

NNAP

National Neonatal
Audit Programme

✧RCPCH Audits

National Neonatal Audit Programme (NNAP) Summary report on 2024 data

October 2025



Photo courtesy of Mabel Micah



HQIP

Healthcare Quality
Improvement Partnership

✧RCPCH

Royal College of
Paediatrics and Child Health

Leading the way in Children's Health



Summary report on 2024 data

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**Front cover photo courtesy
of Mabel Micah**

“ Gracielle needed help breathing, but I was still able to feed her and give her kangaroo care. A few weeks later, Gracielle is now breathing and feeding without support. This is to encourage everyone that it does get better. ”

NNAP Governance

Details of the NNAP governance structure and membership of the NNAP Project Team are available at www.rcpch.ac.uk/work-we-do/quality-improvement-patient-safety/national-neonatal-audit-programme/governance-delivery

Further information:

Further information about the background, aims, and scope of the NNAP is available at: www.rcpch.ac.uk/about-nnap

Introduction

Established in 2006, the National Neonatal Audit Programme (NNAP) is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and delivered by the Royal College of Paediatrics and Child Health (RCPCH).



It assesses whether babies admitted to neonatal units receive consistent high-quality care in relation to the NNAP audit measures that are aligned to a set of professionally agreed guidelines and standards. The NNAP also identifies variation in the provision of neonatal care at local unit, regional network and national levels and supports stakeholders to use audit data to stimulate improvement in care delivery and outcomes.

The audit reports key outcomes of neonatal care, measures of optimal perinatal care, maternal breastmilk feeding, parental partnership, neonatal nurse staffing levels, and other important care processes.

This report summarises the key messages and national recommendations developed by consensus by the NNAP Project Board and Methodology and Dataset Group, based on NNAP data relating to babies admitted to neonatal care in England, Scotland, Wales and the Isle of Man between 1 January and 31 December 2024.

Extended analysis report

The NNAP 2024 data extended analysis report, available at: www.rcpch.ac.uk/NNAP-report-2024-data provides results by NNAP measure by unit type, by neonatal network, and for England, Scotland, Wales and the Isle of Man combined. There is also a summary of findings for each audit measure, recommended next steps for services seeking to make improvements and links to further resources and case studies.

NNAP Data Dashboard

The public facing NNAP Data Dashboard presents results for each of the 10 key performance metrics as annual rolling averages, updated monthly. Data in the Dashboard are provisional and may be subject to change between updates and before the publication of the NNAP annual summary report. Registered audit participants within neonatal networks and units can access a restricted version of the dashboard to support data cleaning and early quality improvement interventions. Access the dashboard at: www.rcpch.ac.uk/resources/nnap-data-dashboard

Further data

Further data about maternity and perinatal services is available from the [National Maternity & Perinatal Audit](#) (NMPA) and [Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK](#) (MBRRACE-UK). The NMPA measures various aspects of maternity and neonatal care provided by NHS maternity services in England, Scotland and Wales. MBRRACE-UK conducts robust national surveillance and investigates the deaths of women and babies who die during pregnancy or shortly after pregnancy in the UK.

Full results

Full annual results at unit and network level, interactive reporting tools and unit posters are available on NNAP Online at: www.rcpch.ac.uk/resources/nnap-online-report-data

A line of sight table describing the evidence base for the recommendations made in this report is available at: www.rcpch.ac.uk/NNAP-report-2024-data



Results at a glance

The National Neonatal Audit Programme (NNAP) assesses whether babies admitted to neonatal units receive consistent high-quality care and identifies areas for improvement.

This poster summarises both the combined national and network level results based on NNAP data relating to babies admitted to neonatal care between January and December 2024, unless otherwise stated. Results displayed in the horizontal pink bars show the range of neonatal network proportions (lowest and highest) and the pink circles shows the overall audit results. A green arrow, whether pointing up or down denotes a positive change, whereas a red arrow, pointing up or down denotes a negative change. An amber arrow denotes no change.

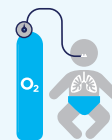
Outcomes of neonatal care



Mortality

6.4% of **7,038** babies born at less than 32 weeks died before discharge home.

→ **0%** change from previous year (2023: 6.4%)



Bronchopulmonary dysplasia (BPD)

39.8% of **7,341** babies born at less than 32 weeks developed BPD or died.

↓ **0.3%** decrease from previous year (2023: 40.1%)



Necrotising enterocolitis

5.1% of **6,909** babies born at less than 32 weeks developed necrotising enterocolitis.

↓ **0.4%** decrease from previous year (2023: 5.5%)



Bloodstream infection

5.1% of **7,063** babies born at less than 32 weeks had growth of a clearly pathogenic organism.

↑ **0.5%** increase from previous year (2023: 4.6%)



Preterm brain injury – Intraventricular haemorrhage (IVH)

6.4% of **6,880** babies born at less than 32 weeks experienced IVH.

↓ **0.2%** decrease from previous year (2023: 6.6%)



Preterm brain injury – cystic periventricular leukomalacia (cPVL)

3% of **6,871** babies born at less than 32 weeks experienced cPVL.

↑ **0.5%** increase from previous year (2023: 2.5%)



Optimal perinatal care



Antenatal steroids

51.8% of **11,321** mothers of babies born at less than 34 weeks' were given a full course of antenatal steroids in the week prior to delivery.

↓ **1.2%** decrease from previous year (2023: 53%)



Born in a centre with a NICU

80.7% of **1,920** babies born at less than 27 weeks' were born in a centre with a NICU on site.

