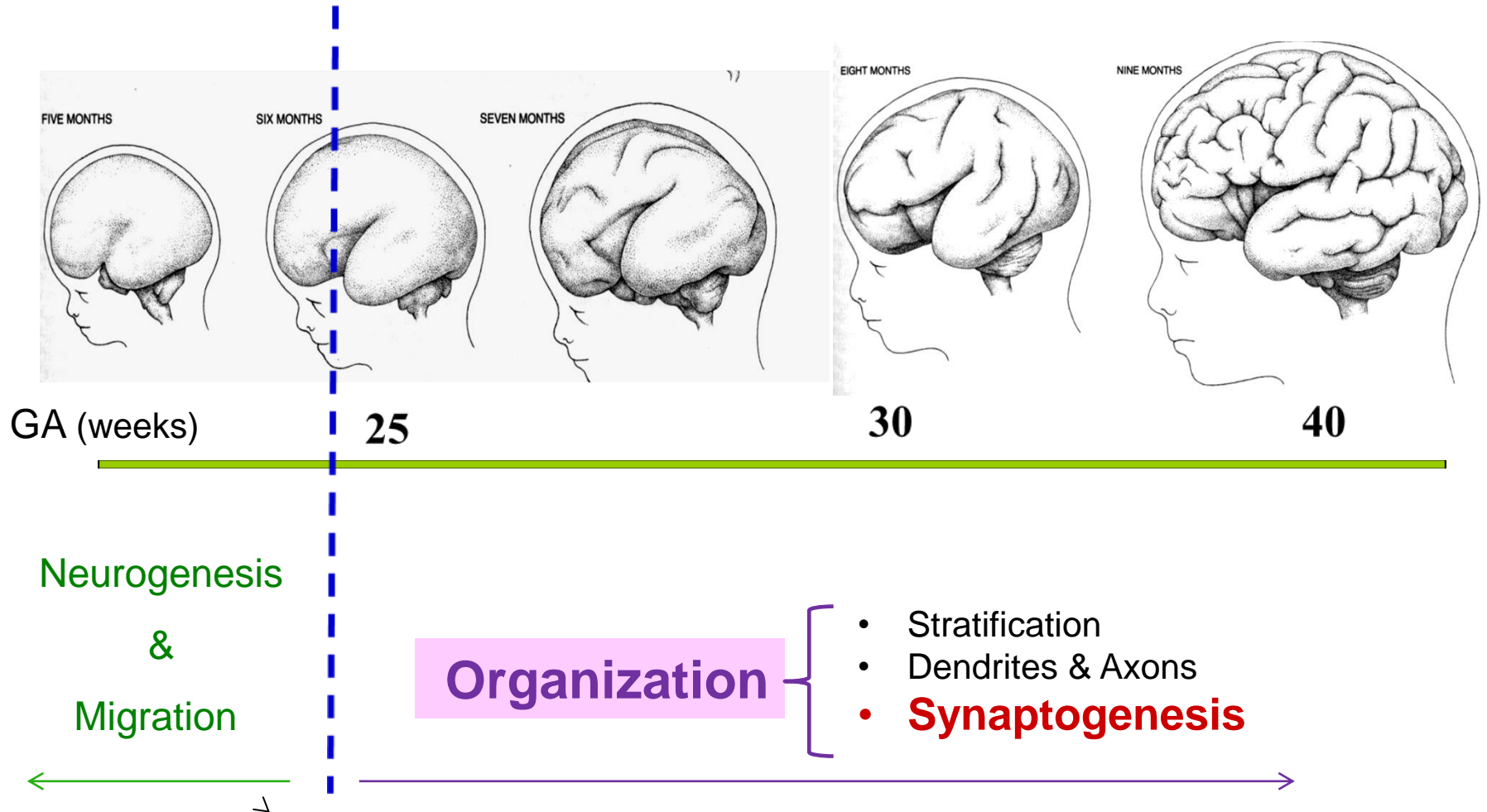
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Meir Medical Center



Some Facts

- Survival of VLBW has improved **> 85%**
- Incidence of neurodevelopmental disabilities remains high - **30-50%**
(motor, self-regulation, ADHD, learning, language, behavior,...)
- Also in infants without major morbidity in NICU

The Brain in the NICU



The Brain in the NICU

Secondary

Infection
Morbidity
Nutrition
Medications



Primary

IVH
PVL

Stress

Noise, Light,
Pain, Maternal
Separation

From womb...



