# Appendix B: NNAP recommendations by audience

The NNAP makes recommendations as a result of the key findings in this report. These recommendations are targeted to a particular audience and are listed by audience.

## Recommendations for neonatal units and services

**(1)** To optimise preterm perinatal wellbeing, base local quality improvement activity on reviews of cases:

- where evidence-based strategies were not used in patient care
- where shared learning from networks is available.

Use the following methodologies to guide improvement:

- The Prevention of Cerebral Palsy in PreTerm Labour (PReCePT) programme,
- The Maternity and Neonatal Health Safety Collaborative and
- The Scottish Patient Safety Programme.

**Action: Perinatal teams, neonatal networks and maternity systems**

*Related NNAP measures: Antenatal steroid administration, Magnesium sulphate administration, Birth in a centre with a NICU.*

**(2)** Review local thermoregulation data to drive quality improvement goals. Use the [British Association of Perinatal Medicine Quality Improvement toolkit for Improving Normothermia in Very Preterm Infants](#) to support action in response.

**Action: Neonatal units**

*Related NNAP measure: Normal temperature on admission.*

**(3)** Review practice and documentation processes where rates of parental consultation and parental presence on the ward round need to be increased. Use the [Bliss Baby Charter](#) for guidance on improving parental partnership in care.

**Action: Neonatal units**

*Related NNAP measures: Parental consultation within 24 hours of admission, Parental presence on the consultant ward round.*

**(4)** Ensure that staff:

- understand the importance of welcoming parents to the neonatal unit
- communicate to parents the value of their presence on the ward round
- involve them directly in the ward round
- record their presence.

**Action: Neonatal units**

*Related NNAP measure: Parental presence on the consultant ward round.*

**(5)** Use evidence-based strategies to lower rates of infection or necrotising enterocolitis (NEC). Consider comparing practice with units with 'complete' data who have lower rates of infection or NEC to drive improvement in local rates.

**Action: Neonatal units**

*Related NNAP measures: Bloodstream infection, CLABSI, Necrotising enterocolitis.*

**(6)** Develop processes to ensure that NEC and blood culture data are complete, using NNAP quarterly reports, to provide assurance at the end of the year.

**Action: Neonatal units with incomplete NEC and blood culture data**

*Related NNAP measures: Bloodstream infection, CLABSI, Necrotising enterocolitis.*

**(8)** Assess practice in the management of early respiratory disease in very preterm infants against NICE guidelines for respiratory care for preterm babies. Consider comparing practice with units with a lower rate of bronchopulmonary dysplasia to identify quality improvement opportunities.

**Action: Neonatal networks and units with a 'positive' treatment effect for BPD where the 95% confidence interval excludes zero.**

*Related NNAP measure: Bronchopulmonary dysplasia.*

**(9)** Use local knowledge of the rates of admission of term and near-term babies, case review (as used in the ATAIN programme), process mapping and Pareto charts to identify and action modifiable factors to address prolonged mother infant separation.

**Action: Neonatal units**

*Related NNAP measures: Minimising separation of mother and term, and late-preterm babies.*

**(11)** Identify barriers to breastfeeding across the patient pathways using:

- parent feedback
- a review of breastmilk feeding rate at discharge
- the early breastmilk feeding measure in the NNAP quarterly reports.

Use tools such as the *UNICEF Neonatal Unit Baby Friendly Initiative* and *Bliss Baby Charter* to overcome barriers identified and to drive improvement.

**Action: Neonatal units**

*Related NNAP measure: Breastmilk feeding at discharge home.*

**(12)** Produce detailed plans to provide or organise follow up of care for babies in accordance with NICE guidance: *Developmental follow-up of children and young people born preterm*. Consider arrangements for:

- communicating with families about follow up at discharge
- families who live far from the hospital of care
- families who do not attend appointments
- families who move to different areas
- completing and documenting assessments made.

**Action: Neonatal units**

*Related NNAP measure: Clinical follow-up at two years of age.*

**(14)** Use NNAP quarterly reports to ensure that a mortality outcome is clearly recorded for every baby admitted. For babies discharged to a non NNAP unit before 44 weeks' post menstrual age, units should capture outcome using the "final neonatal outcome" field.

**Action: Neonatal units and networks**

*Related NNAP measure: Mortality until discharge in very preterm babies.*

**(16)** Consider the impact of nurse staffing guidelines while taking into account capacity to admit babies to neonatal units.

When optimal nurse : baby ratios cannot be met consider:

- the staffing situation in other neonatal units
- the balance of risks of admitting more babies against the potential risks and inconveniences of intra-network or inter-network transfer.

**Action: Neonatal units**

*Related NNAP measure: Neonatal nurse staffing.*

**(18)** Using the *NNAP measures guide*, ensure that data entry regarding nurse staffing is complete and entered considering relevant published guidance such as *Safe, sustainable and productive staffing: An improvement resource for neonatal care*.