↑ **1.1%** increase from previous year (2023: 79.6%)



Deferred cord clamping

73.5% of **12,894** babies born at less than 34 weeks' had their cord clamped at or after one minute.

↑ **5%** increase from previous year (2023: 68.5%)



Temperature on admission

77.6% of **13,077** babies born at less than 34 weeks' were admitted with a temperature within the recommended range of 36.5°C-37.5°C.

↑ **2.6%** increase from previous year (2023: 75%)



Antenatal magnesium sulphate

86.7% of **3,795** mothers of babies born at less than 30 weeks' were given antenatal magnesium sulphate.

↑ **1.5%** increase from previous year (2023: 85.2%)



Breastmilk feeding in first 2 days of life

66.8% of **12,874** babies born at less than 34 weeks' received their mother's milk in the first 2 days of life.

↑ **4.7%** increase from previous year (2023: 62.1%)



Parental partnership in care

WITHIN
14
DAYS



Breastmilk feeding at 14 days of life

80.8% of 11,601 babies born at less than 34 weeks' received their mother's milk at 14 days of life.

↑ 1.4% increase from previous year (2023: 79.4%)

72.7% **80.8%** 89.6%

Breastmilk feeding at discharge

65.8% of 11,596 babies born at less than 34 weeks' received their mother's milk at discharge.

↑ 2.7% increase from previous year (2023: 63.1%)

50.1% **65.8%** 84.6%

Parent consultation within 24 hours

94.6% of 56,864 parents had a documented consultation with a senior member of the neonatal team within 24 hours of their baby's admission.

↓ 0.5% decrease from previous year (2023: 95.1%)

92.2% **94.6%** 96.7%

Parent inclusion in consultant ward rounds

36% of 772,337 baby care days had a consultant-led ward round with at least one parent included.

↓ 2.7% decrease from previous year (2023: 38.7%)

25.2% **36%** 58.2%

Care processes and nurse staffing



On-time screening for retinopathy of prematurity (ROP)

80% of 6,725 eligible babies were screened on time for ROP.

↑ 1.5% increase from previous year (2023: 78.5%)

68.9% **80%** 88.2%

I am
2



Medical follow up at two years

77.9% of 3,890 babies born at less than 30 weeks' had a documented medical follow up at the right time.

↑ 0.7% increase from previous year (2023: 77.2%)

67.7% **77.9%** 85.8%

Non-invasive breathing support

51.7% of 6,642 babies born at less than 32 weeks' received only non-invasive breathing support in the first seven days of life.

↑ 2.4% increase from previous year (2023: 49.3%)

43.3% **51.7%** 61.7%

Neonatal nurse staffing

81.5% of 124,981 nursing shifts were staffed according to recommended levels.

↑ 2.6% increase from previous year (2023: 78.9%)

66.3% **81.5%** 91.1%

Note that all previous years' results in the 2024 report use the latest metric definitions, methodology and data (as of March 2025) to ensure that figures are comparable between years. For this reason, results from previous years will not always match previously published NNAP annual results. The total number of babies included differs between measures because of differences in inclusion criteria and missing data. Babies with missing outcomes are not included in the total.

Further information and resources

For neonatal services, neonatal networks and trusts/health boards

Full annual results

Full annual results at neonatal unit and network levels, interactive reporting tools and unit posters are available on NNAP Online at:

www.rcpch.ac.uk/resources/nnap-online-report-data

Extended Analysis Report

The NNAP 2024 Data: Extended Analysis Report, providing in-depth results and a summary of findings by audit measure, along with full national recommendations, local quality improvement recommendations and links to case studies and useful resources is available at: www.rcpch.ac.uk/nnap

For parents and families

Your Baby's Care Guide 2024

Parents and families can find more information about the NNAP and 2024 results in **Your Baby's Care**, a guide to the NNAP, while **NNAP Online** provides more in-depth results for each neonatal unit and network in England, Wales, Scotland and Isle of Man.

Your Baby's Care: www.rcpch.ac.uk/your-babys-care
NNAP Online: www.rcpch.ac.uk/resources/nnap-online-report-data

How we use information



To find out more about how we use information about babies experiencing neonatal care and their mothers, visit www.rcpch.ac.uk/your-babys-information or scan the QR code with your phone to read our leaflet, *Your Baby's Information*.

Key messages & recommendations

1 Mortality to discharge in very preterm babies

Overall, the proportion of very preterm babies, born between 24 and 32 weeks gestational age, who die before discharge home from the neonatal unit is unchanged from 2023 at 6.4% (451 of 7,038) and has not improved over recent years. Unacceptable geographical variation persists between neonatal networks, which

is not explained by the clinical or demographic background characteristics of babies cared for in the neonatal network (*Figure 1, NNAP Online and extended analysis report*). Although the NNAP reports only deaths occurring after admission to a neonatal unit, not including stillbirths and delivery room deaths, it's clear that the national ambition in England to halve the number of stillbirths and neonatal deaths by 2025¹ is unlikely to be achieved, and a different approach to reducing mortality is needed.

Figure 1: Front and back plot of mortality to discharge in very preterm babies, by neonatal network, 2017-2024.

The "front and back" plot is a time series chart showing all networks as individual lines. The x axis is the NNAP report year, and the y axis shows the percentage of babies with a given outcome in that network. The chart is split into tiles, with each tile showing the same set of lines, but with a particular network's results highlighted by a blue line in each case.

