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NHS England

Neonatal Critical Care Clinical Network Specification

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Contents

Executive Summary

Neonatal Critical Care (NCC) Clinical Networks have been established to ensure high quality neonatal care, improving outcomes for all babies and families, providing safe expert care as close to their home as possible, and keeping mother and baby together while they need care. NCC clinical networks help to manage patient flow across the network, balancing capacity and demand, ensuring services meet the needs of patients

NCC clinical networks have a central role in delivering the recommendations of the NHS England Neonatal Critical Care Review (NCCR) and the agreed recommendations of other relevant national reports, including those of GIRFT.

The requirements for these networks are described in this specification.

1. Clinical Networks

Specialised services Clinical Networks[1] are a vehicle for specialty level collaboration between patients, providers and commissioners. They should have clear lines of accountability with Integrated Care Boards (ICBs) including providers and provider collaboratives, and to NHS England (NHSE) Regional Teams, to ensure local ownership, alignment and a local mandate.

All networks have an important role in delivering the triple aim, supporting:

- better health and wellbeing of everyone,
- the quality of care for all patients, and
- the sustainable use of NHS resources

This specification sets out the appropriate scope for the work of NCC clinical networks. This will inform the development of the annual workplans developed in conjunction with the network's commissioners. No network will, or could, focus on all aspects of the scope described, at one time.

In describing the appropriate scope for networks, these specifications refer to the work of the network board and the network's members, supported by the network team. Networks are not expected to assume the legitimate accountabilities and responsibilities of providers who are accountable for meeting the needs of the Service Specification. However, network

[1] While some specialised services Clinical Networks have previously been described as Operational Delivery Networks (ODNs), the range of activity undertaken is now significantly beyond that envisaged for ODNs, reaching into non-specialised services, and in some cases primary and community care and prevention. Some are jointly funded as part of national transformation programmes and have accountabilities outside as well as within specialised services. As a result, as a group they are now referred to as specialised services 'Clinical Networks'.

responsibilities inevitably overlap with those of providers, because networks aim to improve the ways in which services are delivered operationally and shape how they develop and because providers are members of networks.

2. Strategic Context

NCC clinical networks have been in existence since 2004, and were formally commissioned by NHS England in 2013. Since the publication of the Neonatal Critical Care Review (NCCR) in 2019, NHS England has been implementing the recommendations focused on aligning and investing in capacity, developing the expert neonatal workforce and improving the experience for families, via the NHS Long Term Plan.

Neonatal services are inextricably linked with maternity services and are a key part of the Maternity Transformation Programme. Together, the Maternity Transformation Programme and the NCCR form a coherent programme to improve outcomes for women and babies using maternity and neonatal services, including actions to improve pre-conception, antenatal, intrapartum and postnatal care, all of which have an impact on neonatal outcomes.

Working with Local Maternity and Neonatal Systems (LMNS), NCC Clinical Networks play a key role in ensuring that implementation of both neonatal and maternity transformation plans remain coordinated and proceed together. Similarly, NCC Clinical Networks should link with the relevant Strategic Children's Forum(s) (or equivalent) to ensure alignment with other children's networks and services.

The GIRFT neonatology review was published in April 2022 and provided detailed recommendations for improving clinical care and patient safety.

Neonatal services exist to provide comprehensive, equitable, integrated, safe, high quality services for babies (usually up to 44 weeks corrected gestational age) that require on-going critical care.

Each neonatal network should comprise a number of maternity and neonatal services with at least one Neonatal Intensive Care Unit (NICU) and an appropriate number of Local Neonatal Units (LNUs) and Special Care Units (SCUs) to meet local population need. These units work together as a network to deliver a "local care pathway", with the capacity and resources to care for the babies of women who live within the network area except for those requiring supra-regional or highly specialised services.

Babies requiring the highest levels of care should be concentrated in relatively few specialist centres, and it is the networks' role to develop coordinated patient pathways across neonatal units and supporting transport services, advising on any reconfiguration of services across the network area in line with the recommendations of the NCCR.

3. Network Scope

3.1 Scope

The care pathway for each baby will be specific to their needs, making management of patient flow across the network (which may extend across several ICBs) an essential component of the model of care. Clinical networks help to manage this flow and capacity, ensuring services meet the needs of patients and staff are competent to manage patients at the appropriate level of care for their needs.

Neonatal Critical Care (NCC) clinical networks include all neonatal critical care for babies whether the commissioner is NHS England or one or more Integrated Care Boards (ICBs).

