



Florida's Quality Improvement Initiative: Mother's Own Milk (MOM)

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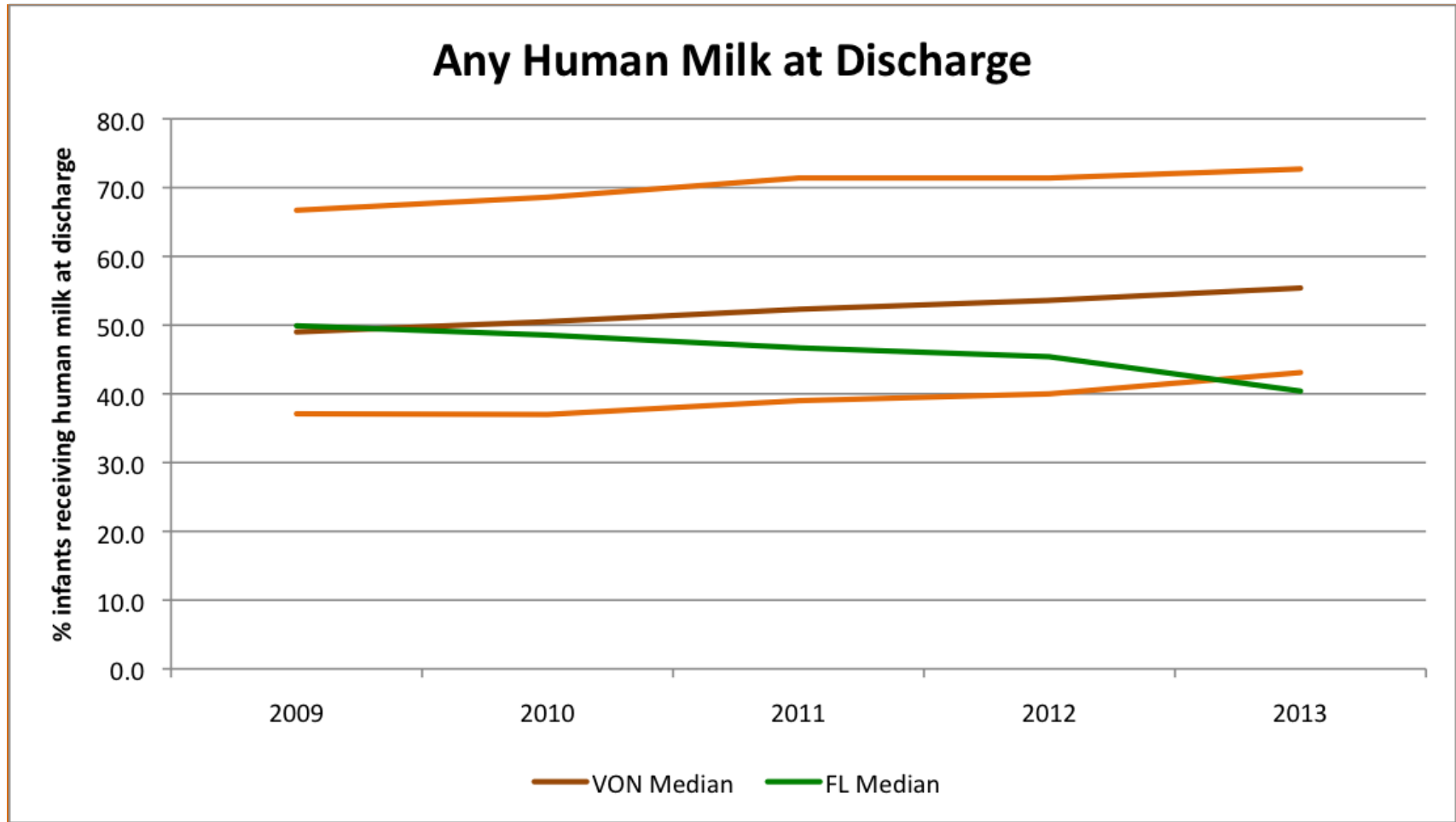
Partnering to Improve Health Care Quality
for Mothers and Babies



Background and Significance

- Human milk is the optimal source of nutrition for babies, especially those under 1,500 grams at birth.
- The AAP (2012) recommends an exclusive human milk diet for premature infants.
 - Mother's own milk (MOM) is the 1st choice
 - Use of pasteurized donor milk (PDM) is recommended if MOM is not available.

Florida vs Vermont Oxford Network (VON) from 2009 to 2013



FPQC MOM Initiative Aim

To apply evidence-based interventions to increase the use of MOM in VLBWs

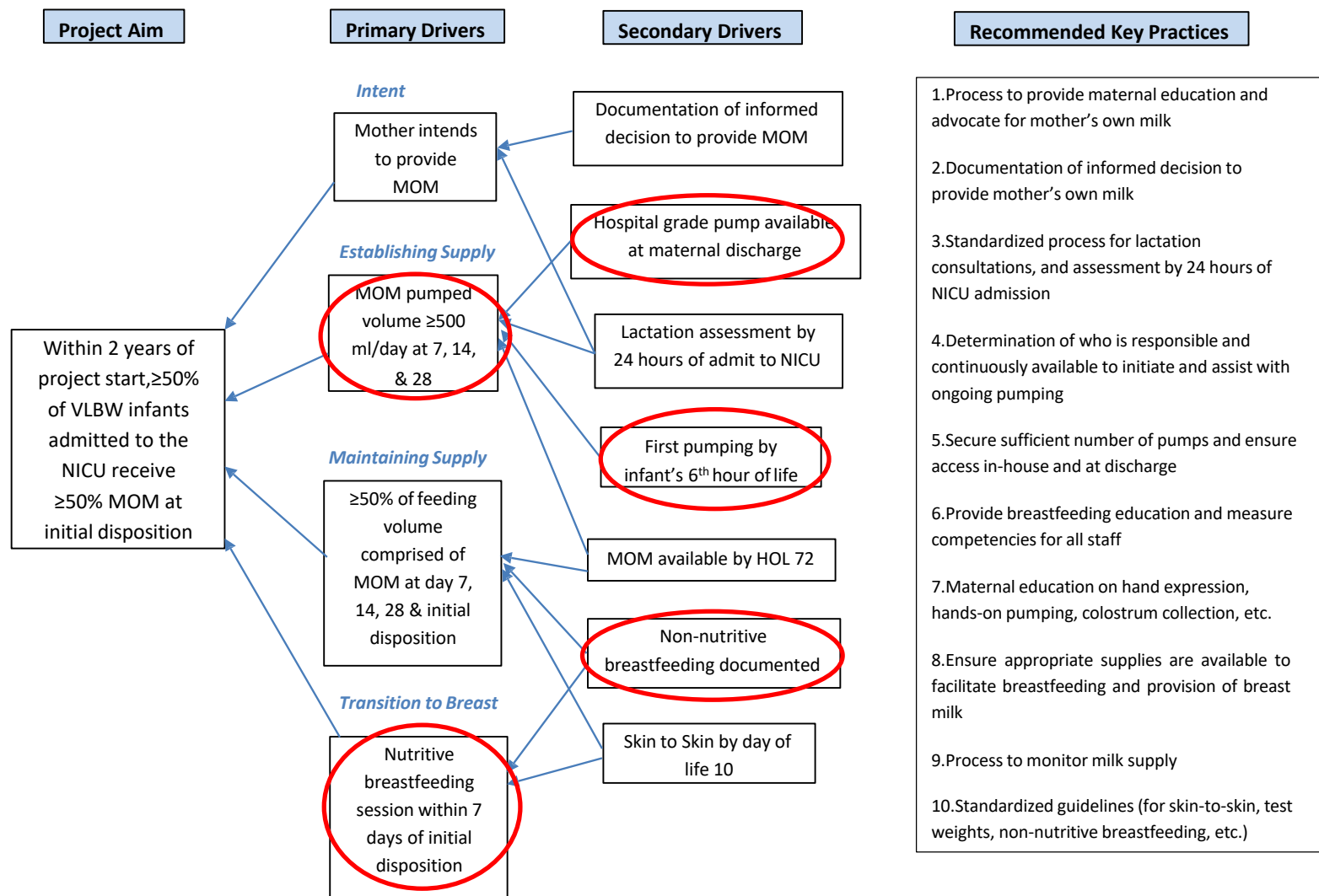
Goal:

