Appendix 2

SCHEDULE 2 – THE SERVICES

A. Service Specifications

Service Specification No.	*E08/S/b*
Service	*Neonatal Critical Care Transport*
Commissioner Lead	
Provider Lead	
Period	
Date of Review	

1. Population Needs

1.1 National/local context and evidence base

In 2001 the Department of Health recommended that neonatal services be organised into managed clinical networks. In 2007 the National Audit Office reviewed the work of the networks and concluded that the development of neonatal networks had improved the service but that there were still issues which needed to be dealt with. In 2008 the Public Accountants Committee (PAC) also reviewed the neonatal care and made recommendations about improvements and proposed a set of performance measures.

Under the auspices of the NHS and the Department of Health (DH) a Taskforce was commissioned to provide a Toolkit for High-Quality Neonatal Services (December 2009) which:

- Outlined the quality principles required of the services providing specialist neonatal care.
- Provided a consistent definition of three categories of neonatal care.
- Described three types of units working in a network of units
- Described a set of quality metrics
- Gave examples of how to address Quality, Innovation, Productivity and Prevention (QIPP).

1.2. Publications include:

- Toolkit for High-Quality Neonatal Services. Department of Health (2009).
- Standards for Hospitals Providing Neonatal Intensive and High Dependency Care.

The British Association of Perinatal Medicine (2001). Available at www.bapm.org. Service Standards for Hospitals Providing Neonatal Care. The British Association of Perinatal Medicine (BAPM) (2010). (3rd Edition). Available at *www.bapm.org*.

- Quality standard for specialist neonatal care. National Institute for Clinical Excellence (NICE) (2010). Available at *www.nice.org.uk*.
- Caring for Vulnerable Babies. The re-organisation of neonatal services in England. Committee of Public Accounts (2008) 26th Report.
- Neonatal Critical Care Minimum Data Set. Department of Health (2009) (NCCMD).
- The Bliss Baby Charter Standards. Bliss (2009).
- Management of acute in-utero transfers: a framework for practice. British Association of Perinatal Medical (2008).
- Dataset for neonatal transport (2012). BAPM & UK Neonatal Transport Group.

In 2011/12 there were in the region of 12,000 to 13,000 neonatal transfers undertaken in England.

Neonates may need to move to a unit other than where they were born for specialist care that is not provided in their local unit. A Neonatal Transport Service is the service which moves babies between hospitals when this is required. The service is staffed by specialist clinicians and nurses to provide ongoing neonatal care before and during the journey. The service will also undertake transfers of neonates back to the local unit. Other reasons for transfer are for tests/investigations not available at the local unit and also when the local unit has insufficient capacity to care for the infant.

Other services operate in overlapping clinical areas. The ECMO transport services transfer infants from neonatal units. Paediatric Intensive Care (PIC) transport services are often involved with transfers of infants, depending on the circumstances of the referral. These services may all at times overlap or share responsibilities with neonatal transport services.

2. Outcomes

2.1 NHS Outcomes Framework Domains & Indicators

Domain 1	**Preventing people from dying prematurely**	√
Domain 2	**Enhancing quality of life for people with long-term conditions**	√
Domain 3	**Helping people to recover from episodes of ill-health or following injury**	√
Domain 4	**Ensuring people have a positive experience of care**	√

Domain 5	**Treating and caring for people in safe environment and protecting them from avoidable harm**	√

Key Outcomes:

1. Dedicated Neonatal Transport Services transfer at least 95% of patients requiring transfer for uplift within its defined catchment area on an annual basis. (Domain: 1,3,4,5,)
2. Mobilisation Time: For time critical transfers the transfer team *mobilises towards the patient within one hour from the start of the referring call (95% of retrievals annually). (Domain: 1, 3, 4, 5,)
3. Referral response time The transport team will arrive with the patient (transfers for uplift of care for intensive care patients) within 3.5 hours of the referring call on 80% of occasions.(Excludes uplifts for planned procedures e.g. PDA Ligation) (Domain: 1,3,5)
4. Timely collection of the data required by NTG/BAPM dataset.
5. Annual report published summarising activity, compliance with quality standards and clinical outcomes, progress from previous year, shared with appropriate stake-holders.

*includes time critical transfers when the team is not at base at time of referral – the clock starts when the referral is received and stops when the team is travelling toward the time critical referral. When the team is at base when the referral is taken the clock starts when the referral is received and stops when the team departs base.

3. Scope

3.1 Aims and objectives of service

Neonatal services aim to deliver a high quality, equitable, safe and effective service and to achieve the highest quality outcomes for premature and sick newborns and their families. It is a high cost, low throughput service in which clinical expertise is a key determinant of the quality of the outcomes for the baby and the family. Services are provided within geographical catchment areas in which provider units work together to provide the pathway of care mothers and babies require. Neonatal services form part of an integrated high quality maternity, paediatric and family care service serving a geographically defined regional population.