... to “Traditional” NICU

- Light
- Sound
- Sleep Disruption
- Pain
- Separation from Mother



Brain-Sensory “Gap”

**Immature
Brain**



**Stimulation
&
Stress**

Questions



Questions



- **How does the NICU feel to the infant?**
 - How he responds to stimuli ?
 - How he reacts during procedures and care?
 - What are our skills to understand behavior, to reduce stress, to promote development?

Questions



- **How does the NICU feel to parents?**
 - Calm, welcoming, tense...?
 - Easy to develop their role...?
 - How do we really have them **IN**?
 - How do we help them grow in their parenting role?

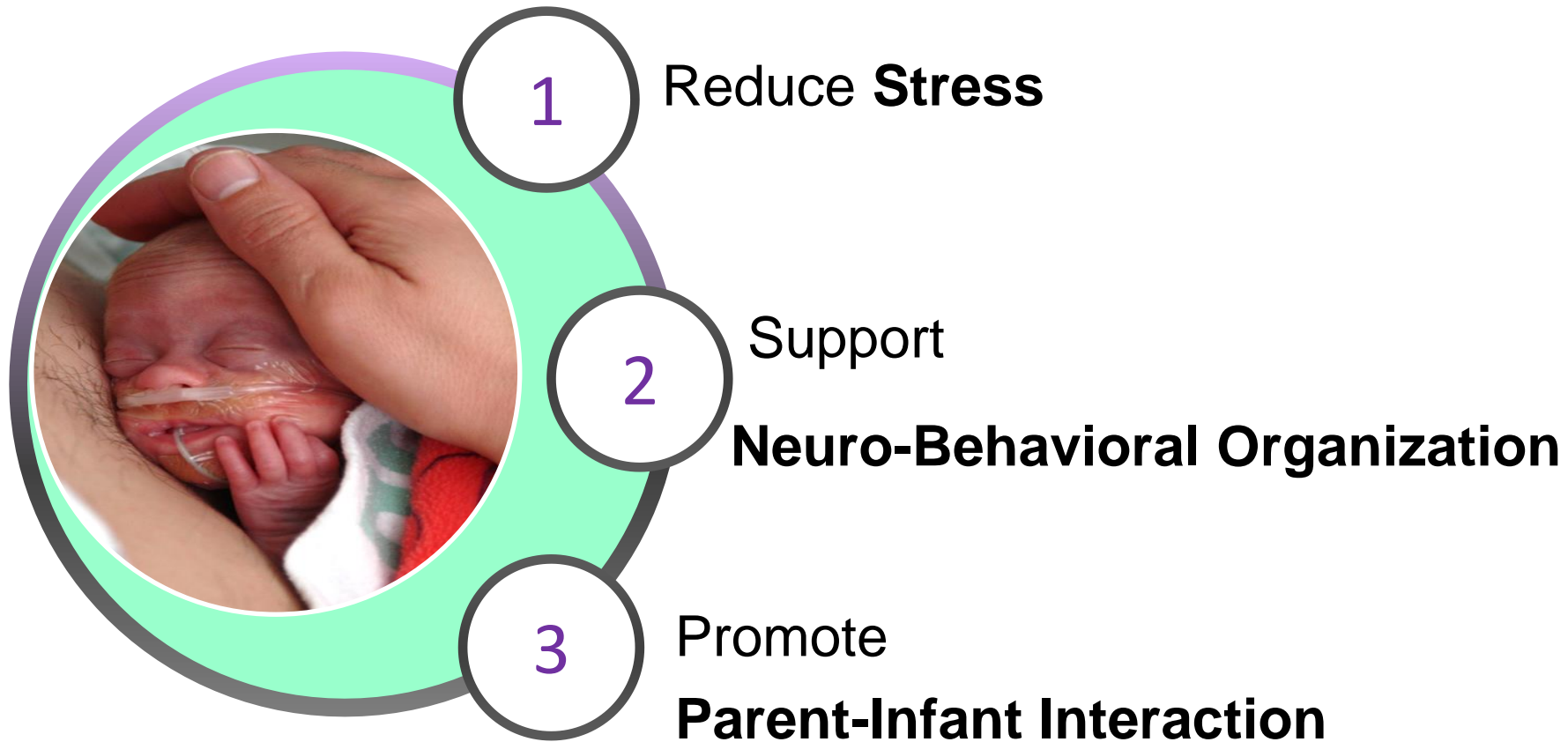
The NIDCAP Model



Newborn **I**ndividualized **D**evelopmental
Care and **A**ssessment **P**rogram



NIDCAP Goals

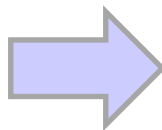


Observational

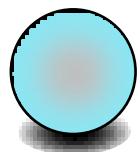