Hospitals provide three different types of neonatal service for their local population:

- Neonatal Intensive Care Units (NICUs) provide intensive care (IC) for the smallest and sickest babies across the whole region, in addition to high dependency (HD), special care (SC) and transitional care (TC) for their local population.
- Local Neonatal Units (LNUs) provide short-term IC (1-2 days); and HD/SC and TC services for their local population.
- Special Care Units (SCUs) provide SC/TC for their local population.

All three levels of neonatal service provide support to maternity wards for babies with additional needs, and each network should have an agreed model for transitional care. All levels of service may also provide outreach services to infants following discharge.

Standards for neonatal medical and nursing workforce are each set by British Association of Perinatal Medicine (BAPM). Additional essential multi-disciplinary workforce requirements including Allied Health Professionals (AHPs, Psychology and Pharmacy) are set out in the GIRFT (Neonatology) report and within the individual profession's standards. The specialised service is described in detail in Service Specifications:

- Neonatal Critical Care (Intensive Care, High Dependency and Special Care) E08/S/a
- Neonatal Intensive Care Transport E08/S/b

Not in Scope

Normal care – care given after birth primarily by the mother, with midwifery support but without the need for neonatal critical care.

Paediatric Critical Care services.

3.2 Population Covered

Neonatal Critical Care Clinical Networks will be flexible in their structure to reflect geographical arrangements and the evolving NHS provider landscape, whilst retaining their individual aims. Neonatal Critical Care Clinical Networks will operate within a defined geographical area and with the neonatal providers that fall within that area.

The care of all babies requiring neonatal care in England will be provided by hospitals that are required to be part of one of the 10 NCC clinical networks covering the whole country.

The networks are:

NORTH EAST AND YORKSHIRE
Northern
Yorkshire & Humber

NORTH WEST
North West

MIDLANDS
East Midlands
West Midlands

EAST OF ENGLAND
East of England

LONDON
London

SOUTH EAST
Kent Surrey and Sussex
Thames Valley and Wessex

SOUTH WEST
South West

Wales and Scotland: While some residents of Wales and Scotland receive their care in England, hospitals in these countries are not part of these networks.

Networks in England will work with colleagues in Scotland and Wales to offer mutual aid as appropriate at times of service pressure.

Crown Dependencies: While some residents of the Channel Islands and the Isle of Man receive their care in England, hospitals in these territories are not part of these networks.

Northern Ireland: While some residents of Northern Ireland receive their care in England, hospitals in Northern Ireland are not part of these networks.

4. Network Aims and Objectives

4.1 Network Vision and Aims

The vision for neonatal services across England set out by the NCCR is:

> A seamless, responsive and multidisciplinary service built around the needs of new-born babies and the involvement of families in their care. High quality neonatal care will be networked together across England, to improve outcomes for all families, provide safe expert care as close to their home as possible, and keep mother and baby together while they need care.

NCC clinical networks will work with commissioners, providers, Maternity Clinical Networks and LMNS and other partners to develop and deliver Neonatal Critical Care Review Implementation Plans addressing the recommendations arising from the review, the linked commitments in the NHS Long Term Plan, taking account of the agreed recommendations of

the GIRFT national report, with the aim of improving outcomes, patient experience and quality standards.

4.2 Network Objectives

An NCC clinical network will:

- Provide a safe, high quality service for neonatal care across the network and seek to improve outcomes for all babies born and cared for within it.
- Support providers within their network to deliver the expected national and local service standards and to achieve compliance with national service specifications and policies;
- Coordinate patient pathways between providers over a wide geographical area to improve access to specialist neonatal resources and expertise, and ensure seamless care for mothers and their babies across the network.
- Develop and implement common neonatal clinical practice guidelines and policy across the network.
- Maintain a framework for demonstrating the attainment of minimum quality standards, the implementation of continuous quality improvement and adequate risk management across the network.
- In collaboration with commissioners, agree the appropriate allocation of capital and revenue funding for neonatal care across the network to ensure that supply meets demand now and in future years.
- Ensure that the input of parents and families is valued and considered in all aspects of the Network's work, including the development of the annual plan.
- Work with Local Maternity and Neonatal Systems and Maternity Clinical Networks to ensure neonatal services are integrated into maternity planning, and ensure that all women who are likely to deliver before 27 weeks of gestation (or give birth to a baby estimated to be less than 800g birth weight) give birth in a maternity unit with an on-site NICU.
- Work with Paediatric Clinical Networks to ensure seamless pathways of care babies who continue to have complex medical needs beyond the neonatal period

These objectives can only be achieved if the network works collaboratively with appropriate partner organisations to share learning, experiences, knowledge, skills and best practice for the benefit of all within the neonatal care environment.