3.1.2.

A Neonatal Transport Service must be available at all times and for all units within a designated geographical catchment area providing:

- Safe and effective transfers for neonates.
- A cot location service for emergency neonatal transfers.
- A perinatal facility location service for in-utero transfers.

The service will be additional to the delivery of in-patient care, recognise the importance of family circumstances and provide arrangements to undertake or facilitate transfers in all categories as part of its baseline provision. Where network capacity does not allow for an appropriate transfer for an uplift of care level between the categories of neonatal service, a baby will have to be transferred out of network to ensure they receive the most appropriate care in the right care setting.

Neonatal transfers will be performed by a dedicated transport service, with the ability to:

- Operate 24 hour per day, every day
- Staff all transfers appropriately and in accordance with the clinical condition of the baby
- Transfer at least 95% of neonates where transfer is required within the service specification and any exceptions documented and reviewed at a network level
- Demonstrate performance against specified response time standards
- Order transfers according to clinical priority
- Operate in an integrated and supportive way with regional referring units
- Operate in an integrated and supportive way with other Transport Services
- Ensure appropriate governance arrangements, including data collection and audit
- Collaborate with providers of aeromedical transport where distance and logistics suggest this will be of clinical benefit

3.2 Service description/care pathway

Service Description:

The process for transfer of critically ill infants must be timely, safe and efficient, requiring a high degree of coordination between all service providers. The development of this coordinated approach must be led by the NIC Transport Service, but should be wholly supported by all hospitals in the network admitting and/or referring critically ill children.

Transfers must not compromise the standard of care provided to other babies. Where such an eventuality arises, alternative agencies will be found to undertake the transfer.

3.2.1. Service Model:

The Neonatal Transport Service must be operational 24-hours daily. The ability to respond to demands on the Transport Service should be prioritised based upon clinical need.

Categories of Transfer:

Ex Utero Transfers: Transfers will be classified at referral according to urgency and reason (NTG/BAPM Neonatal transfer dataset definitions, 2012, available at http://www.bapm.org/publications/)

In-utero (IUTs) are initiated and guided by the maternity teams. Neonatal Transport Services do not transfer in-utero patients, however the Transport Service will liaise with

maternity services and perinatal centres helping to locate appropriate destination facilities. The referring obstetric and midwifery teams then liaise with the receiving unit and are responsible for organising and performing the maternal transfer. Operational Delivery Networks should have guidelines for IUTs based on the British Association for Perinatal Medicine (BAPM) guideline for in-Utero Transfers[1]. The Transport Service is responsible for the transfer back into the network of babies whose mothers were booked within the geographical catchment area. This may require liaison with the Transport Service operating for the discharging network..

Sometimes the circumstances of transfer are complex and it is not clear which is the responsible transport team. When this happens there should be clear decisions made in the best interests of the patient..

3.2.2.
Capacity of Transport Service

Commissioners and providers are responsible for transfer capacity and undertake needs assessment and gap analysis on a regular basis to ensure adequate provision to enable delivery of a service at all times.

Agreed transfer protocols will be in place to include contingency plans to support the transfer of critically ill infants when the Transport Service is overwhelmed. Requests for transfer to which the NIC Transport Service is unable to respond will be monitored and audited.

Where the network Transport Service is unable to undertake a transfer, clear documented arrangements must be in place for alternative agencies to support the transfer if clinically indicated.

3.2.3
Staffing

The Transport Service must have adequate numbers of staff with the appropriate skills to provide a safe service for babies, including:

1. A nominated lead consultant
2. A lead nurse
3. 24 hour consultant advice
4. A doctor or advanced nurse practitioner appropriately trained and experienced to carry out transfers available at all times.
5. A nurse or other non-medical member of staff trained and experienced to carry out transfers should be available at all times.
6. Each service will have local operating policies outlining the type of clinical escort required for different clinical conditions.
7. Staff are trained to necessary standard for all aspects of equipment use, transport safety and infection control.
8. Staff receive full appropriate inductions, competency updates and have access to continuing professional development (CPD) programmes.

[1] Management of acute in-utero transfers: a framework for practice. British Association of Perinatal Medical (2008).

9. All clinical staff must be supervised by the designated on-call Transport Consultant
10. Where the Transport Service is co-located with a neonatal unit the Transport Service staff should not be included in the standard unit rota, and should be supernumerary to this.
11. Staff may be employed by various trusts across a defined area, but should all work towards the same skill set.
12. Where staff are provided from outside of the network Transport Service, any service level agreement (SLA) or contract will stipulate that staff are trained to meet these standards.

3.2.4.
Referral processes and sources

Users of the Transport Service must ensure that all referral requests are made in a timely manner. Referrals must be made with clinical and logistical information available.

