

# **Quality Improvement Program –**

# A cascade of events to increase own mother's milk in the hospital and beyond

Despite the **known benefits** of own mother's milk for preterm and vulnerable infants, a large proportion of them are not fed an **exclusive** human milk diet during the critical first 28 days of a NICU infant's life.<sup>1</sup>

In addition, the dose of own mother's milk with which these infants are fed, is often unknown – or not tracked.<sup>1</sup>

Human milk for the small and sick newborn presents unique challenges that require a specialised response.<sup>2</sup>



Get mother's lactation right from the start?



Get the provision of own mother's milk to the infant right from the start?

# Evidence shows that standardised interventions lead to optimal results

Initiation of a mother's milk supply is a critical event. If initiation is not achieved to its full potential, milk supply will be compromised. The proactive management of lactation during the early post-partum period is a high priority.



Do you know why parents should be provided with consistent, evidence-based information around lactation and infant feeding?



Do you know how soon after birth the first milk expression should



Do you know how frequently mother's should express their milk every day?

# It is important because...

INFORMED DECISION

When parents are informed and understand that their milk is an essential medical intervention that no one else can provide to their infant, they **almost always** decide to express milk.5

In addition, mothers consistently report stronger commitment if they understand the evidence-based value of their milk.5-10

# It is important because...

Early breast stimulation (feeding or pumping) within 1-3 hours but no later than 6 hours of birth, has a positive impact on future milk supply and subsequent feeding outcomes.<sup>11-16</sup>

TIME TO FIRST EXPRESSION

## It is important because...

Frequent expression is of critical **importance** during the first 14 days after birth to initiate and build adequate milk volumes for future milk supply.

FREQUENT EXPRESSION

When the infant is not able to breastfeed, mothers should be supported to express frequently and at least 8 or more times in 24 hours, including once during the night.<sup>12,13,18</sup>

Pump dependent mothers who have milk volumes that are lower than 150ml/day on DAY 4 post birth are at





greater odds of low milk supply<sup>3</sup>



greater odds of formula feeding at NICU discharge and beyond,

This drives an urgency for clinicians to **ACT NOW** and to provide specialised lactation support.

To achieve better health outcomes for all NICU infants we need to ensure high-dose, long exposure to own mother's milk through systematic and continuous implementation of evidence-based care.



Do you know how soon after birth mother's milk should 'come in'?



Do you know the optimal volume of milk that mothers should aim for by the time babies are 14 days old?



Do you know why the dose of own mother's milk is a more accurate quality measure than rates of ever receiving, or receiving own mother's milk at time of hospital discharge?

#### TIME TO MILK COMING IN COMING TO VOLUME

### It is important because...

Any delay to milk coming in (secretory activation) is linked to risks of low milk volumes and a shortened duration of lactation.<sup>19,20</sup>

Secretory activation normally occurs between 24 - 72 hours after birth.<sup>21</sup>

Onset of secretory activation beyond 72 hours is defined as delayed onset of lactation. 22, 23

# It is important because...

## Building milk supply in the first 14 days takes advantage of the high levels milk-production hormones.<sup>22</sup>

After 1 month post birth, it is more difficult to increase their milk supply significantly.23,24

Coming to volume is defined as a total daily milk volume of > 500 ml by day 14 post birth. 24,25

## It is important because...

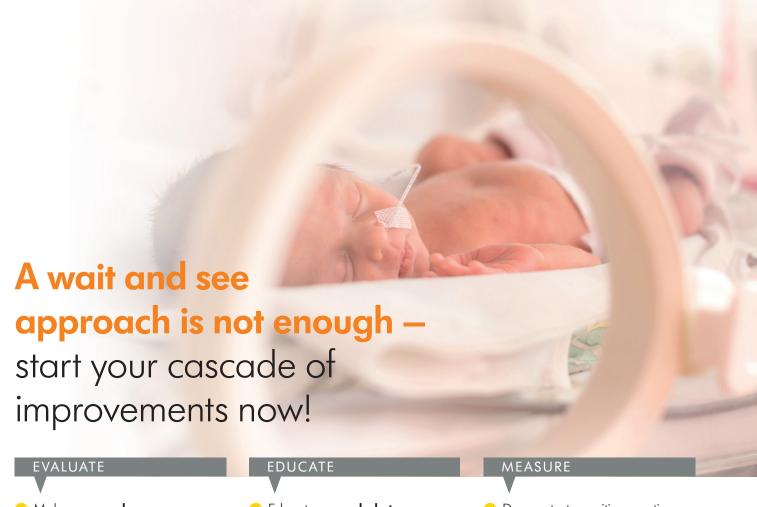
Higher doses of own mother's milk (and the avoidance of bovine formula) are low-cost interventions that reduce the risk of morbidities such as necrotising enterocolitis, late onset sepsis, bronchopulmonary dysplasia and retinopathy of prematurity. It is also shown to shorten the length of the hospital stay.<sup>28-36</sup>

DOSE OF OWN MOTHER'S MILK

It is important to track the dose of own mother's milk fed to the infant during critical time points: 0-14 days and from 0-28 days post-birth.1

In the first few days and weeks you can make an impact





- Make sure you know your areas of improvement
- Make sure you have a solid plan
- Educate your whole team –with evidence-based practices
- Ask your Medela representative about the Lactation Quality Improvement education program
- Demonstrate positive practice change – collect and analyse your lactation data before and after your interventions
- Monitor and measure your mother and infant lactation markers from the start





Find out more about Medela's Quality Improvement program to implement and audit your lactation practices.

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