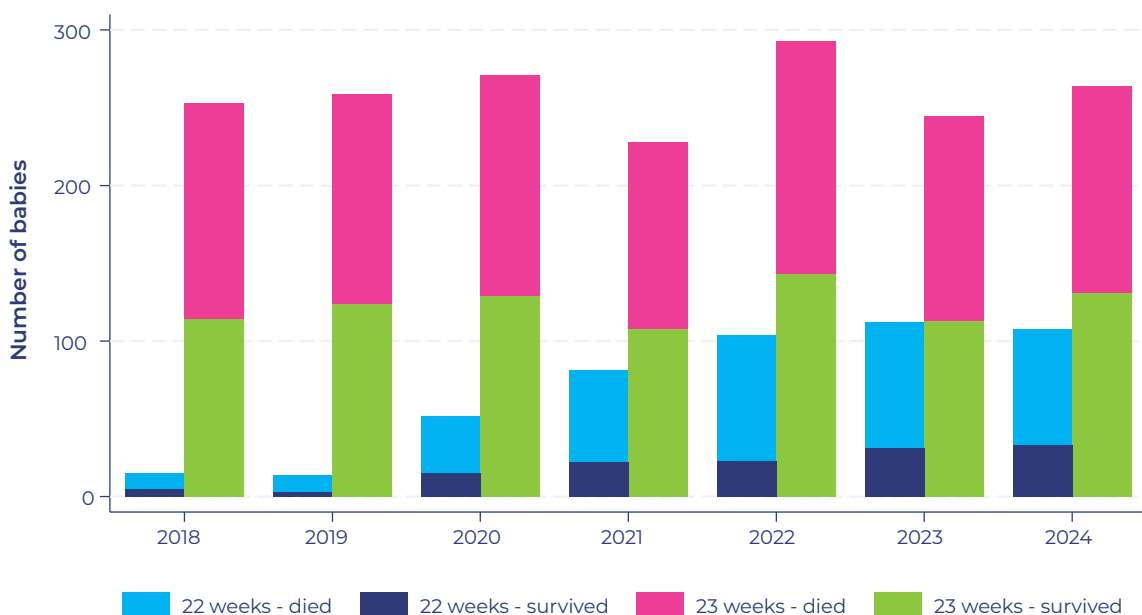


1. Dept. of Health and Social Care. 2015. New ambition to halve the rate of stillbirths and neonatal deaths. [Available here](#).

The number of babies born at 22 weeks gestational age and admitted to neonatal care appears to have plateaued (108 in 2024), having increased approximately seven-fold between 2018 (15) and 2023 (112). The number of babies born at this gestational age and surviving to

discharge has increased from 5 in 2018 to 33 in 2024 (Figure 2). The proportion of admitted babies born at 22 weeks and surviving to 44 weeks or discharge is largely unchanged (Figure 2).

Figure 2: Babies born at 22 and 23 weeks gestational age, admitted to a neonatal unit and surviving to 44 weeks gestational age, 2018-2024.



National recommendation:



1. Neonatal networks should:

- Review their mortality data and, where rates are higher than expected, develop locally prioritised improvement plans. Quality improvement activity should focus on best practices identified from Neonatal Networks exhibiting low mortality, with particular attention given to differences in network structure, staffing, clinical governance, and clinical practices. (Recommendation repeated from the 2023 data report).
- With their constituent units, undertake reviews of deaths in accordance with the BAPM Framework for Practice: Neonatal Mortality Governance (expected to be published in the second part of 2025) and engage with other statutory death review processes. Shared learning from these reviews should inform network governance and unit level clinical practice.

2 Outcomes of neonatal care

This year, the highest proportion to date of neonatal units were able to provide assurance that all required data relating to key complications of prematurity were submitted to the audit (bloodstream infection – 90% (161 of 179), necrotising enterocolitis – 92% (164 of 179), preterm brain injury – 89% (160 of 179). However, caution should continue to be exercised in interpreting measure results due to continuing levels of missing data and unclear quality assurance, as well as the risk of imprecision in reporting cases of preterm brain injury and necrotising enterocolitis.

Rates of **late onset bloodstream infection** have remained static since 2019 with no evidence of improvement over time nationally; ranging between 4.7% and 5.9% (*extended analysis report*). When case mix is taken into consideration, variation in rates of infection between neonatal units and networks is low (*NNAP Online, extended analysis report*).

There is some evidence of a small overall reduction in the incidence of **necrotising enterocolitis (NEC)** (2017 – 6.6%; 2024 – 5.1%, 351 of 6,909) (*extended analysis report*); with regional variation not explained by differences in gestational age of the babies being cared for (*NNAP Online, extended analysis report*). However, caution should continue to be exercised over these results due to the levels of missing data and quality assurance, while data completeness - and ultimately quality - continue to improve.

The completeness of **preterm brain injury** data reported in the NNAP continues to improve year on year, with only two networks with missing data over 20% in 2024 for each of the reported brain injury types (IVH grades 3 or 4, cPVL and PHVD) (*NNAP Online, extended analysis report*). However, data quality issues and reporting of PHVD mean that NNAP cannot yet confidently describe rates of brain injury and trends over time.

Over the last three years, the overall proportion of babies born at less than 32 weeks who developed **bronchopulmonary dysplasia (BPD) or died** has remained stable (2024 – 39.8%, 2,925 of 7,341; 2023 – 40.1%, 2022 – 40.2%) (*Figure 3*). Prior to 2022, there was evidence of an increase over time².