- 👤 Within 2 years of project start, greater than 50% of very low birth weight infants admitted to the NICU will receive greater than or equal to 50% of mothers own milk (MOM) at discharge

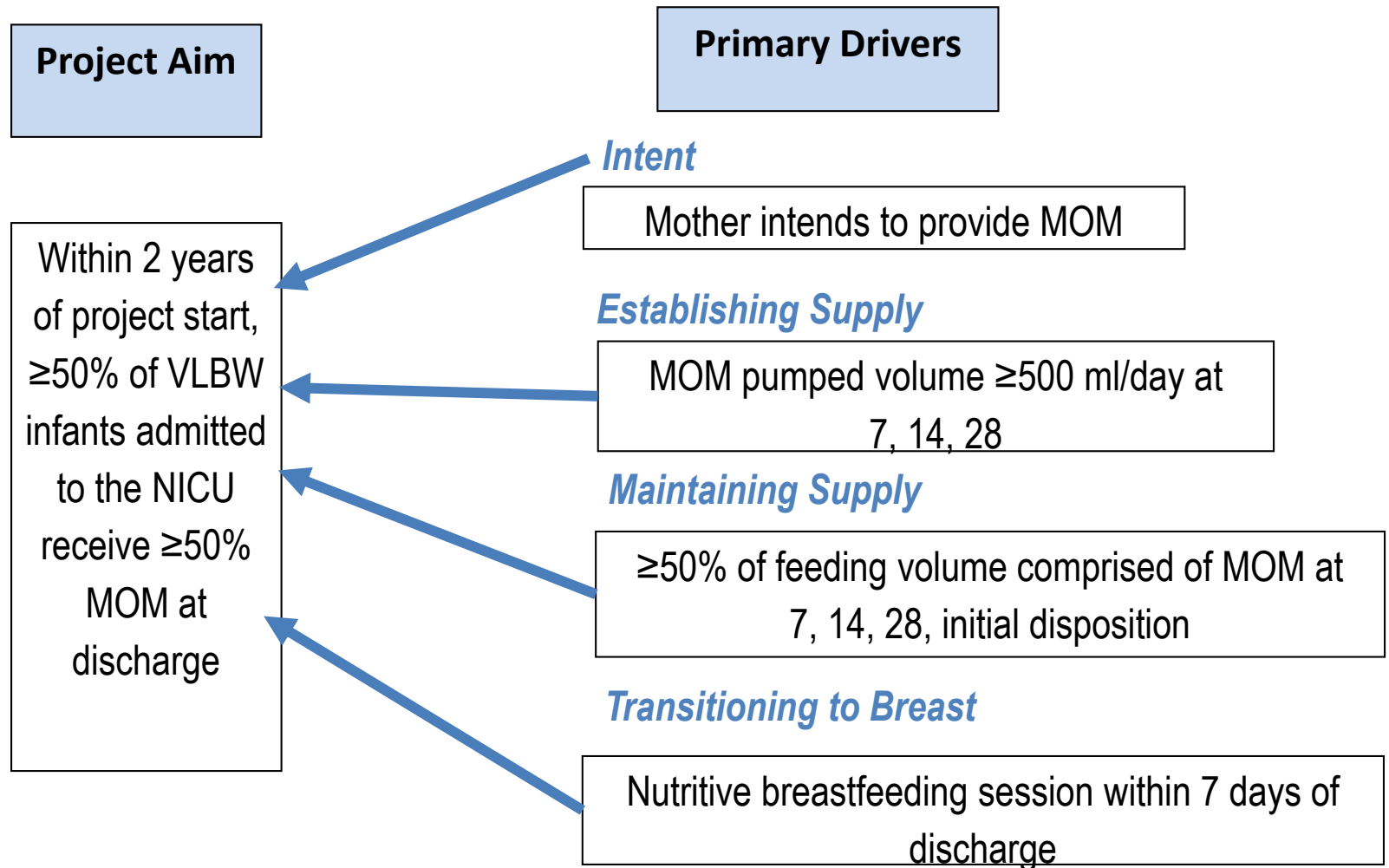
<http://health.usf.edu/publichealth/chiles/fpqc/mom>