For uplift and resource transfers the Transport Service provide clinical advice, mobilise the transfer team and locate a cot. Activation of the transfer team should not be dependent on cot availability. For repatriation and out- patient transfers decisions about need for transfer will be agreed jointly by the appropriate local unit staff and receiving consultant. The Transport Service will then liaise with the referring centre to undertake the transfer in a timely fashion.

Written agreements between neighbouring Transport Services will exist to support occurrences where Transport Services carry out transfers for babies from other regions. Records must be kept and audited to monitor such incidents and shared with the network leads for these services.

3.2.5.
Equity of access to services

Ensuring equity of access to any specialised service can present challenges, particularly in areas with a large geographical area and sparse population. Different regions will need to consider the specific challenges that face them due to the location of their NICU and other specialist services linked to neonatal care. Transport services should be configured, taking into account local knowledge and historical trends, to best meet these challenges as equitably as possible. Transport Services are commissioned to serve the whole population and must provide services equitably across the region that they operate.

Commissioning should take into account the possibility of teams transferring patients outside of their normal remit but within their clinical scope where this is in the best interests of the patient and/or family.

3.2.6.
Handover procedure

The Transport Service must show evidence of protocol for concise but detailed handover with supporting documentation (e.g. radiology imaging) from the referring provider and to the receiving neonatal unit.

Responsibility for the care of the patient rests with the Transport Service between the time that care is formally handed over by the referring team to the time that formal handover is undertaken with the receiving neonatal unit.

Transport teams should utilise where possible IT solutions such as inter-hospital radiology image sharing and telemedicine links which may improve the transfer process or limit the need for transport. Where such IT solutions are beneficial to patient care the Transport Service should work together with the ODN to ensure that the technology is available in all parts of the network.

3.2.7.
Service user / carer information

The Transport Service must have a policy for parental travel arrangements. When appropriate and safe to do so, at least one parent / legal carer will be allowed to accompany their baby during transfer. Where it is not possible to transfer a parent / legal carer with their baby alternative transport arrangements should be made and parents should be offered the opportunity to see their baby prior to transfer.

Parents and carers will be given written information about the Transport Service and receiving neonatal unit, including contact information. Multi-lingual output is advised.

3.2.8.
Governance

The Transport Service will have a governance policy with clear guidelines for how incidents are reported and resolved. Serious transport incidents can be complex with several Trusts involved. The Transport Service will take a lead in ensuring joined-up cross-boundary responses and learning.

There will be clear mechanisms for quality assurance and incident review, including submission to agreed national bodies. Reports of Transport Service activity will be available for review by the AT commissioners and the network or other agencies and produced on an annual or more frequent basis if required. These are to conform to any agreed local or national format.

Structures must be in place to provide ongoing training for those involved with transport, and to demonstrate relevant competencies for all grades of nursing and medical staff undertaking transfers.

Mechanisms will exist to ensure that all stakeholders involved in the Transport Service have an active input into the delivery of the service. Transport services should establish and maintain a Stakeholder Group including clinical personnel from the Network Units, the ambulance service, parents and commissioners.

3.2.9.
Reporting requirements

The Transport Service will:

- Monitor the service against agreed standards, including for activity, delays, exceptions to network pathways.
- Record and monitor activity according to NTG/BAPM 2012 minimum data set on all referrals and transfers, including referrals that do not result in a transfer and records should include the nature of any medical or nursing advice given
- Participate in annual benchmarking of NTG/BAPM 2012 minimum transfer dataset

Recording the cot status of every regional neonatal unit at least once in each 12 hour period is recommended.

The Transport Service must keep records of all clinical incidents, which should also be included in transfer records and audited. Standard NHS England procedures for reporting of incidents should be followed including sharing of incidents with statutory bodies when indicated.

Regular activity reports and an annual report will be produced and shared with all users and commissioners.

3.2.10.
Communication

There will be a single point of contact through which the Transport Service can be contacted and activated at all times for clinical advice and cot / maternal bed location. This will include teleconferencing, call handling and call recording functionality. Clear, accurate and retrievable records of communications must be kept, in accordance with any agreed standards.

The Transport Service shall have arrangements in place to receive feedback from local referring centres.

3.2.11
Documentation

Clinical observation and record-keeping, including all components of the NTG/BAPM transfer dataset during the transfer must be to the same standard as that provided at any other time (reflecting the transport environment).

3.2.12
Vehicles, equipment, safety and insurance

The Neonatal Transport Service will usually operate road transport. However, on occasion, due to either clinical or logistical reasons, transfer by air may be required and the Transport Service must have policies and procedures in place to organise this. The

provision of Aeromedical Transport must be consistent with Care Quality Commission (CQC) and European Aero/Medical Institute (EURAMI) **or** Commission on Accreditation of Medical Transport Systems (CAMTS) standards.