Figure 3: Proportion of babies born at less than 32 weeks GA who developed BPD or died, 2017-2024, using 2024 data, definitions and methodology.

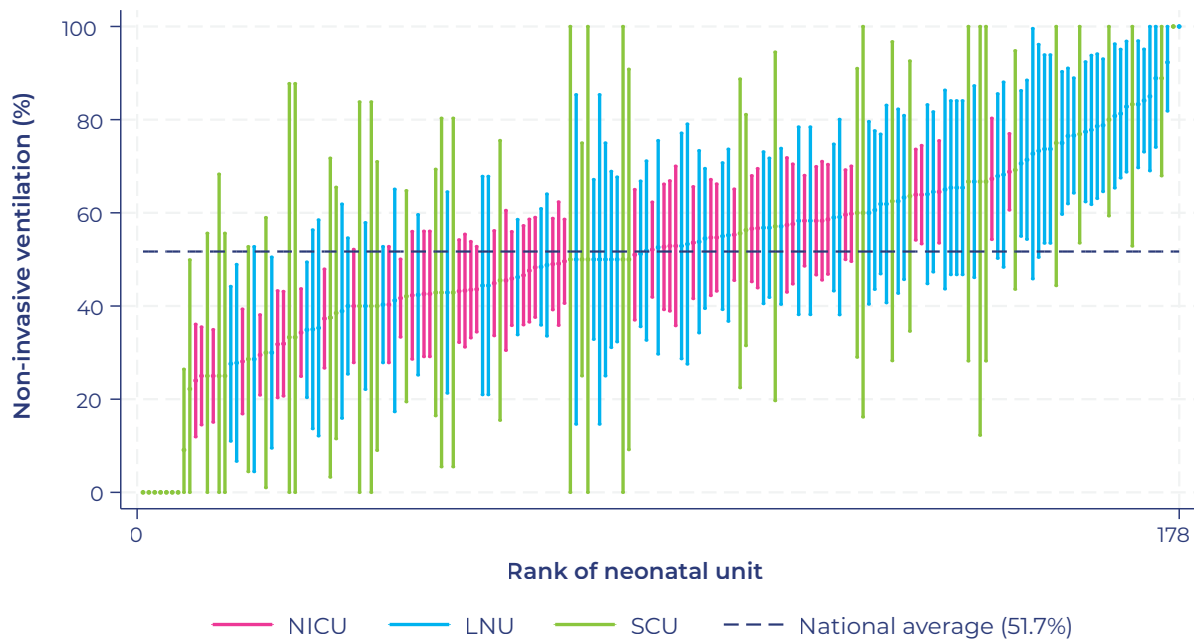


2. Kwok, T. C. et al. 2025. Changes in respiratory support received in very preterm infants between 36 and 40 weeks postmenstrual age - a national observational study in England and Wales. [Article submitted for publication]

Use of non-invasive breathing support is recommended where clinically appropriate to reduce the risk of mortality and incidence of BPD³. There is a continued overall improvement in the proportion of babies receiving only non-invasive breathing support during their first week of life; rising to 51.7% (3,437 of 6,642) in 2024 (2023 – 49.3%; 2022 – 47.8%) (*extended analysis report*).

However, there is significant variation in adherence to NICE guidance among neonatal units and networks, which is not decreasing over time. Network proportions range between 43.3% and 61.7%; and among NICUs, 24% - 68.8% (*extended analysis report, figure 4*). Differences in treatment effect⁴ indicate that regional and local variation is not explained by differences in the gestational age of the babies being cared for (*extended analysis report*).

Figure 4: Observed proportion of non-invasive breathing support, by neonatal unit (2024).



National recommendation:

2. NHS England⁵ and health departments in Devolved Governments should:

- issue clear guidance to neonatal services around the correct reporting of preterm brain injury including PHVD, so that robust data collection can support the achievement of the national ambition for neonatal brain injury.
- develop a mandatory NHS neonatal information standard to ensure that clinical reporting systems are interoperable, ensuring robust data collection to support effective measurement and reporting of all neonatal processes and outcomes.

3. NICE. Specialist neonatal respiratory care for babies born preterm. Quality standard QS193. 15 July 2020. [Available here](#).

4. In reporting outcomes, the NNAP describes the observed number of infants with an outcome, and a "balanced proportion" which is the proportion of that outcome in a matched group of babies with similar baseline characteristics to those in the network of interest. Comparing the balanced proportion to the observed proportion allows calculation of a "treatment effect". Treatment effect is the difference between the observed and balanced proportion. A negative treatment effect means that the observed proportion is lower than the balanced proportion, and suggests that the babies were more likely to survive/not have a particular outcome in the network than elsewhere in the country. A positive treatment effect means that the observed proportion is higher than the balanced proportion, and suggests that the babies would have been more likely to survive/not have a particular outcome had they been born and treated elsewhere.