Mother's Own Milk (MOM) Initiative

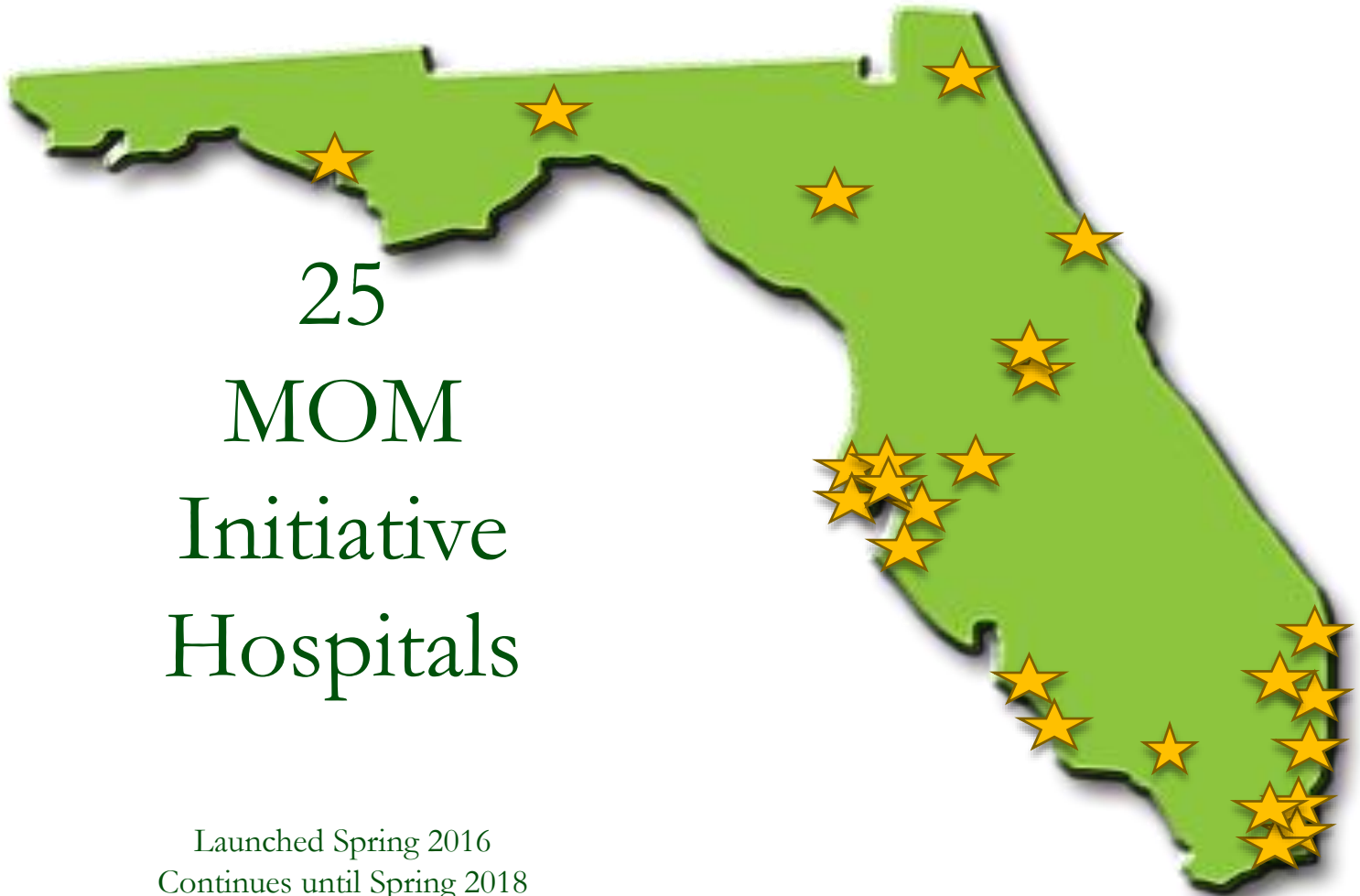


MOM Project

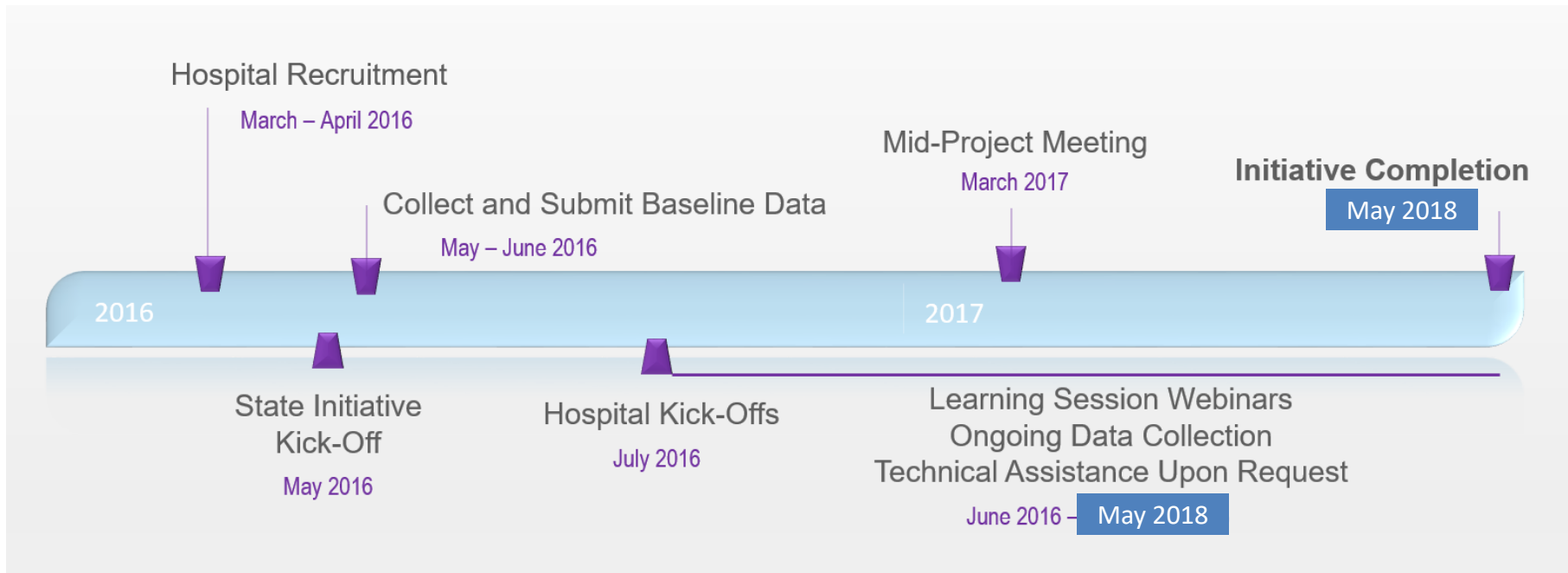


25
MOM
Initiative
Hospitals

Launched Spring 2016
Continues until Spring 2018



Timeline



MOM MID-PROJECT MEETING



1. Prenatal Advocacy and Education on MOM

- All mothers with high risk pregnancies receive prenatal education on the importance of MOM

MOM Education Tool

- 👶 Used prenatally or after delivery of NICU infant
- 👶 Focused on MOM for VLBW
- 👶 Can be customized by hospitals & available in Spanish
- 👶 <http://health.usf.edu/publichealth/chiles/fpqc/~media/46E206F23F794A459CD1C15F675357DB.ashx>

Colostrum and Breast Milk is the best medicine for your baby!

- 👶 If you are interested in feeding your baby at the breast, we are here to help you.
- 👶 We encourage you to pump to provide your own milk even if you don't plan to feed your baby at your breast.
- 👶 Learning to pump takes practice

SEVEN STEPS TO SUCCESSFULLY PROVIDING MOM'S OWN MILK IN THE NICU



Pump Early, Pump Often

- 👶 **The best time to begin pumping is ASAP and within the first 6 hours of birth.**
- 👶 We recommend pumping every 2-3 hours while awake with a goal of at least 8 pumping sessions per day, with at least one pumping session at night.
- 👶 Hand expression after pumping can help remove and collect colostrum for your baby.
- 👶 **Remember Learning to Pump takes Practice!**

Educational Materials (8 languages)

Breast Milk is Best for Premature Babies

Babies born very early usually need to stay in the neonatal intensive care unit. The best food to give your baby is your breast milk. At first your baby may not be strong enough to breastfeed, but you can use a breast pump to collect all the milk your baby needs. Babies can get breast milk from a cotton swab, through a feeding tube that goes from the nose or mouth into the stomach, or from a bottle.

Breast milk is the best kind of food for premature babies because it:

- Is easier to drink than formula
- Can help the brain to grow and develop
- Can prevent serious infections
- Breast milk is a food and a medicine for your premature baby!

How do I make breast milk if my baby is not strong enough to suck on my breasts?

- While your baby is in the hospital, you will need to use a breast pump to get milk out of your breasts.
- Use the breast pump 8 or more times every 24 hours. Make sure to pump at night. The more times you pump each day the more milk you will make for your baby.
- When you visit your baby in the hospital, do "kangaroo" or "skin-to-skin" care. This is when you hold your baby naked with only a diaper on your bare chest. This helps you make more breast milk and is comforting for you and your baby.

Is my milk enough to help my baby grow?