**NIDCAP
"Top 3"**

**Family-
Centered**

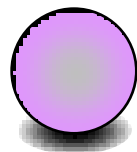
Individualized



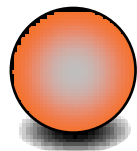
Areas of Intervention



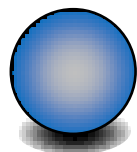
Environment



Infant Care



Family Care

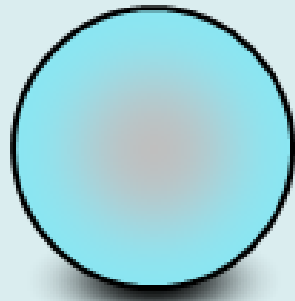


Staff Development

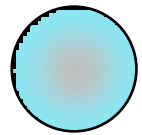
Some Answers

Practices to Support Infant Development
and
Parent Participation in Care





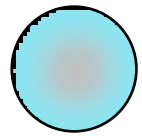
Environment



Adapting the Environment

General “look” of the NICU

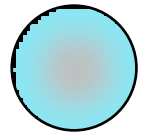




Adapting the Environment

General “look” of the NICU



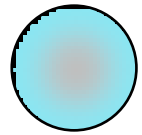


Adapting the Environment

Light & Sound Reduction

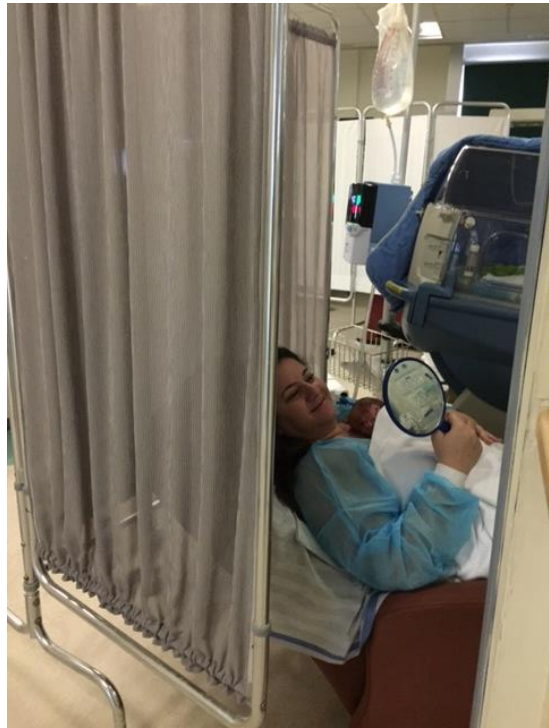
- ✓ Muted light
- ✓ Covers and canopies
- ✓ Protection of sleep
- ✓ Voice and behavior

