



# Exciting News for 2023 Update No.1

The Network is delighted to announce that we have received a commissioning request from Chief Nursing Officer Sue Tranka and Deputy Chief Medical Officer Chris Jones in Welsh Government to deliver Phase 1 of the PERIPrem (Perinatal Excellence to Reduce Injury in Premature Birth) programme.

The commissioning request and the associated funding (provided by Welsh Government and the NHS Health Collaborative) is currently only available up to the end of March 2023. There is, however, mention of the ongoing programme being included in Phase 2 of the Maternity and Neonatal Safety Support Programme. While the short timescales are challenging, we feel as a Network that if we focus on realistic deliverables and move at pace, we can ensure that a solid platform is in place, on which the ongoing PERIPrem Cymru programme can be built and sustained.

## What is PERIPrem?

PERIPrem was initially launched across the West of England and South West Academic Health Science Network Regions in April 2020. It is a unique, perinatal care pathway of 11 evidence-based interventions, to reduce preterm mortality and brain injury. It uses a co-design and co-production approach rooted in Quality Improvement methodology. Its resources have been used to inform the British Association of Perinatal Medicine (BAPM) perinatal optimisation pathway toolkits.

The evidence-base suggests that if all 11 of the interventions are successfully implemented, there is potential to reduce brain injury by 50% (Dr K Luyt - West of England AHSN).

# These interventions are:

## Place of Birth

85% of babies delivered at less than 27 weeks or with an expected birth weight of under 800 grams (less than 28 weeks for multiple births) should be born in a maternity service on the same site as a designated NICU.

[Ref: 1,2,3,4,]



## Antenatal Steroids

85% of mothers who give birth at less than 34 weeks gestational age should receive the correctly timed, full course of antenatal steroids.

[Ref: 2,4,5,6]



## Antenatal Magnesium Sulphate

85% of mothers who give birth at less than 30 weeks gestational age should receive antenatal Magnesium Sulphate.

[Ref: 2,4,5,6]



## Early Maternal Breast Milk (MBM)

85% of babies born at less than 34 weeks gestational age should receive MBM within 6 hours of birth.

Units should monitor (and aim to increase) rates of first MBM within 6 hours of birth for babies born at less than 34 weeks gestational age.

MBM feeding at 14 days - Units should monitor (and aim to increase) rates of babies born at less than 34 weeks gestational age receiving MBM at 14 days of age.

[Ref: 2,8]



## Caffeine

100% of eligible babies should be started on caffeine as soon as possible (aim within the first 6 hours... NICE says: "starting it as early as possible and ideally before 3 days of age") in all babies:

- Less than 30 weeks gestation (consider 32 - 34 weeks)
- Birth weight less than 1500g

[Ref 9,10]



## Probiotics

100% of eligible babies (less than 32 weeks, less than 1500g birth weight) should be commenced on a multi strain probiotic of choice with their first non nutritive feed.

[Ref 11]



## Deferred Cord Clamping

85% of babies born at less than 34 weeks gestational age should have their cord clamped at or after one minute.

[Ref: 2,4,7]



## Normothermia

90% of babies born at less than 34 weeks gestational age should have a temperature on admission which is both between 36.5–37.5°C and measured within one hour of birth.

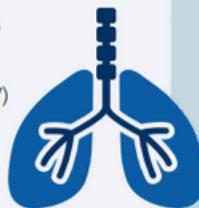
[Ref: 2,4]



## Volume Guarantee (VG) or Volume Targeted Ventilation (VTV)

100% of preterm babies who need invasive ventilation, use volume-targeted ventilation (VTV) in combination with synchronised ventilation as the primary mode of respiratory support.

[Ref 10]



## Prophylactic Hydrocortisone

85% of babies <28 weeks gestation should receive prophylactic hydrocortisone from day 0 of life.

[Ref 10]



1. NHS England. Neonatal Critical Care Transformation Review (2019) <https://www.england.nhs.uk/publications/implementing-the-recommendations-of-the-neonatal-critical-care-transformation-review/>

2. NNAP (RCPC) 2020 Audit standards, set by NNAP Project Board. [https://www.rcpch.ac.uk/sites/default/files/2019-11/nnap\\_2020\\_audit\\_measures\\_guide\\_v1.0\\_191119\\_0.pdf](https://www.rcpch.ac.uk/sites/default/files/2019-11/nnap_2020_audit_measures_guide_v1.0_191119_0.pdf)

3. Helenius K, Longford N, Lehtonen L, Modi N, Gale C. Association of early postnatal transfer and birth outside a tertiary hospital with mortality and severe brain injury in extremely preterm infants: observational cohort study with propensity score matching. *bmj*. 2019 Oct 16;367:l5678.