- When babies are born very premature, they may need extra nutrients added to your breast milk. The doctors and nutritionists at your hospital will help decide if and when your baby may need more nutrients.

How do I get help with making breast milk for my baby?

- Making breast milk for a premature baby is hard work but very rewarding!
- Ask your nurse or lactation consultants if you are having difficulty pumping 8 or more times a day.
- Ask friends and family to help you by making meals or snacks, doing chores, helping with other children, or just offering encouragement.



Making Breast Milk When Your Baby is Premature

Babies born very early usually need to stay in the neonatal intensive care unit. Your breast milk is a medicine and a food for your baby. It is important to start making breast milk as soon as possible after birth. The sooner you start, the more milk you will make for your baby.



Syringe filled with colostrum



Baby receiving colostrum in a syringe



Pumped breast milk



Mother hand expressing

The first drops of breast milk are called "colostrum"

- Colostrum comes as tiny drops of milk that can look yellow.
- Colostrum has special nutrients that can help prevent infections.
- Many people call colostrum "liquid gold" because it is so special.
- You can use a breast pump and your hands to get colostrum. Try to collect your colostrum as soon as possible after birth so that it is ready for your baby as soon as he or she needs it. The sooner you start trying, the more milk you'll make.
- Nurses can give your baby your colostrum, even if he or she is not big enough to feed from a bottle yet.

Making more milk over time

- After a few days, your milk will change. It will look whiter and you'll be making a lot more of it.
- This milk usually comes about 3 to 5 days after you have your baby or sometimes even longer after you have a premature baby, a cesarean section, or if you received certain medications before or during your delivery.
- This is the milk your baby needs to grow.

How often should I use the breast pump?

- Pump at least 8 times over 24 hours.
- Make sure to pump at night. It can be helpful to set an alarm to wake you up to pump.
- It is normal in the first few days to make only a few drops of colostrum. Even if you don't see much milk at first, pumping a lot in the beginning will help you make more milk in the future.

Hand expression

- You can also get milk out of your breasts by using your hand to spray milk directly into a small cup.
- Hand expression can be done right after or even before you give a breastfeed.
- Hand expression can be done at the same time or just after breast pumping to make more milk.

How do I get help with pumping or hand expression?

- Lactation consultants (these are experts specially trained to help you breastfeed) or nurses can help you to use the breast pump and learn hand expression.
- Help and support can also come from your family and friends.



Skin-to-Skin Care for Your Premature Baby

Babies born very early usually need to stay in the neonatal intensive care unit. You can stay close to your baby by doing skin-to-skin or "kangaroo" care. Holding your baby skin-to-skin is healthy for your baby and you!

What is skin-to-skin or kangaroo care?

- Skin-to-skin or kangaroo care is when you hold your baby on your bare chest. Your baby will be naked, wearing only a diaper.
- Direct contact with your skin, with no clothing or blankets in the way, is what keeps your baby warm and healthy.
- You should do skin-to-skin care as much as possible while your baby is in the hospital and keep doing it at home after your baby leaves the hospital.

Skin-to-skin can help premature babies:

- Stay warm
- Breathe and sleep better
- Feel more connected to their mothers
- Get ready for breastfeeding

Skin-to-skin can help mothers:

- Make more breast milk
- Feel more connected to their babies
- Learn about their babies needs

Who can do skin-to-skin care?

- Holding your premature baby in a skin-to-skin position is safe. Even the tiniest babies can do it.
- Mothers, fathers, or other caregivers can all do skin-to-skin care.
- Twins can do skin-to-skin together.
- Ask your nurse or doctor if skin-to-skin care is okay for your baby or babies.

How do I do skin-to-skin care?

- Your baby's nurse will help you move and position your baby.
- Wearing a low-cut or button-down shirt can be helpful to make it easier to place the baby on your chest.
- Plan to spend at least 60 minutes holding your baby.
- You can use a breast pump after you finish doing skin-to-skin. Many mothers find after doing skin-to-skin they make more milk.



Breastfeeding your Premature Baby in the Hospital and at Home

Babies born very early need to stay in the neonatal intensive care unit. While there, they will start learning to breastfeed, and they will continue to learn even after they go home.

When can I start breastfeeding my baby in the hospital?

- You can start breastfeeding when you hold your baby skin-to-skin. Your baby will be comforted, and it will help you make more milk. At first, your baby will only be strong enough to drink a little milk. He or she will then get the rest of your breast milk through a bottle or feeding tube.
- At about 34 to 36 weeks, most babies are strong enough to breastfeed more. Babies that need extra help breathing while in the hospital may take longer to start breastfeeding.
- Your baby's doctors and nurses can tell you when your baby is ready to start breastfeeding.

How do I breastfeed my baby in the hospital?

- Learning to breastfeed your baby is hard work. At first, your baby may only breastfeed 1-2 times per day. Keep practicing! Your baby will be able to breastfeed more as time goes by.
- Your baby may need to take breaks during breastfeeding when he or she is first learning.
- Using a nipple shield can make it easier for your baby to get milk when he or she is learning to breastfeed. Nipple shields can be used in the hospital and for the first few weeks after your baby goes home.
- Remember to keep using a breast pump and do skin-to-skin care when your baby is learning to breastfeed to keep making enough milk.

Extra nutrients:

- When your premature baby is in the hospital and even after you go home, your baby may need extra nutrients added to the bottles of your breast milk to help your baby grow.
- As your baby grows stronger and bigger, he or she will need less extra nutrients.
- You can ask your baby's doctor about how long extra nutrients are needed in your breast milk.

Breastfeeding your baby at home:

- When your baby goes home, feed your baby the same way he or she was fed in the hospital. Talk to your baby's doctor about when to change your feeding routine.
- If you want, as your baby grows you can start to breastfeed more and pump and give the bottle less.
- Talk to a lactation consultant (these are experts specially trained to help you breastfeed) about any questions you have about breastfeeding.



<http://health.usf.edu/publichealth/chiles/fpgc/momresources>

2. Documentation of Informed Decision to Provide MOM

Mothers receive counseling on the benefits of MOM to allow for a fully informed feeding decision, and maternal feeding intent should be documented

3. Standard Process for Lactation Assessments

Lactation assessment for mothers of VLBW infants within
24 hours of NICU admission.

1. Review pumping frequency or technique
(i.e., 8-12 times per day with 1 session at night)
2. Assess breast comfort while pumping
(i.e., flange size, vacuum level)
3. Review use of the pumping log
4. Develop a plan for a hospital grade electric pump at or
after maternal discharge
(i.e., WIC referral, loaner pump, rental information).

4. Person responsible and continuously available to initiate and assist with ongoing pumping

First pumping within the infant's 6th hour of life
and
Assistance with ongoing pumping

5. Secure sufficient number of pumps and ensure in-house access and at discharge

- Hospital grade pumps should be made easily accessible in areas such as labor & delivery, postpartum units, and NICUs
- Mothers need access to a hospital grade pump after maternal hospital discharge.

