

## Rethink, Redesign, Rebuild:

Revolutionizing NICU Lactation  
Care

Claire Eden, BA, IBCLC and  
Joanie Randle, MSN, MSHS, RN,  
IBCLC



1

We have nothing to  
disclose

2

### Objectives:

- Describe current gaps in lactation care
- Identify 3 barriers hospital systems must overcome to implement Continuity of Care in lactation
- Identify 3 NICU specific skills needed to help pump dependent mothers

Rethink

Redesign

Rebuild

Revolutionize lactation care in the NICU

3

Rethink

**Why do we need to change  
the NICU Lactation Care  
paradigm?**

**The current system is not working**

4



Lactation care is fragmented & inconsistent with gaps in care that contribute to suboptimal breastfeeding outcomes in the NICU.

5

Rethink

Redesign

Rebuild

**#thestruggleisreal**

Revolutionize Lactation Care in the NICU

There is a disconnect between the clinical team **telling parents it is critical that they provide milk for their NICU baby** and then not stepping in to the breach to make sure appropriate lactation care is available.

6



This paradigm shift can optimize milk production, increase parental self-efficacy, and meaningfully improve breastfeeding-related outcomes.

7

Redesign  
Rebuild  
Revolutionize  
**Rethink**

the traditional model of lactation care in the NICU

8

What are  
gaps and  
barriers in  
NICU  
lactation  
care

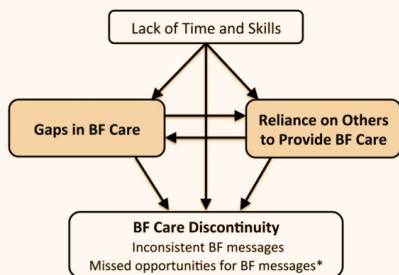


9

### Lactation Care Practice Gaps and Barriers



10



Garner CD, Ratcliff SL, Thornburg LL, Wethington E, Howard CR, Rasmussen KM. Discontinuity of Breastfeeding Care: "There's No Captain of the Ship". *Breastfeed Med*. 2016;11(1):32-39.

11

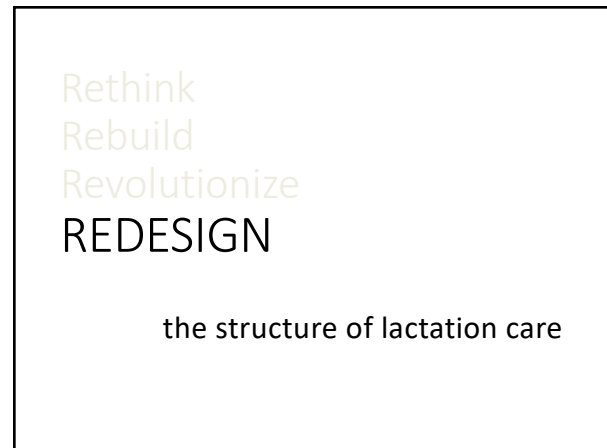
### Lactation care in the NICU: Current State



