

Improving access to appropriately fitted equipment to support mothers expressing breastmilk.



Health
Innovation
Wessex

Health
Innovation
Network
Local change, national impact

Summary: Inspired by a mother's experience of developing mastitis whilst expressing breastmilk for her premature baby, the project focuses on equity of access to appropriate equipment for expressing breastmilk.

Innovation Summary

Research shows correctly measured and fitted flanges on breast pumps increase yield of breastmilk, reduce mother's discomfort, and could reduce the risk of developing mastitis.

Currently, there is a low level of knowledge and nipple measurement is not standard practice. Trusts only stock a standard size which is far too large for the majority. Most mothers are required to buy the correct fitting flange, which disadvantages those from low-income families.

Health Innovation Wessex (HIW) has developed a training webinar for staff, a parent education video, and

-  **Treatment to Prevention**
-  **Hospital to Community**
-  **Health Inequalities**
-  **Patient Safety**

tools to enable correct fitting. HIW has collated the resources developed and project learning into a free toolkit to encourage implementation, spread, and scale beyond Wessex.

Network support

Health Innovation Wessex, working with University Hospital Southampton (UHS), have:

- Designed and produced a nipple sizing tool.
- Worked with parents to create an education video on how to measure nipples for the correct flange fit.
- Created a training webinar for staff.
- Worked to improve access to the correct equipment through NHS procurement.
- Created a toolkit to allow other organisations to implement a similar project in their healthcare setting.

Scalability prospect /next steps



Contacts are being made within NHS England to discuss national adoption.

The toolkit is free and available to support spread and scale of this project outside Wessex. It can be accessed from the [HIW website](#) or the QR code below.

Impact of innovation

This project is currently being evaluated, but early data shows the percentage of pre-term infants receiving breastmilk in the UHS neonatal unit has increased by 13%.

All Wessex trusts now have their Early Breastmilk toolkits. The project and toolkit was presented at the Maternity and Neonatal Safety Improvement Programme event on 11 February 2025. Requests to present have been received for multiple events from within the Health Innovation Network, health visitors, and a national neonatal nutrition webinar series. From January to the end of March 2025, the virtual toolkit was accessed 2,249 times. During the same time, the staff training webinar has been viewed 449 times, and the parent information video has been viewed 339 times. Early breastmilk reduces the risk of sepsis, necrotising enterocolitis, and improves longer-term neurodevelopmental health.

[BAPM Preterm MBM Toolkit Final for publication.pdf](#)

Health and care system success

Initial project feedback from staff using the resources has been very positive. Benefits to the mother include less likelihood of developing mastitis.

Mothers are also less likely to need to pay for their own correctly sized flanges if they are available in hospital for them.

“ I love the patient education video - the information is so clearly explained and visual. I am really excited to use this within our trust and I think it will hugely improve the outcomes for our families who use breast pumps.”

Infant feeding lead

Economic success

What's the economic impact?

Potential benefits are being evaluated and include:

- Increased duration of breastfeeding and associated impact on long-term health economics.
- Reduction in mastitis, antibiotic prescribing and readmission rate.
- Less donor and formula milk purchased by the hospital.
- Increased orders with nipple measuring tool manufacturer and flange distributor.



“ I don't dread pumping like I previously did after changing to the 15 mm flanges. I could only pump for five or six minutes before being too uncomfortable with the 21 mm flanges and needing to stop. When I pumped with the 21 mm flanges, I was able to get 5-15 ml of milk total from both breasts, but I am now pumping 40 ml of breastmilk on the left side alone, comfortably and quickly.”

Breastfeeding mother