5. NHS England or succeeding responsible organisation in England.

3 Optimal perinatal care

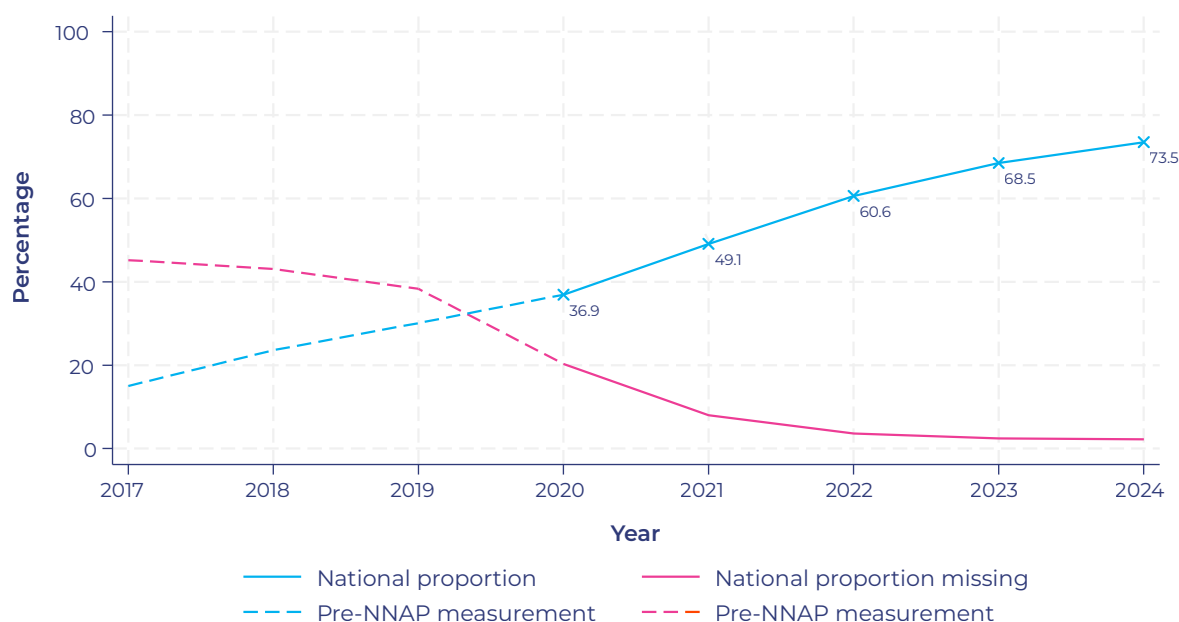
Despite rapid improvement in the proportion of babies receiving all reported **perinatal optimisation** measures⁶, only 1 in 5 babies (21.9%, 2,849 of 13,023) currently receives a complete optimal perinatal care journey, increased from 7.7% in 2021 (*extended analysis report*).

There is evidence that optimal perinatal interventions are linked to key outcomes such as mortality and brain

injury.^{7,8,9} Therefore, there is an important opportunity to improve perinatal optimisation nationally, to increase the proportion of babies receiving an optimal perinatal care journey and reduce regional variation in mortality and brain injury.

Since the introduction of **deferred cord clamping** into NNAP reporting in 2020, there has been rapid uptake of this important intervention by the neonatal community, with significant overall year-on-year improvement in data completeness and delivery - from 36.9% in 2020 to 73.5% (9,479 of 12,894) in 2024 (*Figure 5*).

Figure 5: Proportion of babies born at less than 34 weeks GA receiving deferred cord clamping, 2017-2024, using 2024 data, definitions and methodology*.



*From 2022, the measure was changed to include babies born at 32 and 33 weeks gestational age, therefore data relating to these babies may not have been completed and quality assured prior to this point.

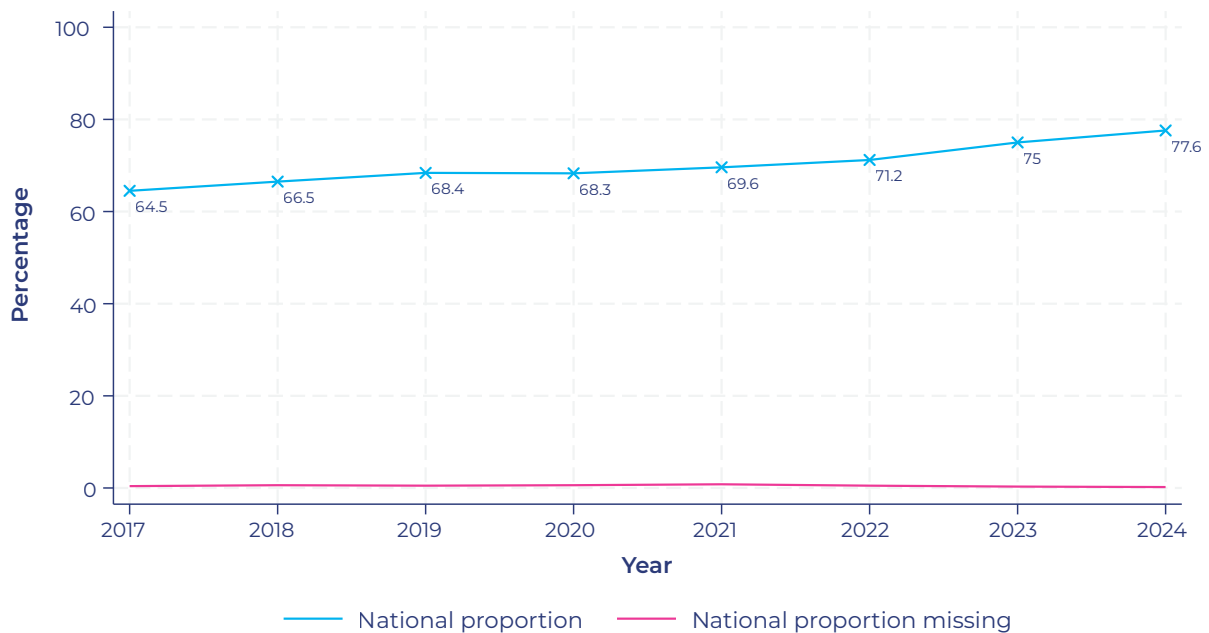
However, there is still striking unit level variation (from 30.8% to 100%) (*extended analysis report*) and therefore opportunities exist for further improvement.