7. Maternal Education in NICU

- 👶 Early Initiation of Pumping
- 👶 Hand expression and Colostrum collection
- 👶 Engorgement
- 👶 Hands-on pumping
- 👶 Pumping and breast milk management

8. Ensure appropriate breastfeeding supplies

Success of the mother in producing milk and breastfeeding in the NICU is dependent on availability of equipment and supplies to support establishment of milk supply and breast milk management

9. Process to monitor milk supply

A process to assist mothers and NICU staff in monitoring milk supply

Milk Lab Monitoring Milk Supply

[illegible]

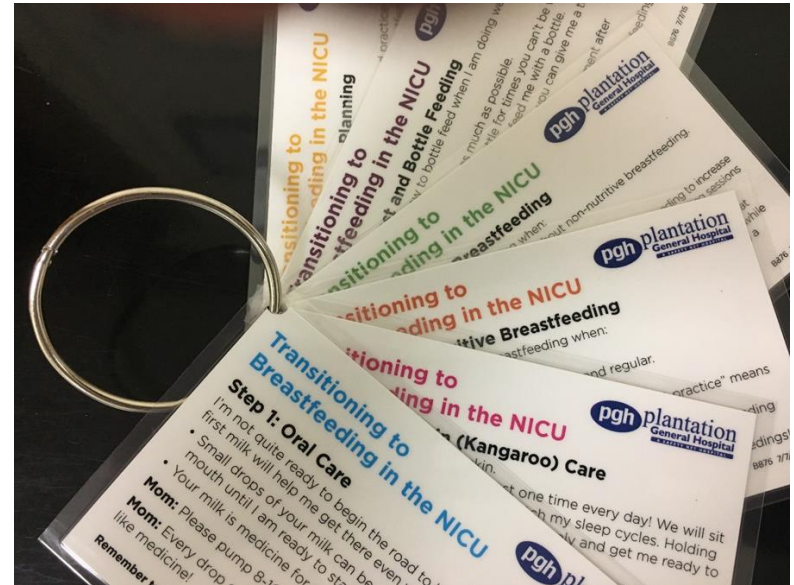
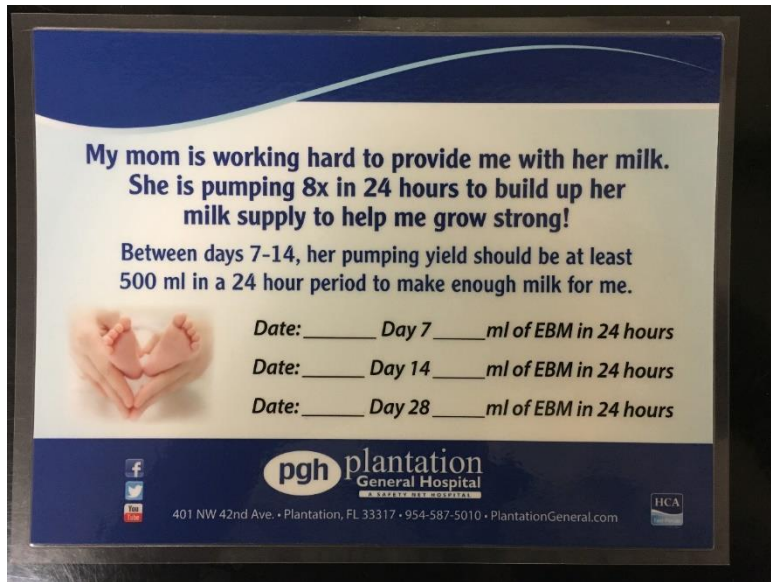
Ask for Milk Lab

5h 24h Based On: 0700 | Reset Now

Last Filed Value

Last Filed Value	Milk Lab
	Yes
	9/28/2017
	215 ML
	496 ML
	39752 ML (c...
	Syringe
	Yes
	82 ML
	Yes
	525 ML
	Yes
	556 ML
	Yes
	001423-1
	Syringe
	9 ML








Visual Aids



- Education of NICU Staff on expected milk yields by developing cards for at bedside for DOL 7, 14, and 28.
- Common dialogue between RNs and Parents
- Laminated Crib Cards so mother is prepared for the developmental steps and cue based feeding progression

10. Standardized Guidelines

Standardized guidelines to support use of MOM and promote breastfeeding in the NICU for VLBW infants

-  Management and Feeding of breast milk
-  Oral care
-  Skin to skin
-  Non-nutritive breastfeeding
-  Nipple shields
-  Transition to nutritive breastfeeding / test weight
-  Infant discharge feeding and appropriate follow-up



Kangaroo-a-Thon: Celebrating the Power of Parents Closeness & Touch

June 6th ~15th

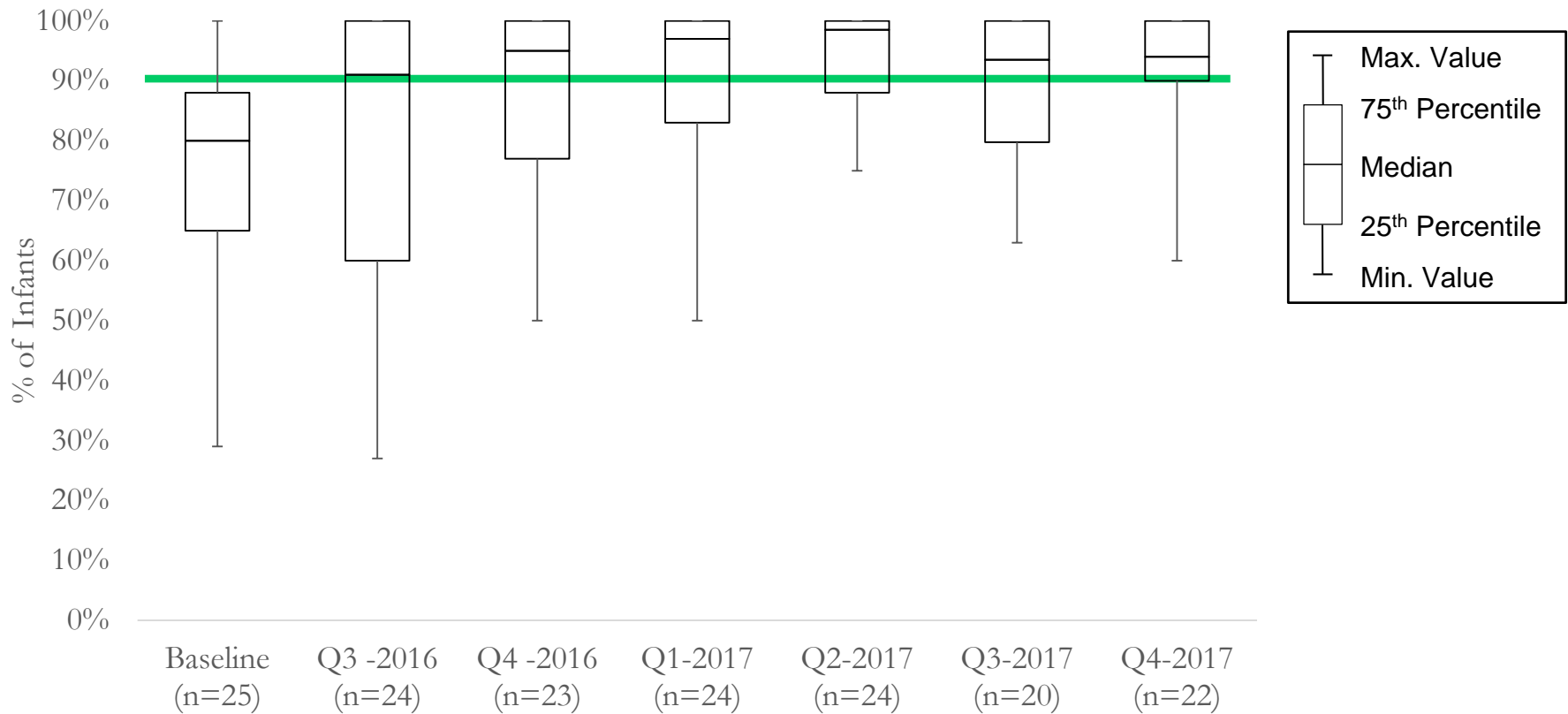


Kickoff event:
Tues: May 27th
2-4pm
Fri: May 30th
8-11pm
Lg conf room

Come and learn
about specifics
of kangaroo-a-
thon and how
you can win a
prize basket
while having a
light snack and
refreshment!!