4.3 Network Functions

Service delivery: *plan and manage capacity and demand*

- Develop an approach to managing capacity and demand that:
  - Ensures efficient and appropriate flow of patients along the pathway, managing system capacity and improving system resilience.
  - Ensures that as much care and treatment is provided as close as possible to home and that the patient and their family travel only when essential.
  - Ensures timely access for interventional procedures.
- Monitor and report on bed occupancy, alerting commissioners to situations in which providers are unable to accept an NICU referral (including repatriations) as a result of a lack of capacity at that time.
- Support capacity planning and activity monitoring with collaborative forecasting of demand in line with NCCR standards.

- Work with commissioners to ensure there are adequate neonatal transport services both now and following any changes to service provision across the network. Transport services should be integrated into network governance structures.

Resources: *stewardship of resources across whole pathway and minimising unwarranted variation*

- Improve utilisation of resources
- Ensure appropriate use of Neonatal Critical Care by:
  - Supporting the implementation of standardised pathways of care across the network.
  - Facilitating stepdown of care when this is no longer required.
  - Building confidence in LNUs / SCUs to support timely repatriation.
- Improve the effectiveness and appropriateness of use of high-cost treatments and consumables.
- Standardise drugs, devices etc. used across the network for best value, to facilitate collaborative purchasing arrangements to achieve the best price.
- Work with other related networks, flexing use of resources to find efficiencies, target resources for best effect and share insight and experience.
- Provide advice to providers producing business cases to invest in neonatal services, align with network level priorities and plans and provide assurance to commissioners.

Workforce: *flexible, skilled, resilient staffing*

- Working with the Children and Young People Transformation programme, assess current gaps and future workforce needs across the network taking into account projected demand.
- Develop and support implementation of extended roles for non-medical staff groups, supported by training and development and network wide policies and procedures.
- Undertake network training needs assessment (including baseline skills audit and network maturity assessment).
- Develop and agree a network training plan that meets the needs of the network both in the delivery of care and in the functioning of the network.
- Agree with commissioners and providers how the planned training will be delivered.
- Monitor delivery and assess the effectiveness of the agreed training.
- Work closely with NHS England's Workforce, Education and Training Directorate, local deaneries and provider Trusts to help ensure the neonatal workforce is trained to appropriate levels and works towards national recommendations and standards.
- Enable the movement of staff through the implementation of a staff passport.

Quality: *improving quality, safety, experience & outcomes*

- Create a culture of ongoing service improvement, ensuring best practice models are embedded and contribute to improved quality performance (i.e. dashboard measures), BAPM and neonatal toolkit standards.
- Reduce variations in care
- Improve equity of access for planned and unplanned care and swift escalation pathways.

- Establish and maintain systems for the collection, analysis and reporting of key indicators of outcomes, quality of care and patient and family experience and ensure data is submitted as required to regional or national data collection systems.
- Ensure national level capacity data is submitted as required and data is accurate and up to date for the units within the network.
- Monitor key indicators of quality across the network and regularly review clinical outcomes across the network.
- Share the learning from internal and external investigations of care quality, linking with the other organisations where appropriate.
- Use clinical process and clinical outcome measures to compare and benchmark providers.
- Undertake audit, and other service improvement activities including reflecting on and responding to suboptimal outcomes, care and patient experience.
- Manage risks to the delivery of the network's annual work programme.
- Identify service issues and risks and ensure they are managed through regional and system quality structures following agreed escalation processes. Providers or commissioners may ask networks to facilitate the response to risks, but providers and commissioners remain accountable for their services' risks.
- Run a regular clinical forum to review mortality and outcomes across the network.
- Oversee and monitor compliance with national standards of all units in network taking into account local context.

Collaboration: *working together within individuals and organisations at local, system and national level*

- Plan services as a system rather than individual organisations:
- Develop partnership arrangements with all relevant partners including national and local commissioners, LMNSs, providers, patients and families and local and national voluntary sector organisations.
- Link network clinical leadership with system, regional and national clinical leadership cadres to support a collaborative approach and shared aims.
- Share best practice with networks covering the same service across the country.
- Work closely with other clinical networks supporting the care of children and young people through the Regional Maternity Transformation Board and Children's Strategic Forum (CSF) or equivalent, identifying opportunities for shared solutions and resources.
- Work closely with paediatric critical care clinical networks to ensure the safe and effective transition of patients where necessary.
- Network actively participate in and support the national neonatal networks group.