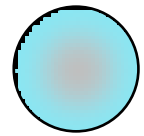




Adapting the Environment

Provision of Privacy



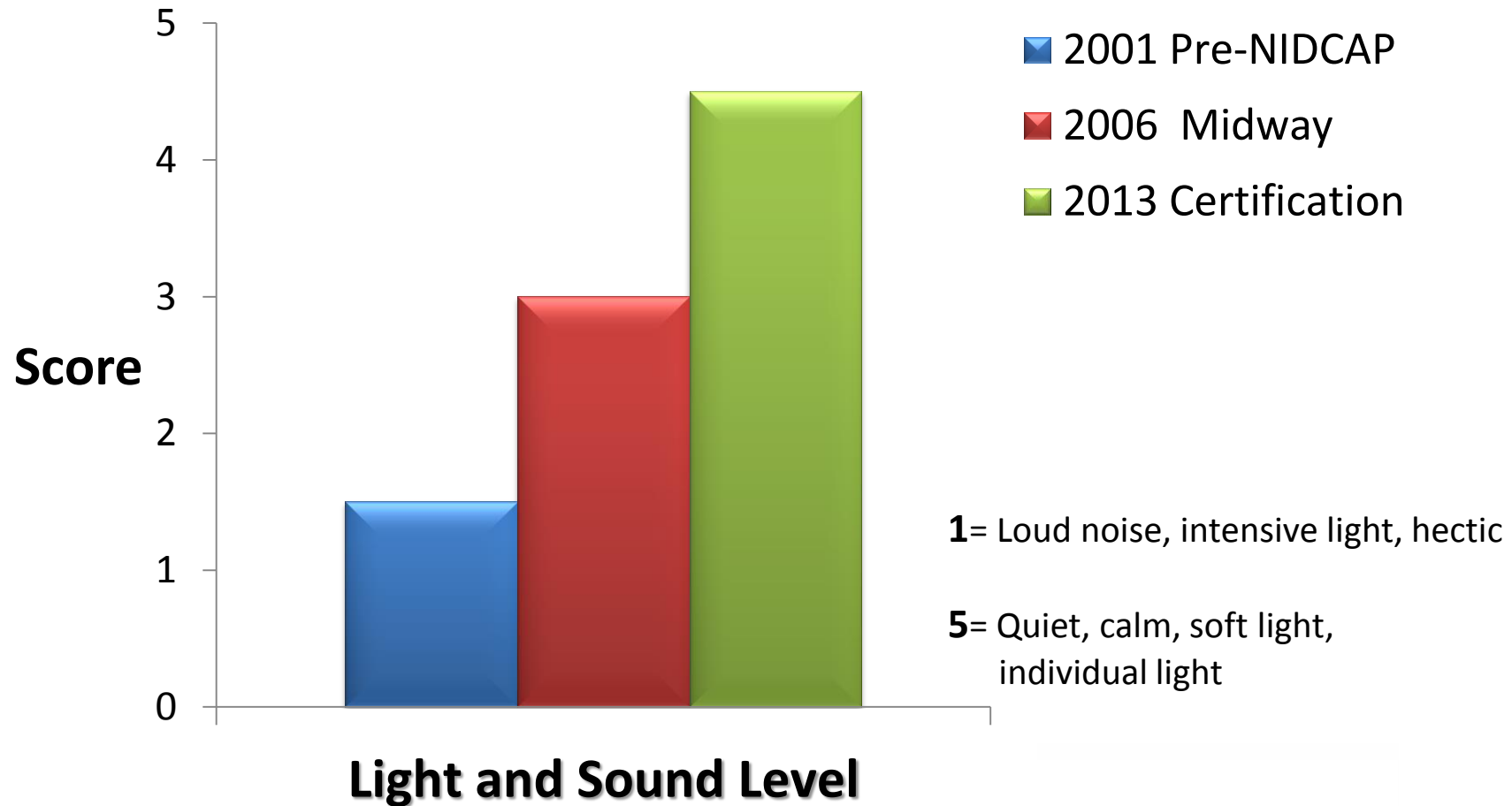


Adapting the Environment

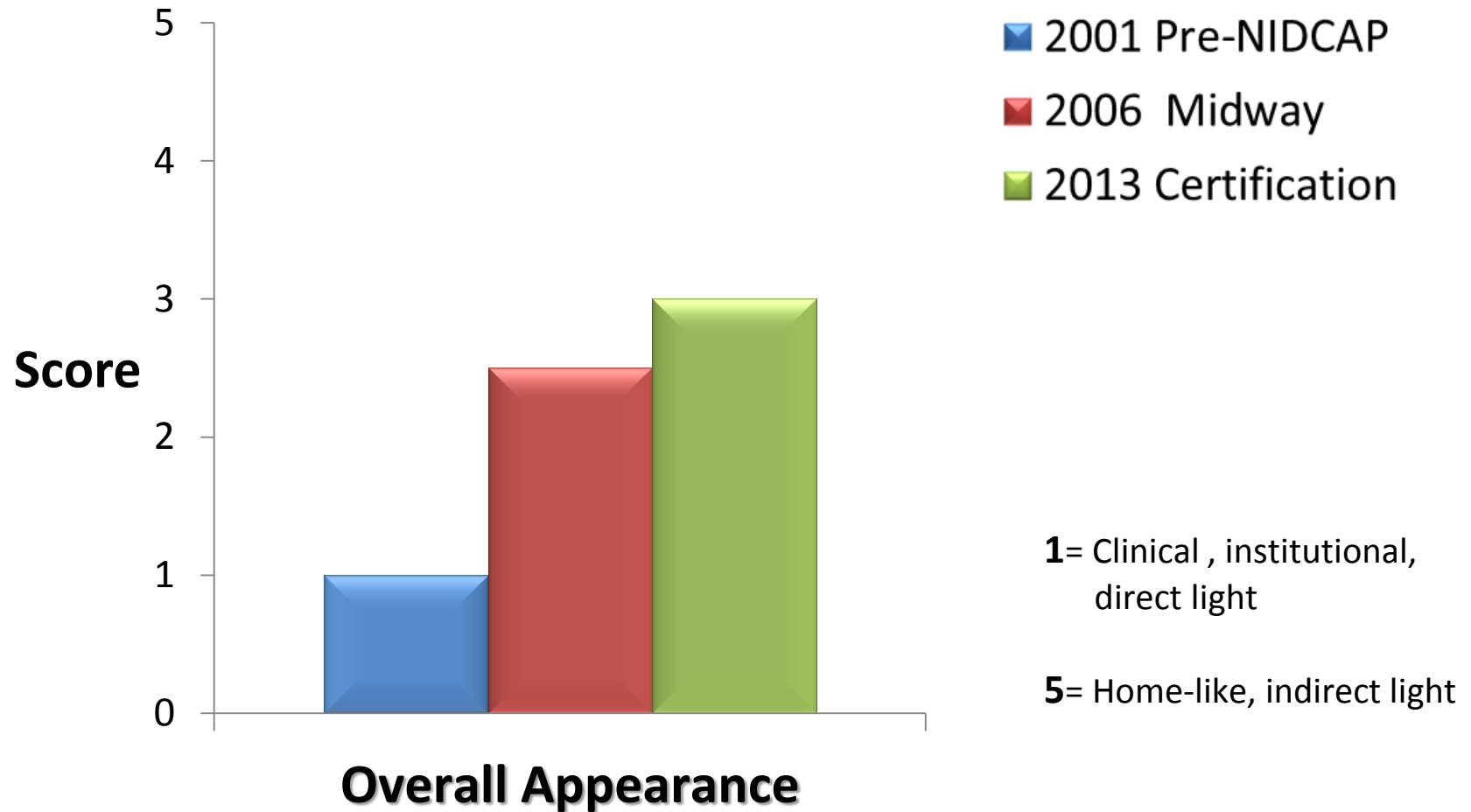
“Personal” bed space

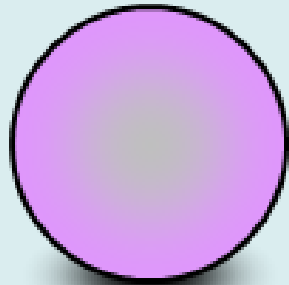


Assessing the Change

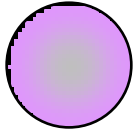


Assessing the Change





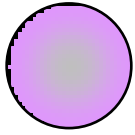
Infant Care



Infant Care

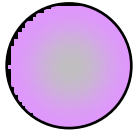
Prolonged Skin to Skin





Infant Care





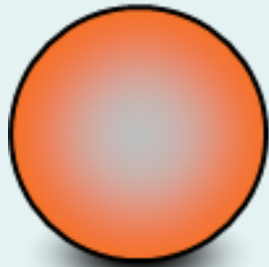
Infant Care

↑↑ Proximity and Touch

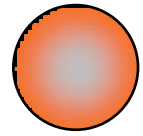


Containment





Family Care



Parent to Parent Support



אחים בוגרים



Parents' Participation in Care

Family Centered Rounds (FCR)

*Conventional
Rounds*



Rounds with Parents

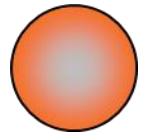