Help parents to
provide
meaningful/
healing touch
as often as
possible. Prize
baskets for
families and
staff!

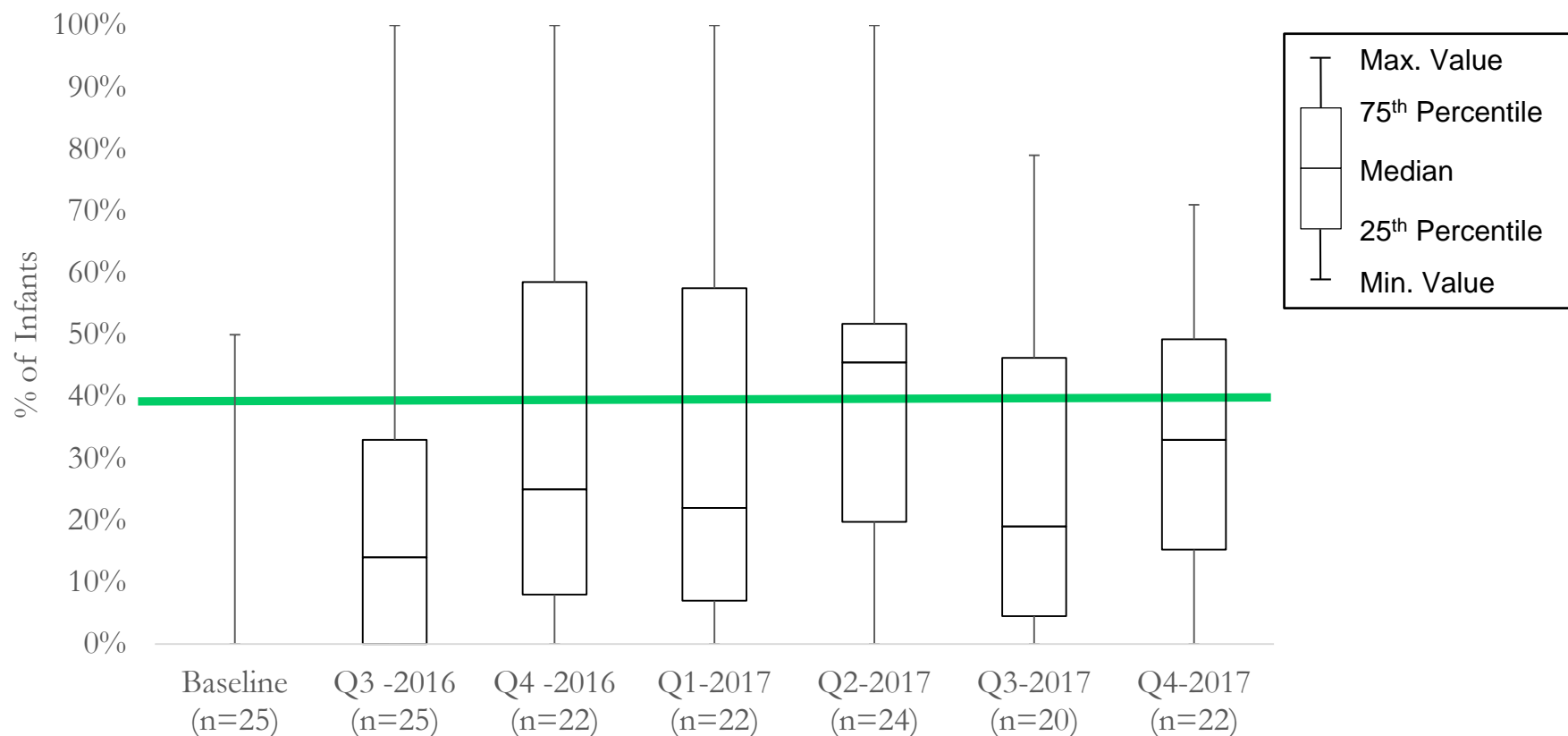
Fig 1. Intention to Provide MOM out of all eligible VLBW infants



Goal Line: —————

Denominator: All eligible VLBW infants

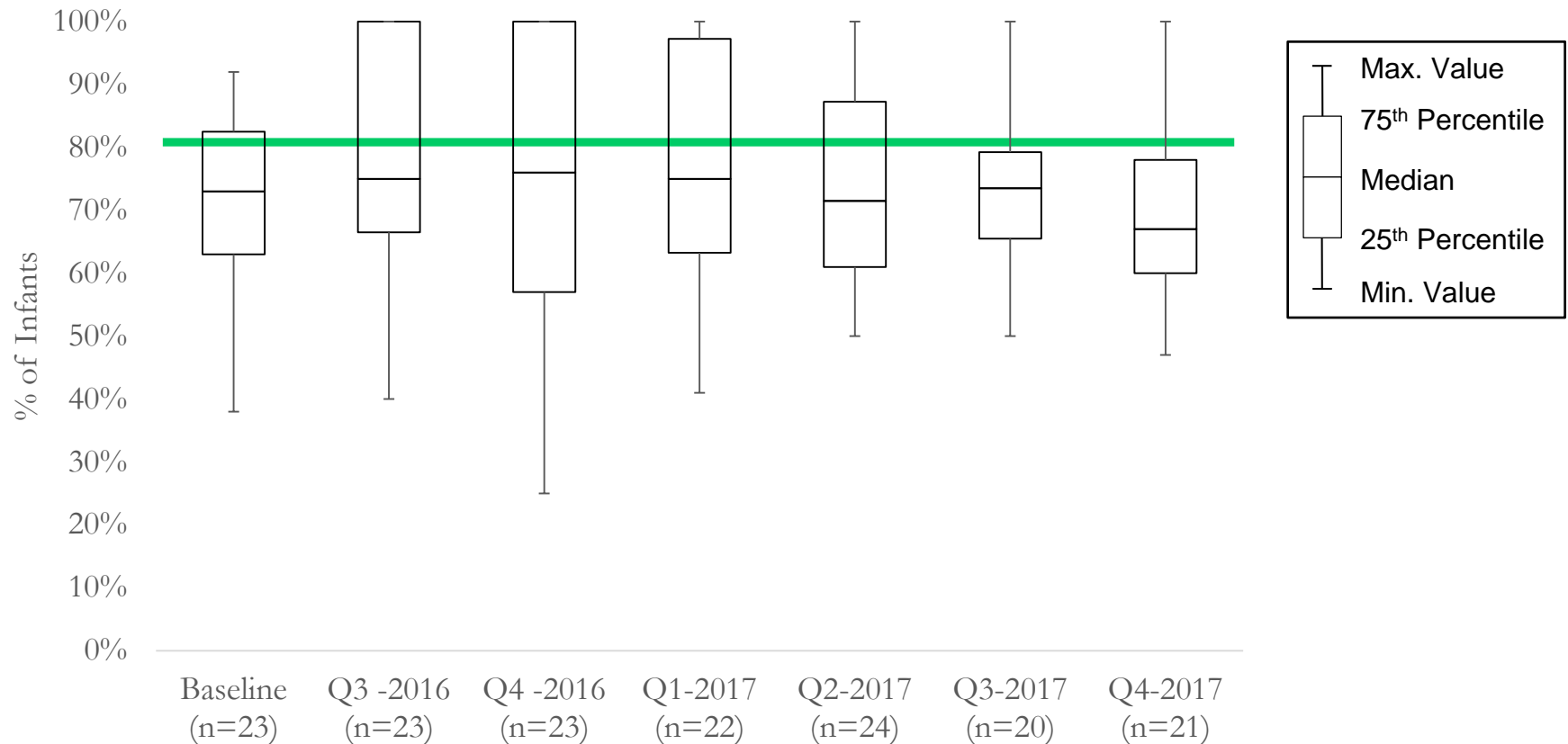
Fig 2. MOM pumped volume ≥ 500 ml/day on DOL 14