**Action: Neonatal units and networks**

*Related NNAP measure: Neonatal nurse staffing.*

## Recommendations for neonatal networks

**(1)** To optimise preterm perinatal wellbeing, base local quality improvement activity on reviews of cases:

- where evidence-based strategies were not used in patient care
- where shared learning from networks is available.

Use the following methodologies to guide improvement:

- The Prevention of Cerebral Palsy in PreTerm Labour (PReCePT) programme,
- The Maternity and Neonatal Health Safety Collaborative and
- The Scottish Patient Safety Programme.

**Action: Perinatal teams, neonatal networks and maternity systems**

*Related NNAP measures: Antenatal steroid administration, Magnesium sulphate administration, Birth in a centre with a NICU.*

**(7)** Neonatal networks should work with units that do not validate their NEC or Bloodstream infection NNAP data in order to ensure full participation in the audit, and maximise compliance with the NHS neonatal service specification in England and other appropriate structures within the devolved administrations and crown dependencies.

**Action: Neonatal networks**

*Related NNAP measures: Bloodstream infection, CLABSI, Necrotising enterocolitis.*

**(8)** Assess practice in the management of early respiratory disease in very preterm infants against NICE guidelines for respiratory care for preterm babies. Consider comparing practice with units with a lower rate of bronchopulmonary dysplasia to identify quality improvement opportunities.

**Action: Neonatal networks and units with a 'positive' treatment effect for BPD where the 95% confidence interval excludes zero.**

*Related NNAP measures: Bronchopulmonary dysplasia.*

**(13)** To reduce mortality, neonatal networks should, following a review of local mortality results, take action to:

- consider whether a review of network structure, clinical flows, guidelines and staffing may be helpful in responding to local mortality rates
- consider the extent of the implementation of evidence-based strategies in the following areas to reduce mortality:
  - antenatal steroids
  - deferred cord clamping
  - avoidance of hypothermia
  - management of respiratory disease
- ensure that shared learning from multi-disciplinary reviews of deaths (including data from the local use of the Perinatal Mortality Review Tool) informs:
  - network governance
  - unit level clinical practice.

**Action: Neonatal networks**

*Related NNAP measure: Mortality until discharge in very preterm babies.*

**(14)** Use NNAP quarterly reports to ensure that a mortality outcome is clearly recorded for every baby admitted. For babies discharged to a non NNAP unit before 44 weeks' post menstrual age, units should capture outcome using the "final neonatal outcome" field.

**Action: Neonatal units and networks**

*Related NNAP measure: Mortality until discharge in very preterm babies.*

**(15)** Ensure that sufficient numbers of neonatal unit nurse staff and nurses with specialist qualifications are trained and retained to reduce current variations in staffing and improve staffing levels.

**Action: National governments, neonatal networks and individual health trusts or boards**

*Related NNAP measure: Neonatal nurse staffing.*

**(17)** Maintain oversight of neonatal unit capacity on a regular basis to support and assist units in balancing capacity against demand.

**Action: Neonatal networks**

*Related NNAP measure: Neonatal nurse staffing.*

**(18)** Using the *[NNAP measures guide](#)*, ensure that data entry regarding nurse staffing is complete and entered considering relevant published guidance such as *[Safe, sustainable and productive staffing: An improvement resource for neonatal care](#)*.

**Action: Neonatal units and networks**

*Related NNAP measure: Neonatal nurse staffing.*

## Recommendations for perinatal services

**(1)** To optimise preterm perinatal wellbeing, base local quality improvement activity on reviews of cases:

- where evidence-based strategies were not used in patient care
- where shared learning from networks is available.

Use the following methodologies to guide improvement:

- The Prevention of Cerebral Palsy in PreTerm Labour (PReCePT) programme,
- The Maternity and Neonatal Health Safety Collaborative and
- The Scottish Patient Safety Programme.

**Action: Perinatal teams, neonatal networks and maternity systems**

*Related NNAP measures: Antenatal steroid administration, Magnesium sulphate administration, Birth in a centre with a NICU.*

## Recommendations for trusts/health boards

**(15)** Ensure that sufficient numbers of neonatal unit nurse staff and nurses with specialist qualifications are trained and retained to reduce current variations in staffing and improve staffing levels.

**Action: National governments, neonatal networks and individual health trusts or boards**

*Related NNAP measure: Neonatal nurse staffing.*

## National and system-wide recommendations

**(10) NNAP** and the **National Maternity and Perinatal Audit (NMPA)** should work with **NHS Digital** to maximise opportunities to report measures of rates and duration of mother and baby separation in a way that is most useful to audit users.

*Related NNAP measures: Minimising separation of mother and term, and late-preterm babies.*

**(15)** Ensure that sufficient numbers of neonatal unit nurse staff and nurses with specialist qualifications are trained and retained to reduce current variations in staffing and improve staffing levels.

**Action: National governments, neonatal networks and individual health trusts or boards**

*Related NNAP measure: Neonatal nurse staffing.*