Staff Perceptions

	Pre FCR (Mean)	Post FCR (Mean)	p
Total Score	26.8	30.6	*
Questions			
<i>parents' right to participate</i>	3.6	4.7	**
<i>parents' understanding of infant</i>	3.6	4.3	*
<i>staff's understanding of infant/parents</i>	3.1	4.0	**

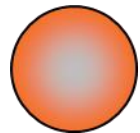
Parents' Perceptions

	Pre FCR (Mean)	Post FCR (Mean)	p
Total Score	30.9	33.8	*
Questions			
<i>opinion matters</i>	4.2	4.8	*
<i>felt understood</i>	4.4	4.9	*



Family Centered Rounds

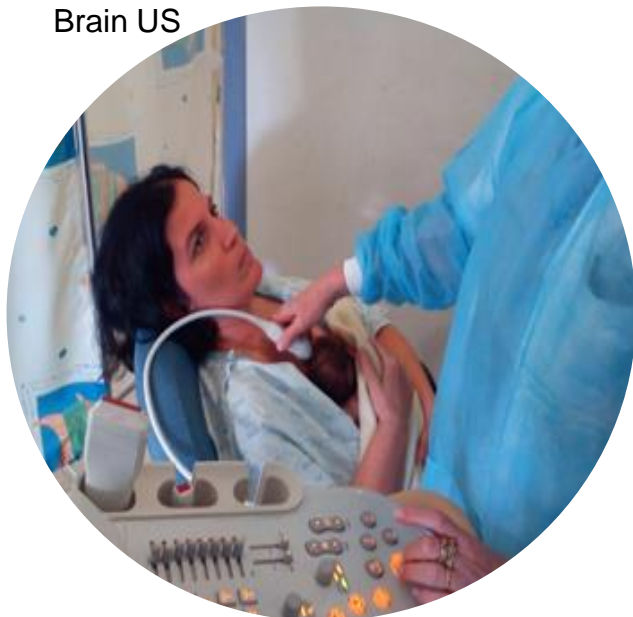
- Is a family-centered practice that can be implemented
- Improved attitudes of parents and staff towards communication and participation
- FCRs going on for 5 years now...!



Parents' Participation in Care

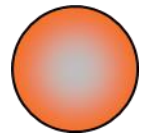
Support to baby in procedures

Brain US



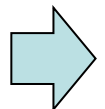
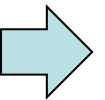
Blood draw

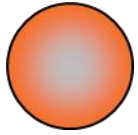




Parents' Participation in Care

4-Hand Care





Parents' Involvement

Shared Learning



Some final reflections

NICU environment and care can be adapted
in order to:

- ❑ Protect and nurture infant's developing brain
- ❑ Support infant's developmental needs
- ❑ Facilitate parents' involvement



Some final reflections

Parents' participation in care depends on the knowledge, attitudes and behaviors of the team, as well as on the quality of relationships with the families, and not only on the physical aspects of the NICU



Some final reflections

The optimally designed NICUs of the future will necessarily need to be staffed by professionals who are knowledgeable and skilled in the delivery of *sensitive, humane, family-centered developmental care for infants and parents*





תודה רבה!!