Goal Line: —————

Denominator: Only infants whose mother intended to provide MOM

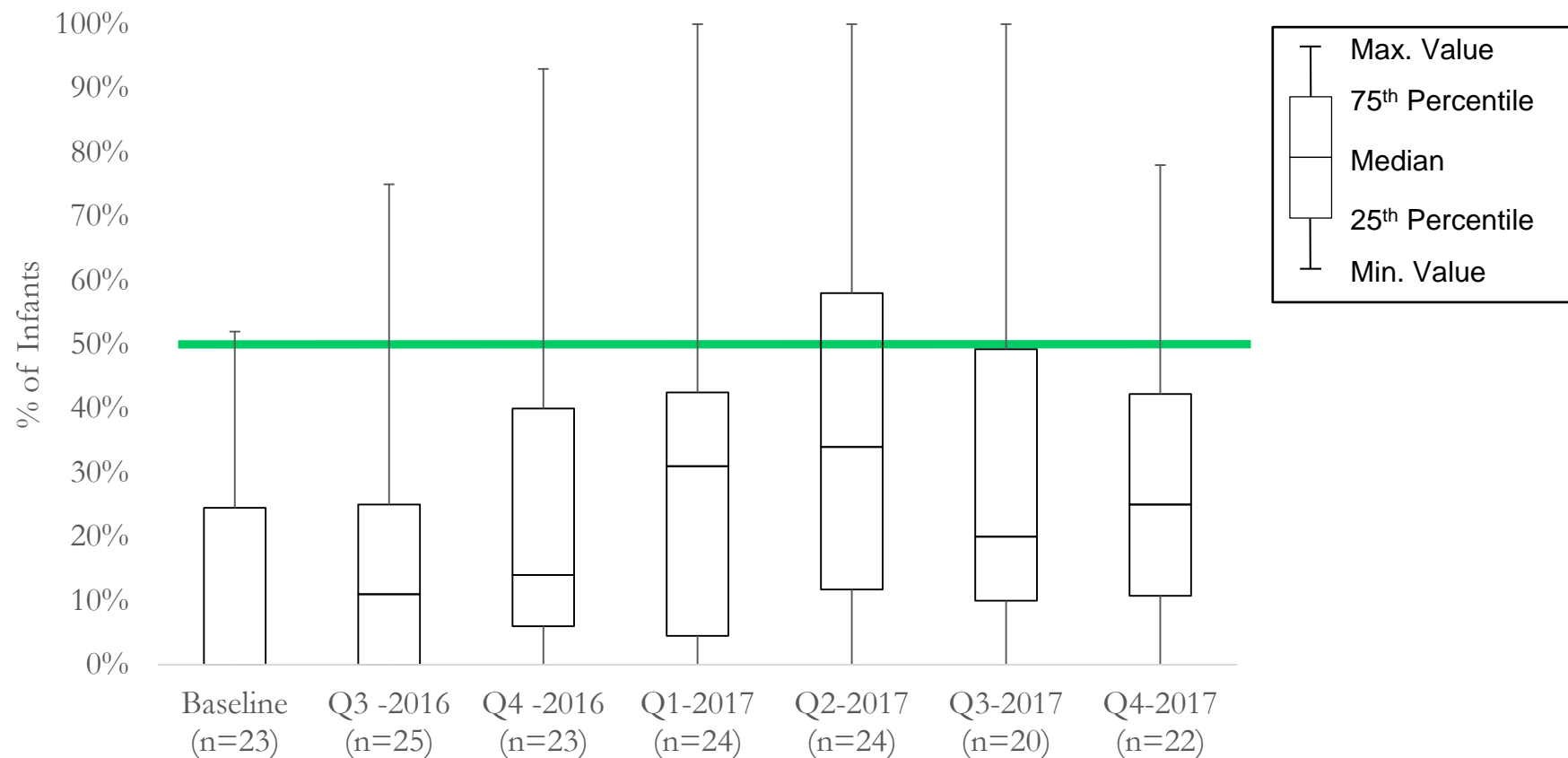
Fig 3. % of infants having $\geq 50\%$ of feeding volume comprised of MOM on DOL 14