12



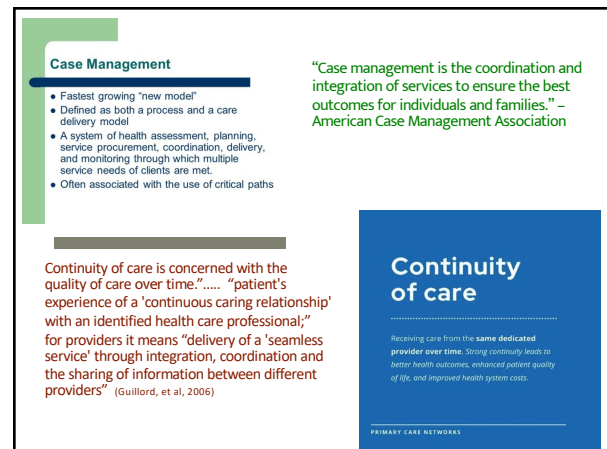
13



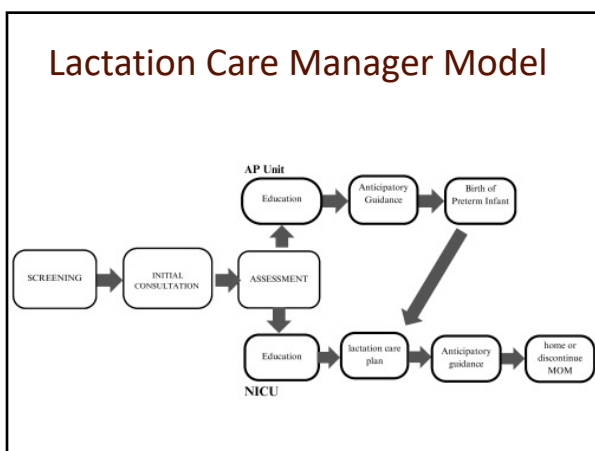
14



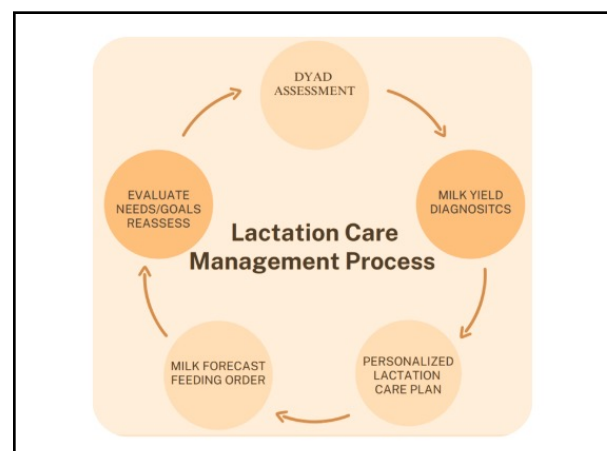
15



16



17



18

## Moving toward personalized lactation care

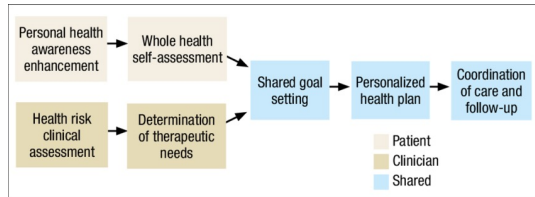


19

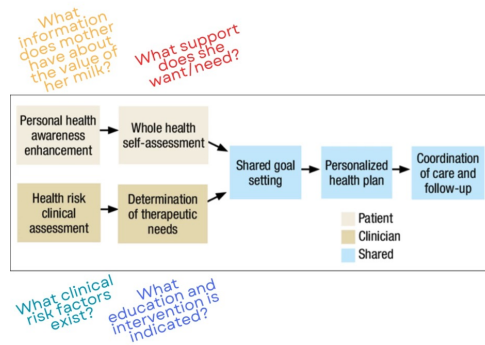
## Moving toward personalized lactation care



20



21



22

Rethink  
Redesign  
Revolutionize  
**REBUILD**

Lactation Consultants at the clinical team table

23

Does lactation have a seat at the clinical table?

Marginalized?

24

## Lactation care in the NICU: Desired State

- Lactation as part of daily rounding on Antepartum & NICU
- Lactation specific NICU skill set
- Lactation Care Manager to follow mother/family AP → PP → NICU → Discharge
- Create & implement policy prioritizing lactation support during separation

25

## NICU skill set is needed to assist pump dependent mothers in NICU

Milk expression and exclusive pump use

Understanding of preterm lactogenesis timeline

Trauma informed counseling and communication skills

physiology & pathophysiology of preterm and medically complex infants

maternal pathophysiology impacting milk production

Maternal pharmacology impacting milk production

26

## Integrate Lactation Care into rounding on Antepartum & NICU

- AP: start lactation education/preparation while mom is on AP unit
- NICU: daily/regular check in re: milk volumes
- Collaboration among clinical teams (AP/PP/NICU/outpatient lactation consultants)



27



28

Rethink Redesign Rebuild

REVOLUTIONIZE

29

## Keys to Coming to Volume

(producing > 500 milliliters of milk per day by postnatal day 14 for mothers of infants in the NICU)

5x5



Expressing milk at least 5 times a day by day 5

Early



At least one of those between 1 and 5 am

<5 hours



Don't go longer than 5 hours between pumping sessions

Mago-Shah, R., Gupta, V., & Shah, R. (2023). Early pumping frequency and coming to volume for mother's own milk feeding in hospitalized infants. J. Pediatr. Nurs., 58, 10–16.

30

### Prior to maternal discharge

- Hands expression and hands-on pumping
- Effective double electric pump for home use (and instruction on how to use it!)
- Clinical assessment of lactation risk assessment
- Personalized care plan for the first 24-48 hours



31

### Maternal discharge teaching checklist:

- ☒ assembly and cleaning of breast pump
- ☒ lactation physiology
- ☒ pumping log/app to track milk production
- ☒ expression schedule
- ☒ milk collection, storage, labeling, transport
- ☒ post-discharge follow-up with IBCLC

32

### Regular follow up with an IBCLC

Follow-up lactation care should be provided at regular intervals after maternal discharge:

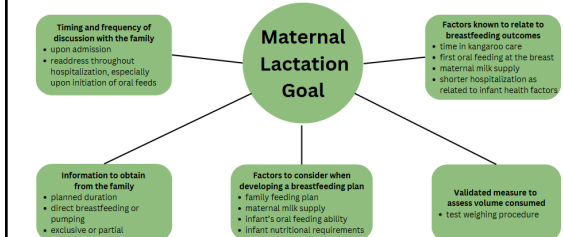
- 48-72 hours after discharge
- 7-10 days postpartum
- 14 days postpartum.
- PRN

This care should include comprehensive lactation assessment:

- Pump frequency/yield
- Self-efficacy
- Feeding order/opportunities
- Personalized care plan

33

### NICU Discharge Planning Should Address Maternal Lactation Goal



Taylor, S. N., & Martin, C. R (2022) Evidence-based discharge nutrition to optimize preterm infant outcomes, NeoReviews, 23(2), e108-e116.