Using the latest definition of this measure, there is a clear year-on-year improvement in the proportion of babies with a **normal temperature on admission** and **within an hour of birth**, from 64.5% (9,542 of 14,801) in 2017 to 77.6% (10,149 of 13,077) in 2024 (*Figure 6*).

While improvements can clearly still be made, variation between networks is relatively low, ranging from 69.1% to 82.2%, with year-on-year improvement continuing in most networks (*extended analysis report*).

6. Antenatal steroids, antenatal magnesium sulphate, birth in a centre with a NICU, deferred cord clamping, normal temperature on admission, breastmilk feeding in the first 2 days of life.
 7. Fogarty, M. et al. Delayed vs early umbilical cord clamping for preterm infants: a systematic review and meta-analysis. *Am J Obstet Gynecol*. 2018 Jan;218(1):1-18. doi: 10.1016/j.ajog.2017.10.231. [Available here](#).
 8. Oddie S., Tuffnell D. J., McGuire W. Antenatal magnesium sulfate: Neuro-protection for preterm infants. *Archives of Disease in Childhood - Fetal and Neonatal Edition* 2015; 100: F553-F557. [Available here](#).
 9. McCall EM, Alderdice F, Vohara S, et al. Interventions to prevent hypothermia at birth in preterm and/or low birthweight infants. *Cochrane Database of Systematic Reviews* 2018, Issue 2. [Available here](#).

Figure 6: Proportion of babies born at less than 34 weeks GA with normal temperature on admission, 2017-2024, using 2024 data, definitions and methodology*.



*From 2023, this measure was changed to include babies born at 32 and 33 weeks gestational age, therefore data relating to these babies may not have been completed and quality assured prior to this point.

There has been a small reduction in the overall proportion of eligible mothers receiving a full course of **antenatal steroids** within one week prior to delivery (2024 – 51.8%, 5,867 of 11,321; 2023 – 53%) (*extended analysis report*). However, there is evidence that shortened courses (less than 24 hours) are common.¹⁰ Antenatal steroid courses with a short duration do not have additional benefit over standard length courses and may cause harm.¹¹ It is important to ensure that NNAP measurement of antenatal steroid usage does not inadvertently encourage sub-optimal delivery of this treatment.

Broadly, delivery of **antenatal magnesium sulphate** is relatively unchanged in recent years (2024 – 86.7%, 3,291 of 3,795; 2023 – 85.2%; 2022 – 85.5%) following the introduction in 2018 of the PReCePT programme¹² in England, and in 2020, PERIPrem Cymru¹³ in Wales. Three neonatal networks are meeting the NNAP developmental standard of 90% (*extended analysis report*).

Despite a small increase in the overall proportion of extremely preterm babies **born in a centre with a NICU** this year, performance has remained relatively unchanged since 2020 (2024 – 80.7%, 1,549 of 1,920; 2020 – 79.7%) (*extended analysis report*). Regional

variation does exist, with network rates ranging from 71% to 91.3%; only four networks are meeting the NNAP developmental standard of 85% (*extended analysis report*). The network variation observed reflects both population geography and network management of patient flows.

National recommendation:

As recommended in the [NNAP Summary Report on 2023 Data](#):

3. **Neonatal Networks** should ensure that their constituent units are using the NNAP restricted access dashboard to regularly review their rates of optimal perinatal care delivery, identifying instances of non-adherence, and implementing quality improvement activities in response to them.

10. Pettinger, K. et al, (2025) Hitting the target and missing the point with shortened courses of antenatal steroids: An observational study. Neonatal Society Summer Meeting. 19 June 2025; London. [Available here](#).

11. Pettinger KJ, Spencer R, Oddie SJ. Perinatal medicine's best treatment: how should we be using antenatal steroids? Archives of Disease in Childhood - Fetal and Neonatal Edition 2025;110:245-246. [Available here](#).

12. NHS England. PReCePT – using magnesium sulphate to reduce cerebral palsy in pre-term babies. 20 June 2023. [Available here](#).

13. NHS Wales Executive. PERIPrem Cymru for professionals. [Available here](#).

4 Parental partnership in care

Communication and decision making

94.6% (53,817 of 56,864) of families have a **consultation with a senior member of the neonatal team within 24 hours** of admission. This is a small drop since 2023 (95.1%), coinciding with this measure no longer being subject to the outlier management process (*extended analysis report*). However, network variation remains low; all neonatal networks achieve this for over 92% of baby admissions (*NNAP Online, extended analysis report*).

The audit has been measuring **parental inclusion on daily consultant ward rounds** since 2017, and it is now widely accepted that parents should be included in these key decision-making discussions. Initially reporting on whether a parent was involved in the ward round at least once during their baby's stay, the NNAP now looks at whether this happened on each day of a baby's stay. Overall, a parent is involved in the ward round for 36% of baby care days (277,943 of 772,337). There is wide variation in how well this is achieved geographically, from 25.2% to 58.2% between neonatal networks (*NNAP Online, extended analysis report*).

Changes to the way these data are recorded in clinical systems make it difficult to compare data over time, and to effectively interpret the impact of missing data, and therefore the NNAP recommends caution when comparing and interpreting results. Feedback to the audit from some users has indicated that parent partnership could be measured in ways which take

better into account other opportunities for parents' inclusion. The NNAP is committed to exploring what parent partnership in care means to parents and families, and how this could be better measured in the future.

