Appendix B: NNAP Recommendations by audience (in alphabetical order by audience)

British Association for Neonatal Neurodevelopmental Follow Up (BANNFU)

(1) Describe and promote best practice and successful models of delivery of high rates of follow up using appropriate instruments

To improve the long-term outcomes of all babies that have had neonatal care.

British Association of Perinatal Medicine (BAPM)

(1) Consider developing a care pathway identifying potentially better practices and the optimal means for their implementation

In order to reduce the proportion of babies affected by bronchopulmonary dysplasia.

Departments of Health in England, Scotland and Wales

(1) Prioritise structural changes and operational management to ensure that babies who require intensive care are cared for in the units best equipped to deliver it.

(2) Ensure that sufficient resources are available for the education and employment of suitably trained professionals to meet and maintain nurse staffing ratios described in service specifications

Local Maternity Systems (LMS) and equivalent bodies in devolved nations

(1) Ensure that appropriate clinical pathways exist

To enable delivery of intensive care to all infants where this is required, with a minimum of postnatal transfers.

National Maternity and Perinatal Audit (NMPA)

(1) Consider developing reporting of antenatal steroid use in order to encourage timely exposure of eligible infants to it.

Neonatal Networks

(1) Ensure that all women who may deliver their baby at less than 30 weeks gestational age are offered magnesium sulphate where possible

- Adopt and implement the following guidance and methodologies to guide improvement:
    - BAPM Perinatal Optimisation Care Pathway Toolkit
    - Prevention of Cerebral Palsy in PreTerm Labour (PReCePT) quality improvement programme
    - Scottish Patient Safety Programme

To help reduce the risk of babies who are born prematurely developing cerebral palsy.

(2) Prioritise structural changes and operational management to ensure that babies who require intensive care are cared for in the units best equipped to deliver it.

(3) Neonatal Networks with low rates of ROP screening should implement a mechanism for real time measurement of their unit's adherence to ROP screening guidelines

So that they can identify where related quality improvement activities need to be undertaken.

(4) Neonatal networks and units with both low and high rates of infection should:

- Facilitate invitations for units with higher rates of infection to visit units with lower rates in order to jointly agree whether potentially better practices could be used and consider requiring units to participate in such quality improvement activity
- Ensure that the proposed visits should be multidisciplinary and focussed on identification and implementation of potentially better practices including "infection prevention bundles".

In order to reduce the risk of exposing sick and premature babies to infection.

(5) Seek to understand the extent to which care practices explain the differences in rates of BPD,

- Implement potentially better care practices, including any identified from NICE guidance about specialist respiratory care

(6) Review the admission durations of their units, alongside admission rates, as part of planning maximally effective use of neonatal bed days

(7) Focus on both the early initiation and sustainment of breastmilk feeding in conjunction with parents by:

- Reviewing data and processes in order to undertake selected quality improvement activities suited to the local context
- Removing barriers to successful breastmilk feeding by ensuring that appropriate and comfortable areas are provided with adequate, regularly cleaned expressing equipment
- Seeking and acting on feedback from local parents on their experience of starting and sustaining breast feeding
- Working to achieve and sustain both UNICEF UK Baby Friendly Initiative Neonatal Unit accreditation and Bliss Baby Charter accreditation
- Implementing the guidance and evidence-based care practices set out in the BAPM Maternal Breastmilk Toolkit
- Working with local parents to review and improve local practices around the early communication of the benefits of breastmilk, ideally prior to birth wherever possible

So that the many health benefits to the preterm baby and the mother of breastfeeding can be realised.

(8) 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 a quality improvement approach to the delivery of evidence-based strategies in the following areas to reduce mortality: timely antenatal steroids, deferred cord clamping, avoidance of hypothermia and management of respiratory disease

- Ensure that shared learning from locally delivered, externally supported, multi-disciplinary reviews of deaths (including data from the local use of the Perinatal Mortality Review Tool) informs network governance and unit level clinical practice

(9) Prioritise data quality assurance in submitting nurse staffing data,

- Monitor adherence to recommended nurse staffing standards
- Develop action plans to address any deficits in nursing staffing and skill mix

So that babies and their parents are cared for at all times by the recommended number of trained professionals.

Neonatal Units

(1) Work as a perinatal team to:

- Optimise the timing and dosing of antenatal steroids for eligible babies
- Avoid the inappropriate use of multiple courses
- Adopt evidence-based practices to predict preterm birth, by using the following guidance and methodologies to guide improvement:
    - BAPM Perinatal Optimisation Care Pathway Toolkit
    - Prevention of Cerebral Palsy in PreTerm Labour (PReCePT) quality improvement programme
    - Scottish Patient Safety Programme

To help reduce the severity of respiratory disease and other serious complications in preterm babies.

(2) Work as a perinatal team to:

- Ensure that all women who may deliver their baby at less than 30 weeks gestational age are offered magnesium sulphate where possible
- Adopt and implement the following guidance and methodologies to guide improvement:
    - BAPM Perinatal Optimisation Care Pathway Toolkit

- Prevention of Cerebral Palsy in PreTerm Labour (PReCePT) quality improvement programme
- Scottish Patient Safety Programme

To help reduce the risk of babies who are born prematurely developing cerebral palsy.

(3) Units with lower rates of parental consultation, and particularly those with low outlying performance, should:

- Reflect on their rates of parental consultation
- Use a quality improvement approach and consider using novel means such as video calls where parents are unable to enter the neonatal unit

In order to improve parental partnership in care.