4. BAPM. Perinatal Management of Extreme Preterm Birth Before 27 Weeks of Gestation (2019). Available at [www.bapm.org](http://www.bapm.org)

5. NICE Guidance for Preterm Birth (2019) <https://www.nice.org.uk/guidance/ng202>

6. Doyle LW, Crowther CA, Middleton P, et al. Magnesium sulphate for women at risk of preterm birth for neuroprotection of the fetus. *Cochrane Database Syst Rev* 2009;CD004661

7. Rahe H, Gyte GM, Diaz-Rozaño JL, Duley L. Effect of timing of umbilical cord clamping and other strategies to influence placental transfusion at preterm birth on maternal and infant outcomes. *Cochrane Database of Systematic Reviews* 2019, Issue 9. Art. No.: CD003248. DOI: 10.1002/14651858.CD003248.pub4

8. Parker MG, Melvin P, Graham DA et al. Timing of First Milk Expression to Maximize Breastfeeding Continuation Among Mothers of Very Low-Birth-Weight Infants. *Obstet Gynecol*. 2019;133(6):1208-1215

9. <https://www.nice.org.uk/guidance/ng202>

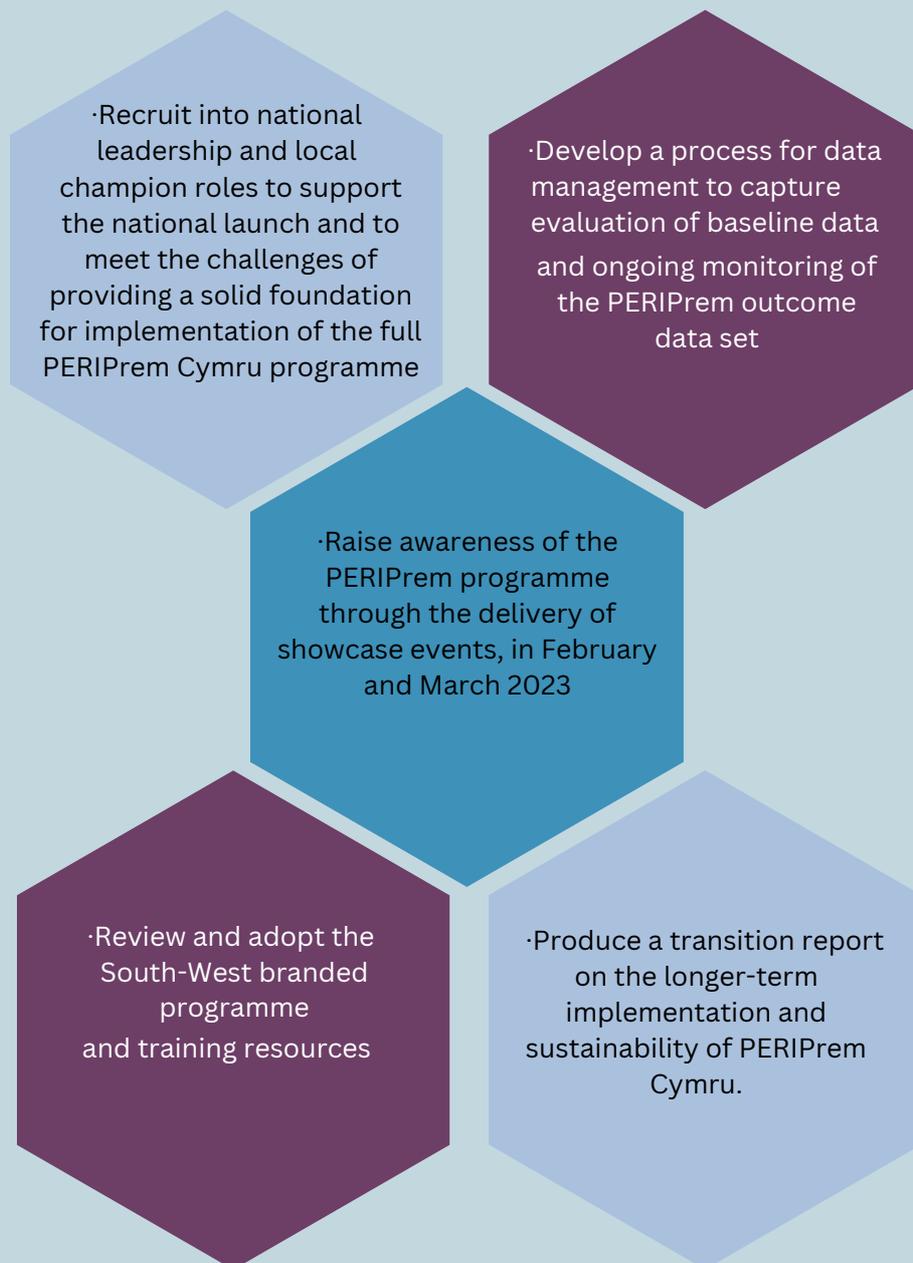
10. Specialist neonatal respiratory care for babies born preterm. NICE guideline [NG124] Published date: April 2019 <https://www.nice.org.uk/guidance/ng124/topics/Recommendations>

11. <https://www.nice.org.uk/guidance/ng124/topics/Recommendations>

## Our Approach

Through the work of the perinatal optimisation task and finish group, chaired by Dr Anneli Alman, Consultant Neonatologist, Aneurin Bevan UHB, the Network recognises that a number of elements of the bundle are currently in practice but there is variability across Wales. PERIPrem Cymru seeks to reduce this variability and improve compliance against all 11 interventions.

To ensure successful delivery of the PERIPrem Cymru National Launch Phase, during the period 1 January - 31 March 2023, the Network will:



PERIPrem Cymru is coming and if you have any questions please contact the network on:

[NHSWHC.Maternity-NeonatalNetwork@wales.nhs.uk](mailto:NHSWHC.Maternity-NeonatalNetwork@wales.nhs.uk)