Goal Line: —————

Denominator: Only infants whose mother intended to provide MOM

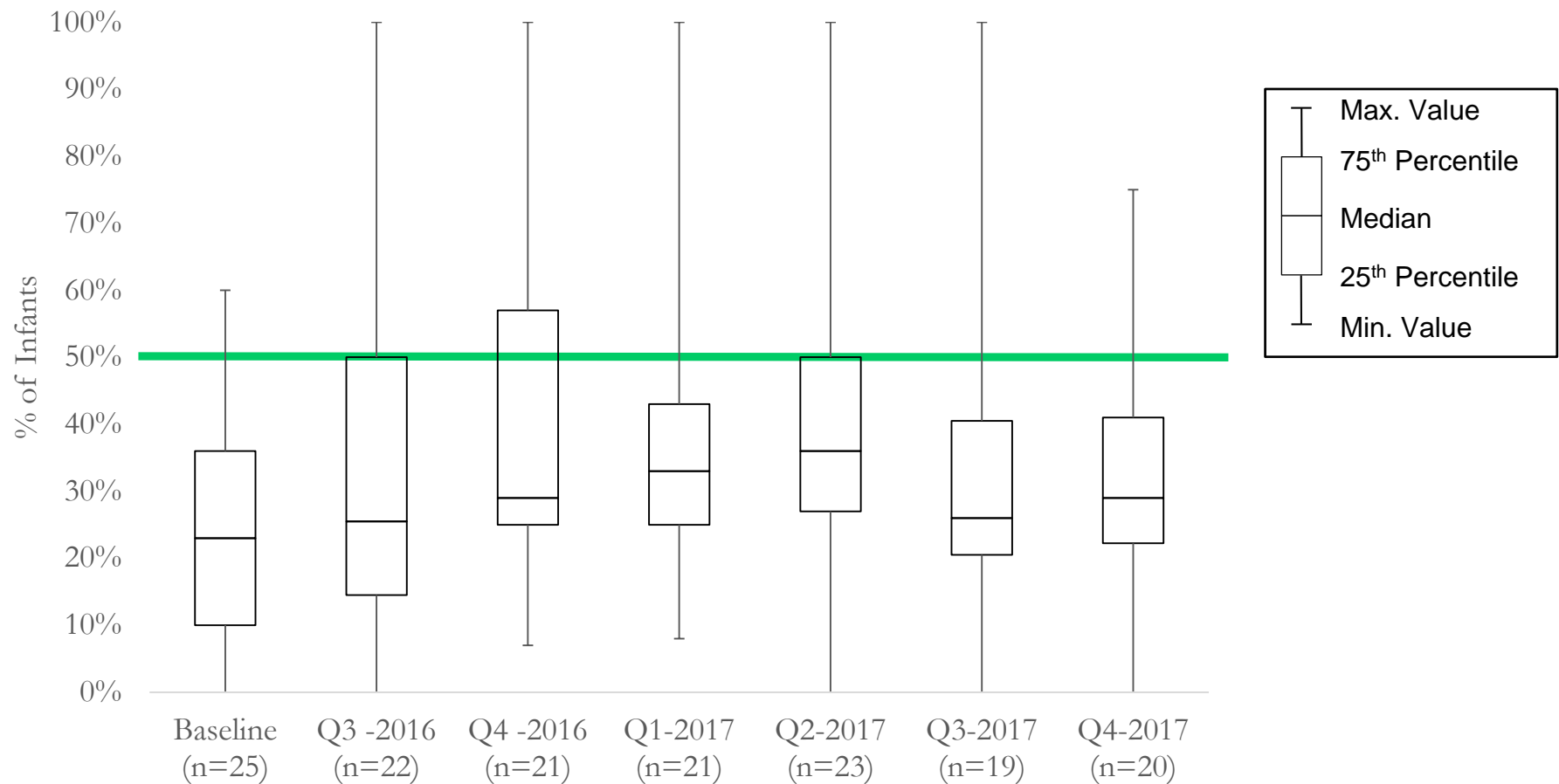
Fig 7. Non-nutritive BF session documented



Goal Line:

Denominator: Only infants whose mother intended to provide MOM

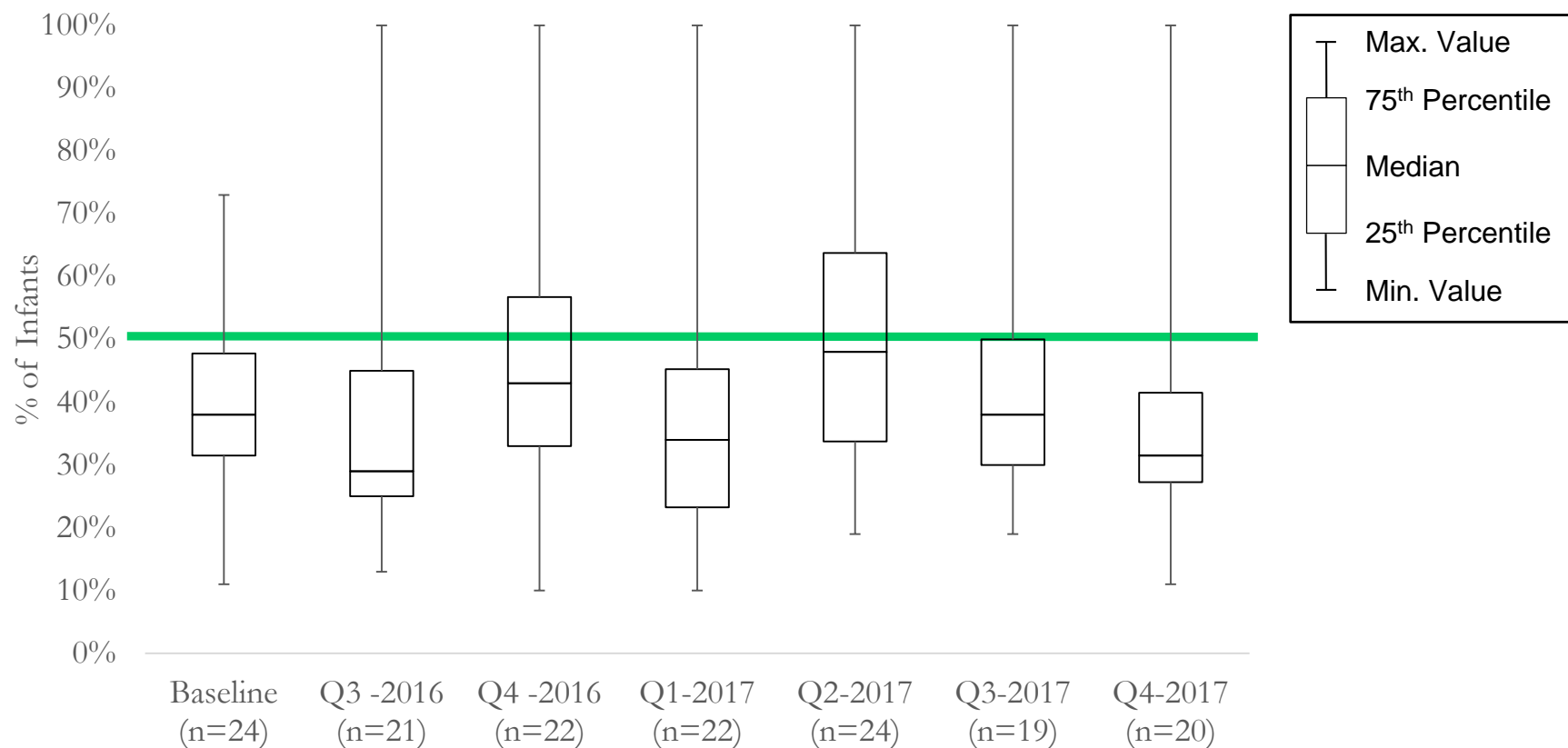
Fig 6. Nutritive BF session at within 7 days of infant's initial disposition



Goal Line: —

Denominator: Only infants whose mother intended to provide MOM

Fig 5. % of all VLBW infants having $\geq 50\%$ of feeding volume comprised of MOM on Initial Disposition



Goal Line: —

Denominator: All VLBW infants

Average NICU Census	DOL 14 \geq 50% MOM	Nutritive BF	All VLBW \geq 50% MOM Initial Disp.
71-100	68%	24%	28%
41-70	63%	34%	40%
21-40	76%	32%	39%
<20	92%	40%	65%

Next Steps.....

- 👶 Sustainability survey completed
 - 👶 22 out of 25 MOM NICUs responses
 - 👶 Phase to start June 2018
 - 👶 Continue to maintain progress and work on improvements 😊
- Explore the racial & ethnic disparities in providing MOM
 - Disparities persist in use of MOM and access to PDM in NICUs (Boundy et al., 2017).



Partnering to Improve Health Care Quality
for Mothers and Babies



QUESTIONS?



Florida Perinatal Quality Collaborative

at The Lawton and Rhea Chiles Center for Healthy Mothers and Babies

👶 For more information, visit our project website:

<http://health.usf.edu/publichealth/chiles/fpqc/mom>

www.fpqc.org

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