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Using national audit data and recommendations to drive local quality improvement initiatives

A round 750,000 babies are born each year in England, Scotland and Wales and of these nearly 105,000 receive specialist neonatal care. The National Neonatal Audit Programme (NNAP) supports professionals, families and commissioners to improve the care provided to these babies.

In September the NNAP, delivered by the Royal College of Paediatrics and Child Health (RCPCH), published its 11th annual report, which focuses on a wide range of process and outcome measures across the neonatal care pathway – from antenatal interventions to clinical follow-up assessing development at two years of age.

One the major achievements of the audit and its parent representatives over the past few years is the introduction of new measures of parental partnership in care, reported for the first time this year. For several years, the NNAP has reported the proportion of parents having a consultation with a senior member of the team in their baby's first 24 hours in the unit, which in 2017 stands at 94.6%. We are now able to report the average number of days a baby was separated from its

mother where breathing support was not needed:

- term babies = 3.2 days
- late preterm babies = 6.8 days.

We are also able to say for the first time that parents attended at least one consultant ward round during 74.3% of admissions to the neonatal unit. However, these figures vary greatly between organisations and we hope clinical staff will want to review their results on NNAP Online (https://nnap.rcpch.ac.uk). **FIGURE 1** shows other important findings of the NNAP report on 2017.

Measuring and monitoring data are important, but we need to ensure that these results drive change at a local and network level to reduce the variation that we continue to see. The NNAP strives to support improvement in several ways: through our interactive reporting tool NNAP Online; through sharing best practice between unit and networks; and through specific, targeted and evidence-based recommendations.

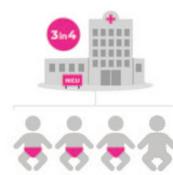
NNAP Online is an open access data portal that enables neonatal teams, neonatal networks and others to view and compare results at a unit,



Magnesium sulphate administration was much higher in 2017 than in 2016 (2017 = 64.1% of eligible mothers; 2016 = 53.3% of eligible mothers), reflecting rapid assimilation into practice of this aspect of NICE guidance, which is aimed at reducing cerebral palsy.

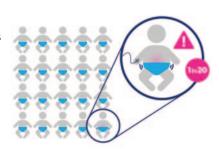
More very preterm babies in England, Scotland and Wales are admitted with a normal temperature than has been recorded for other nations in the international literature.²⁻⁴ Sixty-four per cent of babies had a

normal first temperature (36.5 to 37.5°C) measured within an hour of birth. This is an improvement in performance from recent years (2016 = 60.8%; 2015 = 58.1%) without an increase in hyperthermia (temperature >37.5°C; 2017 = 12.2%; 2016 = 12%). However there remains room for significant further improvement in the promotion of normothermia on admission to neonatal units for very preterm babies. Review results for your unit, and others, on NNAP Online.



Three in four babies born at <27 weeks of gestational age were born at a hospital with an on-site NICU. Only two of 15 neonatal networks have more than 85% of these babies born within a hospital with an on-site NICU. Geographical size of the network does not readily explain why more of some networks' babies are delivered in centres with a NICU.

One in 20 (5.6%; 428 of 8,228) babies born at <32 weeks of gestational age developed necrotising enterocolitis (NEC). The NNAP uses a surveillance



definition of NEC based on diagnosis at surgery, post-mortem or on the presence of clinical or radiographic signs.

FIGURE 1 Important findings of the latest NNAP report.

network and national level; supporting units and networks to share best practice and stimulate quality improvement activities. Unit results posters, designed for display on the neonatal unit to help communicate audit results to families and the wider team, are available at NNAP Online (FIGURE 2).

The NNAP brings together a multidisciplinary, multi-agency group to translate key findings and results into recommendations that can be acted upon to improve neonatal care. Recommendations support the existing goals and priorities of neonatal and perinatal services, and are targeted by area of care and to the audience with the ability to action the recommendation. We think you will find these helpful in planning quality improvement activities in your unit – please check them out.

As we move into the 12th year of NNAP reporting, the audit continues to develop in line with the priorities of the neonatal care community and the families that they support. Responding to requests from stakeholders, the NNAP will report in 2019 on the level of neonatal nurse staffing against guidelines and service specification. Looking further forward, we are developing a measure of early initiation of breast milk feeding on the neonatal unit, to better support quality improvement activities targeting this important aspect of neonatal care.

While the NNAP report highlights key areas of progress, variation in practice and outcomes still exist between services and across the UK. Sustained efforts at a local, regional and national level to embed quality improvement methods and to target specific areas of care need to be continued to ensure the best outcomes for babies and their families.



To read the full NNAP 2018 report on 2017 data visit: www.rcpch.ac.uk/resources/national-neonatal-audit-programme-annual-report-2018-2017-data.

References

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