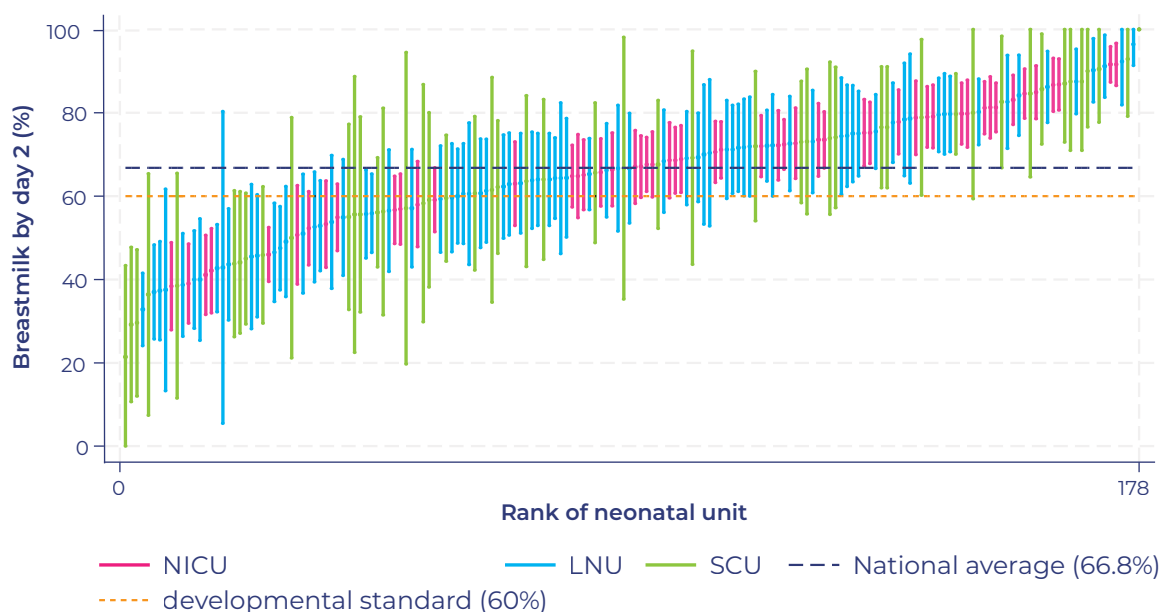
Breastmilk feeding

There is an encouraging increase in the proportion of babies receiving **breastmilk in their first two days of life**, from 52.4% in 2022, to 66.8% (8,586 of 12,847) in 2024, with minimal missing data (0.7% in 2024) (*extended analysis report*). Opportunities do however exist for improvement; there is striking unit level variation, from 38.4% to 91.6% across NICUs, and 21.4% to 100% across all levels of neonatal unit (*Figure 7*).

Overall, high rates of any breastmilk feeding are being achieved at 14 days, and this rate has been sustained over the last 5 years (2019 – 78.4%; 2024 – 80.8%, 9,371 of 11,601). Breastmilk feeding rates decrease to 65.8% at discharge home, although this represents an improvement from 59.5% in 2017 (*extended analysis report*).

Geographical variation exists between networks in the rates of feeding with any mother's milk at day 14 (from 72.7% to 89.6%), which widens further by discharge home (50.1% and 84.6%). Evidence shows that the higher the proportion of breastmilk consumption during the neonatal stay, the better the odds of continued breastfeeding^{14,15}. Rates of exclusive breastmilk feeding at day 14 range from 43.6% to 59.5% across networks, while rates of exclusive breastmilk feeding at discharge range from 29.9% to 47.2% (*extended analysis report*).

Figure 7: Proportions of any breastmilk feeding in the first two days of life, by neonatal unit (2024).



14. Valentine, G. et al. (2021) Percent mother's own milk feedings for preterm neonates predicts discharge feeding outcomes. *Journal of Perinatology*, 41(12), 2766–2773. [Available here.](#)

15. Levene, I., et al. (2024). The relationship of early expressed milk quantity and later full breastmilk feeding after very preterm birth: A cohort study. *Maternal & Child Nutrition*. [Available here.](#)

Medical follow up at two years of age

The rate of improvement in the delivery of **medical follow-up at two years of age** has been slow, from 69.9% in 2018 to 77.9% (3,029 of 3,890) in 2024, and regional variation remains, from 67.7% to 85.8% ([NNAP Online, extended analysis report](#)). However, there is clear evidence of some regional and local good practice – 41 units are achieving the NNAP developmental standard that says that at least 90% of babies should have two-year follow up data entered ([NNAP Online, extended analysis report](#)).

The NNAP will now consider and consult on reporting rates of survival without severe disability for centres following up over 90% of their babies, which may support improvements in follow-up delivery in other centres.

National recommendation:

4. Neonatal networks and local maternity and neonatal systems should ask their constituent units with below average rates of breastmilk feeding by day 2 to:

- a. investigate reasons for variation in uptake locally, and
- b. with families, co-design targeted, quality improvement programmes.



Luna having her first cuddle and skin-to-skin with dad, Mike Smith, whilst on CPAP. We were given bonding hearts on the unit to use so that our scent could be transferred and comfort Luna when we were away from her. Luna is now an amazing two year old and our miracle.