Transformation: *plan sustainable services that meet the needs of all patients and families*

- Regularly review network configuration, capacity and compliance with standards, advising and agreeing a plan with commissioners to address any shortfalls.
- Undertake a regular assessment of capacity (at a frequency to be agreed with commissioners) to advise commissioners and other partner organisations (e.g. LMNSs) on the positioning of the cots/new cots required to meet the demand and or reconfigure services where appropriate.

- Ensure that providers of neonatal critical care services meet nationally agreed standards.
- Work with providers and commissioners to address shortfalls from compliance with national standards. Where necessary this should include making recommendations regarding changes in designation status or clinical criteria, outlining effects of change (if any) on network clinical pathways, capacity, maternity services and paediatric training and experience.
- Assess and advise on the risks or benefits of redesignation and/or change in clinical criteria to services and to patients and their families.
- Advise commissioners on the reconfiguration of services in line with the recommendations of the NCCR including the impact of proposals on patients, providers and education and training opportunities.

Population health: *assessing need, improving inequalities in health, access, experience and outcomes*

- Develop and implement network pathways and protocols to reduce variation in service delivery, in line with the service specification.
- Work with LMNSs and maternity networks to ensure that family integrated care is provided by all units, which should provide information on, and access to:
    - emotional wellbeing and psychological support
    - provision of practical and financial support
    - parental accommodation.
- Improve equity of access to care.
- Work with commissioners to improve equity of access to neonatal care.
- Identify health service needs of patient groups and review service provision across the network against identified need and identify gaps.

4.4 Annual workplan

The network board will agree an annual workplan with its commissioners (system and regional). This will reflect national, regional and local priorities, and take account of the resources available to support delivery. The workplan will describe its expected deliverables and benefits.

The network board will publish an annual report detailing its activities, accounts and delivery against the agreed annual plan.

5. Governance

5.1 Accountability

Hosting

Networks and their boards are independent of the host, with their own governance and accountability directly to the commissioner. The host is not accountable for the delivery of the network's functions and where the host is a network member, they will have the same roles and responsibilities as other members and will exert no undue influence as host of the network.

The network host will be selected by the commissioners following an open and defensible process that maximises value for money, which would include consideration of opportunities for sharing infrastructure. The responsibilities of each party will be set out in a formal hosting agreement.

Accountability and responsibility

Network footprints reflect patient flows, provider scale and catchments so will often cut across commissioner boundaries (ICB and regional). Governance arrangements must provide clear accountability to commissioners at system level (with links to all relevant ICBs) and region as appropriate for both network delivery and commissioning responsibilities. Local arrangements to achieve this should be clearly documented within the network's terms of reference.

Networks will be responsible to ICBs for the management of local pathways and delivery of locally agreed targets. This should be set out in memoranda of understanding between ICBs, providers and the network.

The network will be accountable to the regional team of NHSE via the appropriate board within the Region including any multi-ICB decision bodies established.

A single network plan and deliverables should be agreed with all ICBs within the network's geography and signed off by the region. Networks will be expected to provide regular reports and have regular reviews with NHSE regional teams.

The network's authority to act on behalf of its commissioners and members will be set out clearly within the network memorandum of understanding and where necessary clarified within the agreed annual plan.

5.2 Network governance and architecture

Members and stakeholders

Networks are required to have a formally constituted governing body or board, which is accountable to the network's commissioner for delivery of the network's agreed programme, with a line of sight to all ICBs whose patients use the services of providers within the network.

Network boards should include balanced representation from member organisations and other relevant stakeholders, including families and third sector organisations with an interest in the specialty.

Clinical representation should cover the whole multi-disciplinary team and pathway of care and should include associated clinical areas, such as maternity and paediatrics.

Parents are key partners and should be represented on the network board. Parental involvement should be embedded into all aspects of network work. This will be facilitated by the network Parental Advisory Group.

The Board

The board should meet on a regular basis and operate under the oversight of a suitable chair with agreed terms of reference.

The chair will be an appropriately experienced, impartial leader who is credible across the whole network and will be appointed through a fair and open process.

- The chair should not be a network clinical lead, and ideally should not have the same main employer as the network clinical lead(s) in order to mitigate the risk of (real or perceived) conflicts of interest.
- They could be a board member or senior clinician from one of the provider organisations in the network (ideally not the host, to underpin the collective nature of these arrangements) or a patient representative where a suitable candidate is available.

5.3 Risk Management and risk sharing

Networks do not manage risk independently but within a system of national, regional and system level arrangements. Networks support risk identification, assessment, mitigation and may facilitate any agreed response.

