

Coming to volume

What is coming to volume?

Coming to volume refers to the lactation stage between secretory activation (milk 'coming in') and achieving a threshold milk volume that is sufficient to maintain lactation.¹

It is defined as achieving a total daily milk volume of **≥500 ml /day** by postpartum day 14.^{1,2}

Why is coming to volume important?

Coming to volume before postpartum day 14 has been shown to be the strongest predictor of the provision of own mother's milk (OMM) feedings at NICU discharge by mothers of VLBW infants.²

It indicates that milk supply is on track to meet the long-term needs of the infant.²⁻⁴

When supported with evidence-based best practices, such as early and frequent expression, NICU mothers can achieve milk volumes similar to exclusively breastfeeding mums.^{1,3,5,6}

Building milk supply in the first 14 days takes advantage of the high levels milk-production hormones. As time passes, it becomes more difficult to significantly increase milk supply.¹

How to implement?

Develop / revise milk expression protocols that:

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|--|---|--|
| <input type="checkbox"/> provide mothers with a pumping log to track daily expressions and milk volumes ^{1,4} | <input type="checkbox"/> educate staff and mothers on coming to volume, and that this may mean building a milk supply greater than the infant's current needs | <input type="checkbox"/> advise pumping 8 or more times in 24 hours with a hospital-grade, double-electric pump ¹ |
| <input type="checkbox"/> track 24 hour milk volumes throughout the first 14 days to identify coming to volume | <input type="checkbox"/> provide easy access to pumps, kits and containers in all relevant maternity and nursing wards | <input type="checkbox"/> communicate to all mothers that pumping at least once between 00:00 and 07:00 is important for milk supply ¹ |
| <input type="checkbox"/> integrate specialist lactation support for when mothers are not achieving ≥500 ml on the 5 th day ² | <input type="checkbox"/> support mothers to access a hospital-grade pump for expressing at home ⁶ | <input type="checkbox"/> recommend double pumping ⁷ with a correctly sized breast shield ⁸ |
| | <input type="checkbox"/> address potential changes in staffing strategies which may be necessary to overcome barriers ¹⁻⁴ | |

How to audit?

Strategies to measure best practice include:

- Assessing the completeness of logged daily milk volumes.
- Auditing the percentage of mothers who come to volume by day 14.
- Monitoring that sufficient lactation care is provided both before, and after coming to volume.
- Identifying reasons for mothers not achieving coming to volume.

Auditing records on a monthly basis:

- Highlights recent progress and can enhance motivation within the organisation to continue with quality improvement measures.
- Shows where changes are still required and allows for timely implementation of further education to staff for continuous improvements in clinical practice.
- Allows barriers to be identified and addressed.

References: **1** Meier PP et al. J Perinatol. 2016; 36(7):493–499. **2** Hoban R et al. Breastfeed Med. 2018; 13(2):135–141. **3** Spatz DL et al. J Perinat Educ. 2015; 24(3):160–170. **4** Meier PP et al. Clin Perinatol. 2017; 44(1):1–22. **5** Meier PP et al. Pediatr Clin North Am. 2013; 60(1):209–226. **6** Meier PP et al. J Perinatol. 2012; 32(2):103–110. **7** Prime DK et al. Breastfeed Med. 2012; 7(6):442–447. **8** Sakalidis VS et al. Acta Obstet Gynecol Scand. 2020; 99(11):1561–1567.