Photos courtesy of Rosanna Smith



5 On-time screening for retinopathy of prematurity (ROP)

Since the publication of new ROP screening guidance in March 2022, there has been a clear increase in the proportion of eligible babies receiving on time screening in line with the new recommendations; from 66.4% in 2022 to 80% (5,377 of 6,725) in 2024 (*extended analysis report*). This important screening needs to be delivered within a precise time window by highly specialised staff, and this challenge has been increasingly met by the neonatal community.

6 Neonatal nurse staffing

There is an overall trend towards improving compliance with nurse staffing levels over time, from 62.5% in 2017 to 81.5% (101,921 shifts of 124,981) in 2024, with evidence of a recovery following the aftermath of the COVID pandemic (2020 – 79.3%, 2021 – 74.1%, 2022 – 72.3%, *see extended analysis report*). However local and regional variation remains; from 66.3% to 91.1% between networks (*extended analysis report*).

7 Equity in neonatal care process delivery by ethnicity

This year, for the first time, the NNAP has also undertaken analysis of data for areas where differences in the delivery of important neonatal care interventions according to ethnicity have been demonstrated.¹⁶ More detailed results are available on [NNAP Online](#) and the [NNAP Dashboard](#). The results presented are not adjusted for differences in case mix, because the unadjusted results are those which need to be actioned.

Robust reporting of equity in neonatal care relies on accurate and complete reporting of patient demographics. The NNAP is driving improvements in completeness of demographic data through its dashboard. Among babies born in 2024 and admitted to a neonatal unit, 11.4% had missing ethnicity (8.5% of babies born at less than 34 weeks gestational age), after using baby's ethnicity if a mother's ethnicity was not recorded.

Optimal perinatal care

- Nationally, a lower proportion of babies of Black mothers received **deferred cord clamping** (68.5%, 755 of 1,102) than White (74.1%, 5,927 of 8,002), Asian (75.5%, 1,594 of 2,112) and mothers classified as Mixed/Other (70.2%, 458 of 652) (*extended analysis report*).
- Nationally, a lower proportion of babies with Black mothers had a **normal temperature on admission** (73%, 818 of 1,120), than White (78.1%, 6,302 of 8,072), Asian (77.5%, 1,649 of 2,129), and mothers grouped as Mixed/Other (76.3%, 505 of 662) (*extended analysis report*).
- A lower proportion of babies with White mothers were **born in a centre with a NICU** (77.8%, 755 of 971), when compared to Black (82.9%, 213 of 257), Asian (82.6%, 327 of 396) and Mixed/Other (83.2%, 99 of 119) (*extended analysis report*).

Parent partnership in care

- Parental consultation within 24 hours** took place for a lower proportion of admissions when the mother was Black (93.7%, 3,886 of 4,147) Asian (94.2%, 7,783 of 8,261) or grouped as Mixed/Other (93.8%, 2,343 of 2,498) than for White mothers (95%, 34,656 of 36,483) (*extended analysis report*).

- Parental inclusion on the consultant ward round** took place for a lower proportion of baby care days when the mother was Asian (29.3%, 38,083 of 129,969 baby care days), Black (34.7%, 23,743 of 68,423 baby care days), or Mixed or other ethnic background (33.6%, 12,989 of 38,651 baby care days) than for White mothers (37.9%, 178,111 of 469,391 baby care days) (*extended analysis report*).
- Use of **breastmilk** amongst preterm babies varies by ethnicity. A lower proportion of babies born to Black and Asian mothers (62.2%, 680 of 1,093; and 65.5%, 1,370 of 2,091 respectively) received any of their mother's milk in their first 2 days of life than babies born to White mothers (67.5%, 5,367 of 7,949) and those grouped as Mixed/Other (70.9%, 464 of 654) (*extended analysis report*).
- Conversely, **breastmilk feeding** was established and sustained through the neonatal stay for a higher proportion of babies born to Black mothers (day 14 – 88.9%, 876 of 985; discharge – 82.3%, 795 of 966), than for babies born to White mothers (day 14 – 77.4%, 5,581 of 7,213; discharge – 59.8%, 4,335 of 7,249), Asian mothers (day 14 – 86.8%, 1,652 of 1,903; discharge – 73.1%, 1,362 of 1,863), and mothers grouped as Mixed/Other (day 14 – 84.9%, 507 of 597; discharge – 74.4%, 451 of 606) (*extended analysis report*). This suggests there may be opportunities to improve the equity of early support provided to women of minoritised ethnicity.

National recommendation:

5. Neonatal networks and local maternity and neonatal systems should work with the perinatal teams in their constituent neonatal units to:

- ensure that staff receive appropriate and consistent training to confidently ask families about their ethnicity and that of their baby, and to accurately record demographic information,
- use the NNAP dashboard to review how well NNAP process measures are delivered locally, and whether this differs by ethnicity
- where differences exist, seek to understand the underlying causes, and
- with families, co-design quality improvement programme that directly address those causes.



16. Pettinger, K. et al, (2024) Does neonatal care delivery vary by deprivation and ethnicity: a retrospective cohort study. Neonatal Society Spring Meeting. 13 March 2025; London. [Available here.](#)

A guide to the
**National Neonatal
Audit Programme**
Summary report
on 2024 data



The National Neonatal Audit Programme is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and funded by NHS England and the Governments of Wales, Scotland and the Isle of Man as part of the **National Clinical Audit and Patient Outcomes Programme**.



**Royal College of Paediatrics
and Child Health**
5-11 Theobalds Road,
London, WC1X 8SH