Specific local risk management arrangements and governance processes should be managed locally through MOUs/ SOPs etc which are clear and signed off. Escalation processes for risks within a system should be clear and explicit, with any quality concerns escalated through agreed systems and regional processes.

5.4 Interdependent Relationships

Neonatal units are located alongside obstetric-led maternity services. Neonatal services are interdependent with maternity, fetal medicine, paediatric and specialised neonatal transfer services. For some units that interdependency extends to fetal and paediatric surgery, cardiac, neuroscience and other specialist paediatric services.

Neonatal Critical Care Clinical Networks must therefore have close links with:

- Maternity services including Local Maternity and Neonatal Systems (LMNS) and Regional Maternity Transformation Boards
- Paediatric Critical Care clinical networks
- Fetal Medicine networks
- NHS England Specialised Commissioners and Integrated Care Boards (ICBs)
- Adjoining NCC clinical networks
- Children's Strategic Forum (CSF) or equivalent
- Where linked networks and ICBs are not coterminous with the NCC clinical network the arrangements for mutual involvement and lines of communication should be formally agreed and included in the network board's terms of reference.

6. Resources

Network funding provided to the host is ring-fenced for the network programme of work.

Each network should have a team to support its work that provides clinical leadership, management and administrative support. Networks should also have arrangements for analytical and business intelligence support. Commissioners must ensure as part of the annual planning process that the scale of resource made available to networks is sufficient to support the agreed programme of work. The capacity of the network to deliver its programme of work does not reside solely in the network team but also in the support of all network members including its commissioners.

As part of the annual planning process, commissioners must ensure that:

- the scale of resource made available to networks is sufficient to support the agreed programme of work
- networks have access to the data they need and the analytical capacity and capability to turn this into actionable improvement programmes

Roles such as administration, network management and analytical support may be appropriately combined across CYP networks, with further opportunities to increase the value from these investments, share learning across networks and improve the sustainability of networks through the provision of a pool of staff to support specialised services Clinical Networks across a region.

7. Deliverables, Service Indicators & Outcomes

Indicators and metrics of network performance come from three principal sources:

1. Generic indicators of a well set up, well-functioning network
    - There is an appropriate network team in post with the skills to deliver the specification
    - The network board meets at least three times per year, is quorate, and minutes, actions and risks are recorded
    - As appropriate to the network spec, there are regular network specialist Multi-Disciplinary Team (MDT) meetings (or equivalent)
    - There are IT facilities in place that enable communication across the network, supporting image transfer and remote participation in the MDT.
    - There is an annual workplan agreed by the network board with the network's commissioners
    - There is an agreed plan for PPV engagement
    - There is an analysis of the service needs of the population served by the network, a gap analysis and a plan, agreed with the network's commissioners to meet those needs
    - There are network agreed patient pathways, procedures and protocols
    - There is an analysis of workforce requirements and a plan, agreed with network members to meet these requirements
    - There are arrangements (for example passporting) that enable workforce flexibility between providers within the network.
    - There is an analysis of training needs, and an annual network training plan agreed with network members

- There is an analysis of the networks data and information needs and a plan, agreed with network members to meet these requirements
- There is a network agreed research strategy including access and participation in clinical trials
- The annual workplan includes at least one quality improvement initiative
- An annual report is produced, summarising the work of the network and its outcomes. The report includes a financial statement
- The network participates in the national network meetings

2. Nationally agreed indicators and outcomes for all networks of this specialty, for example as defined by a national transformation programme, or included in the service specification and delegated to network leadership.

TBC

3. The network's individual locally agreed annual workplan, which should build in metrics and indicators for each element.

The network board will agree an annual workplan with its commissioners which will include the expected in year deliverables along with the indicators that will demonstrate effective network operation.

8. Further support and information

Implementing the Recommendations of the Neonatal Critical Care Transformation Review, NHS England, 2019

Available at: https://www.england.nhs.uk/wp-content/uploads/2019/12/Implementing-the-Recommendations-of-the-Neonatal-Critical-Care-Transformation-Review-FINAL.pdf

Neonatology National Specialty Report, GIRFT, 2022

Available at: https://future.nhs.uk/connect.ti/GIRFTNational/view?objectId=130557829

The full suite of materials covering what clinical networks do, commissioning of specialised services clinical networks and the clinical networks operating model together with model materials for use by networks and their commissioners can be found on the Future NHS website here:

https://future.nhs.uk/NationalSpecialisedCommissioning/view?objectID=34094320

Access requires membership of the site and permission to access the workspace. This is straightforward for all NHS employees.