34

Rethink Redesign Rebuild

REVOLUTIONIZE

## Conclusions

Rethink: The current model is fragmented and insufficient  
 Redesign: Lactation Consultants part of the clinical team  
 Rebuild: Recognize NICU lactation care requires specific skill set

35

## ACKNOWLEDGEMENTS

Georgia Perinatal Quality Collaborative  
 National Lactation Consultant Alliance  
 La Leche League International  
 Children's Healthcare of Atlanta  
 Georgia Chapter, American Academy of Pediatrics  
 Abigail Wexner Research Institute  
 Nationwide Children's Hospital

37



## References

World Health Organization. Indicators for Assessing Infant and Young Child Feeding Practices. 2008

Miller J, Tonkin E, Damarell R, et al. A systematic review and meta-analysis of human Milk feeding and morbidity in very low birth weight infants. *Nutrients*. 2018;10:E707.

Perugi, S., Ciarcia, M., Coviello, C., Fusco, M., Lunardi, C., Remaschi, G., Sarcina, D., Sassudelli, G., Pratesi, S., Dani, C., & PROBREAST Study Group (2024). A structured programme to promote breastfeeding improved the rates in very preterm infants at discharge. *Acta paediatrica* (Oslo, Norway : 1992), 113(6), 1322–1330.

Suganuma, M., Rumbold, A. R., Miller, J., Chong, Y. F., & Collins, C. T. (2021). A Systematic Review and Meta-Analysis of Human Milk Feeding and Short-Term Growth in Preterm and Very Low Birth Weight Infants. *Nutrients*, 13(6), 2089.

38

## References

Song, J. T., Kinshella, M. W., Kawaza, K., & Goldfarb, D. M. (2023). Neonatal Intensive Care Unit Interventions to Improve Breastfeeding Rates at Discharge Among Preterm and Low Birth Weight Infants: A Systematic Review and Meta-Analysis. *Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine*, 18(2), 97–106.

Mercado, K., Vittner, D., & McGrath, J. (2019). What Is the Impact of NICU-Dedicated Lactation Consultants? An Evidence-Based Practice Brief. *Advances in neonatal care : official journal of the National Association of Neonatal Nurses*, 19(5), 383–393.

Sankar, M. N., Weiner, Y., Chopra, N., Kan, P., Williams, Z., & Lee, H. C. (2022). Barriers to optimal breast milk provision in the neonatal intensive care unit. *Journal of perinatology : official journal of the California Perinatal Association*, 42(8), 1076–1082.

39

## References

Parker, L. A., Bendixen, M., Sullivan, S., Cacho, N., & Mueller, M. (2022). Antepartum Breast Pump Education for Mothers and Their Support Person: Effect on Time to First Expression and Lactation Outcomes-A Randomized Controlled Pilot Study. *Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine*, 17(5), 437–445.

Meek JY, Noble L; Section on Breastfeeding. Policy Statement: Breastfeeding and the Use of Human Milk. *Pediatrics*. 2022 Jul 1;150(1):e2022057988. doi: 10.1542/peds.2022-057988. PMID: 35921640.

Mago-Shah, R., Gupta, V., & Shah, R. (2023). Early pumping frequency and coming to volume for mother's own milk feeding in hospitalized infants. *J. Pediatr. Nurs.*, 58, 10–16.

Rollins, N. C., et al. (2016). Why invest, and what it will take to improve breastfeeding practices? *Lancet*, 387(10017), 491–504.

40

## Extra ideas/verbiage to use

41

## METHODS

1. Establish a Lactation Care Manager role to offer structured, individualized, goal-orientated lactation care consistently over time.
2. International Board Certified Lactation Consultants (IBCLC) providing care for NICU families need advanced training and skills specific to the needs of pump-dependent parents and medically complex infants.
3. Reframe antenatal lactation education to include preparation for separation for high-risk pregnancies and identify opportunities for lactation teaching antenatally.
4. Establish policies prioritizing lactation education and care when the mother and neonate are separated.
5. Provide assessment and education for mothers of NICU patients prior to maternal discharge and ensure regular follow up visits with IBCLC through NICU admission (including after NICU discharge, if indicated).

42

## RESULTS

- The Lactation Care Manager Model offers structured, personalized, goal-orientated lactation care consistently over time, addressing fragmentation in care and optimizing outcomes.
- The 5x5 approach connects advice about breast pumping frequency to teaching about lactation physiology and aligns with research on milk production outcomes.
- NICU-focused lactation policies enhance early intervention, increase pump access, and support maternal self-efficacy.
- Improved milk volume outcomes have been observed in NICUs that incorporate individualized lactation planning and support by an IBCLC.

43