(4) Units, in collaboration with parents, should:

Build relationships and trust between parents, family members and neonatal unit staff by:

- Understanding the unique role of parents as partners in care, and involving them in developing and updating care plans and decision making
- Empowering parents to feel comfortable and able to contribute to discussions about their baby's care
- Taking the time to explain to parents why decisions about aspects of care are being suggested
- Reflecting on audit results with parents, identifying the reasons for any gaps in parental presence on ward rounds, any lack of consultant wards or documentation of consultant ward rounds, and working with parents to address any barriers to participation identified

So that parents are partners in the care of their baby in the neonatal unit.

(5) Units with higher reported rates of infection should:

- Compare practices with units with lower rates of infection, identified via NNAP Online and consider whether their rates of infection could be decreased
- Ensure that their use of evidence-based infection reduction strategies is optimised

In order to minimise the number of babies infected in their units.

(6) Networks and units with both low and high rates of infection should:

- Facilitate invitations for units with higher rates of infection to visit units with lower rates in order to jointly agree whether potentially better practices could be used and consider requiring units to participate in such quality improvement activity
- Ensure that the proposed visits should be multidisciplinary and focussed on identification and implementation of potentially better practices including “infection prevention bundles”.

In order to reduce the risk of exposing sick and premature babies to infection.

(7) Units with high treatment effect should:

- Seek to identify potentially better practices from neonatal units with lower treatment effect

(8) Seek to understand the extent to which care practices explain the differences in rates of BPD,

- implement potentially better care practices

(9) Units with validated NEC data should:

- Compare their rates of NEC to those of other comparable units with validated data, and if their rates of NEC are relatively high, seek to identify and implement potentially better practices

In order to reduce the associated higher risk of mortality and, for those babies who survive, the risk of longer term developmental, feeding and bowel problems.

(10) Ensure the accurate recording of NEC diagnoses

In order to facilitate valid comparisons of the rates of NEC, and the development of preventative measures based on variations in rates of NEC.

(11) Ensure discharge practices minimise inappropriate separation of mother and baby,

- Consider introducing measures to facilitate timely discharge such as criterion-based discharge
- Consider delivering some care as transitional care

So that babies born at term and late pre-term admitted to neonatal units are not separated from their mothers for longer than is necessary.

(12) Focus on both the early initiation and sustainment of breastmilk feeding in conjunction with parents by:

- Reviewing data and processes in order to undertake selected quality improvement activities suited to the local context
- Removing barriers to successful breastmilk feeding by ensuring that appropriate and comfortable areas are provided with adequate, regularly cleaned expressing equipment
- Seeking and acting on feedback from local parents on their experience of starting and sustaining breast feeding
- Working to achieve and sustain UNICEF UK Baby Friendly Initiative Neonatal Unit accreditation
- Implementing the guidance and evidence-based care practises set out in the BAPM Maternal Breastmilk Toolkit and Bliss Baby Charter
- Working with local parents to review and improve local practices around the early communication of the benefits of breastmilk, ideally prior to birth wherever possible

So that the many health benefits to the preterm baby and the mother of breastfeeding can be realised.

(13) Produce detailed plans to provide or organise follow up of care for preterm babies in accordance with NICE guidance and 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

So that very preterm babies can be monitored and checked for any problems with movement, the senses, delays in development or other health problems and so that parents can get reassurance about how their baby is developing, and any support that they might need.

(14) 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 a quality improvement approach to the delivery of evidence-based strategies in the following areas to reduce mortality: timely antenatal steroids, deferred cord clamping, avoidance of hypothermia and management of respiratory disease.
- Ensure that shared learning from locally delivered, externally supported, multi-disciplinary reviews of deaths (including data from the local use of the Perinatal Mortality Review Tool) informs network governance and unit level clinical practice.

Neonatal Intensive Care Unit (NICU)

(1) Neonatal Intensive Care Units (NICUs) with persistently low levels of ROP screening should ensure that:

- Babies requiring ROP screening are accurately identified
- Safety systems for appropriate ROP screening are in place

So that babies who are at the highest risk of loss of vision, can be screened and receive timely treatment if required.

(2) Prioritise data quality assurance in submitting nurse staffing data,

- Monitor adherence to recommended nurse staffing standards
- Develop action plans to address any deficits in nursing staffing and skill mix

So that babies and their parents are cared for at all times by the recommended number of trained professionals.

Obstetric Services

(1) Optimise the timing and dosing of antenatal steroids for eligible babies,

- Avoid the inappropriate use of multiple courses
- Adopt evidence-based practices to predict preterm birth, by using the following guidance and methodologies to guide improvement:
    - BAPM Perinatal Optimisation Care Pathway Toolkit
    - Prevention of Cerebral Palsy in PreTerm Labour (PReCePT) quality improvement programme
    - Scottish Patient Safety Programme

To help reduce the severity of respiratory disease and other serious complications in preterm babies.

(2) Work as a perinatal team to:

- Ensure that all women who may deliver their baby at less than 30 weeks gestational age are offered magnesium sulphate where possible
- Adopt and implement the following guidance and methodologies to guide improvement:
    - BAPM Perinatal Optimisation Care Pathway Toolkit
    - Prevention of Cerebral Palsy in PreTerm Labour (PReCePT) quality improvement programme
    - Scottish Patient Safety Programme

To help reduce the risk of babies who are born prematurely developing cerebral palsy.

Patient safety team in NHS Improvement and equivalent bodies in the devolved nations

(1) Facilitate national dissemination of learning from mortality reviews

Universities and Health Education England or equivalent bodies in the devolved nations

(1) Consider revising, renewing and standardising models of specialist neonatal nursing education