had ≥15% weight loss (approximating the 99.8th centile) and 0.1% had hypernatraemia ≥155mMol/L (approximating the 99.9th centile).

**Conclusion** This national collaborative audit is the first of its kind to provide benchmarking data for trusts to focus on their own service improvement. The rate of ≥12.5% weight loss found is consistent with that published by NICE, supporting the validity of the approach despite a skew towards Unicef accredited units in Southern England. There was no significant increase in excess weight loss or severe hypernatraemia during the early pandemic despite the disruption to breastfeeding support services - it is also known that national breastfeeding rates remained stable. It is possible that an increase in dehydration in some babies due to poor breastfeeding support is masked by increased formula use in others, or by improved breastfeeding efficacy due to reduced competing demands. This is supported by other evidence showing a mixed picture of feeding outcomes for different families during the pandemic.4

**REFERENCES**

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**Abstracts**

QIP: IMPROVING RATES OF ADMISSION NORMOTHERMIA ON A LEVEL-2 NICU

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**Aims** Management of temperature within the normal physiological range is a common challenge in the neonatal unit (NICU). The Neonatal National Audit Programme (NNAP) mandates that 90% of preterm babies <32 weeks should have an admission temperature, measured within one hour of birth, between 36.5°C and 37.5°C. This is supported by the consensus statement from the International Liaison Committee on Resuscitation (ILCOR) published in 2015 which strongly links suboptimal temperatures to increases in mortality and morbidity in preterm infants.5

Whittington hospital’s level-2 NICU had an admission normothermia rate of 65% in the 2019 NNAP annual report. Although these rates had improved when a local audit was done in 2020-21, they still fell short of the 90% target, so a QIP was developed to increase admission normothermia in the preterm and term cohorts.

**Methods** A multi-disciplinary focus group, including medical and nursing staff, was formed to examine the hypo and hyperthermic cases identified during the initial audit. A ‘Normothermia Action Plan’ was put in place which included:

- A normothermic checklist for all neonates admitted to the unit
- The use of plastic bags for all neonates <32 weeks or with a birth weight of <1500g
- An aide-memoire poster about thermoregulation to be displayed in labour ward/theatres/neonatal unit
- Education for medical and nursing staff on the importance of thermoregulation

These new measures were put in place from May 2021 and were regularly brought to the attention of staff using a series of e-mails and reminders during handover. Weekly and monthly audits were undertaken to assess whether the measures were being implemented and were effective. Due to the smaller numbers of infants overall each month, the ‘post-action plan’ data was analysed collectively rather than as preterm and term cohorts.

**Results** Our initial audit had shown 85% (52/62) normothermia in term admissions and 80% (24/30) in preterm (<32 weeks) admissions. The monthly audit done immediately before instigation of the action plan (April 2021) showed a similar rate of 85% normothermia across all gestations.

Monthly audits started 4 months after the introduction of the QIP, showed admission normothermia rates of 81% (29/36) in September, 78% (35/45) in October, 80% (24/30) in November and 85% (17/20) in December.

Hypothermia rates were variable (7-17%) but were generally lower than pre-QIP levels. Hyperthermia rates were also variable (2-13%), but some months were considerably higher than pre-QIP levels. (figure 1)

**Conclusion** Our QIP achieved its aim of reducing hypothermia rates, but normothermia rates remained similar despite instigating a combination of interventions including staff education and revision of preterm thermoregulation protocols. It could be deduced that concurrent rise in inappropriately high admission temperatures seen was due to the stringent attention to the avoidance of low temperatures.

This QIP highlighted the value of repeated PDSA cycles to achieve optimum results. The unit has procured skin temperature probes for servo temperature control to further improve thermoregulation and achieve higher rates of admission normothermia.

**REFERENCES**