The table relating ambulance cabin requirements has been removed as outside the scope of NHS England commissioning. Statement in Vehicles section below states responsibility of the ambulance provider..

Equipment and vehicle must be able to effectively support the transfer of neonates of varying maturity and dependency. It must be fit for purpose, comply with and be maintained and cleaned to agreed, published standards.

The Transport Service will have documented policies for the safety of staff, patients and attendants during transfer, including:

1. Transfer referral processes
2. Clinical management policies for all types of transfer
3. Equipment use and maintenance
4. The use of gases and power
5. The use of seatbelts
6. Speed and use of lights and sirens
7. The stowage of equipment
8. Patient restraints
9. Manual handling policies and practices
10. Infection control policies
11. Death in transfer
12. Documented arrangements for back-up should any primary systems fail.

Insurance: The Transport Service needs to ensure there is adequate provision of insurance for service personnel against loss of life or injury. Arrangements need to be identified and specified within the SLA or contract with the ambulance service provider. The insurance cover for passengers not employed by the Transport Service such as students, observers and parents/carers must be documented.

Vehicles: vehicles will comply with specified and appropriate vehicle standards that are suitable for the transfer of critically ill patients. The Transport Service will not use an unfamiliar vehicle (or equipment) unless accompanied by someone trained to operate it.

The transfer team must be able to contact the receiving neonatal unit and the Transport Service operators throughout the period of transfer, and vice versa, with appropriate telecommunications equipment.

3.2.13
Ambulance providers

There will be a contract for the provision of ambulance vehicles for transport.
As part of the contract, the provision of staff and equipment will have agreed timescales, which are aligned with national targets, against the defined categories. These arrangements will include contact information, vehicle specification and response times.

The vehicle provider must operate to the standards laid down by the NHS for ambulance services.

3.2.14
Private contractors

Private contractors carrying out neonatal transfers are expected to be registered with the Care Quality Commission (CQC) and be compliant with CQC standards and to perform to the same criteria outlined above for the clinical teams and ambulance providers for commissioned Transport Services. This includes equipment standards, staffing and governance arrangements.

3.3 Population covered

The service outlined in this specification is for patients ordinarily resident in England[2]; or otherwise the commissioning responsibility of the NHS in England (as defined in Who Pays*?: Establishing the responsible commissioner* and other Department of Heath guidance relating to patients entitled to NHS care or exempt from charges). Specifically, neonatal Transport Services are to be used for babies transferred between network intensive care units and local neonatal units. Neonates are defined as those babies who are generally (but not exclusively) less than 44 weeks post menstrual age. However for neonatal Transport Services the definition is expanded to any baby being transferred into or out of a neonatal unit of any level.

3.4 Any acceptance and exclusion criteria and thresholds

3.4.1.
Exclusions

Paediatric Critical Care Transport Services: Unless neonatal and paediatric transport services are formally commissioned to run as one service it is expected that written agreements will be in place between services covering the same geographical areas delineating clearly defined areas of primary responsibility and also areas where there is potential for overlap and collaboration. Where the resilience of services may be improved by mutual-aid agreements these should be clearly agreed between services and the limitations of each service to help the other made clear.

Clinically inappropriate transfers: There will be agreed protocols in place for situations where transfer is clinically inappropriate. This may include infants who have been discharged home or need transfer from paediatric wards. Specialist teams may be required for some transfers, such as extra corporeal membrane oxygenation (ECMO) referrals. In a situation where such patients are referred to a local network Transport Service, they will contact the specialist team to discuss transfer arrangements.

In utero-transfers are not undertaken by neonatal transport services.

3.4.2.
Acceptance criteria

2

The service will accept referrals from senior clinicians on referring neonatal units for babies requiring uplift in care, specialist care or repatriation to their local unit. Clinical indications for referral should be made in line with the categories of care levels and categories of neonatal units in the neonatal care service specification.

3.5 Interdependencies with other services/providers

Critical Interdependencies

1. Critical Interdependencies are NICUs, local neonatal centres, ambulance services, other, particularly adjacent Neonatal Transport Services and Paediatric Critical Care Transport Services.
2. Dependent on the model of service provision there will be an essential interdependency with other Ambulance Services and Aeromedical Transport services.

For NIC Transport, the integration with NIC services, NIC networks and the relevant Specialised Services and Networks for Children provide a link to parts of a wider care pathway

Neonatal Transport Services can be managed alongside or in the same service as Paediatric Critical Care Transport Services, but where this is the case it is important that neonatal-specific protocols and standards are adhered to and staff have recognised neonatal qualifications and experience. A Neonatal Transport Service may also be co-located with a neonatal unit, but neither service nor patients should be compromised by the arrangement. The Transport Service staff should not be included in the standard unit rota and should be supernumerary to this.

It is acknowledged that all Transport Services will from time to time face acute demands which outstrip their capacity to respond. There should be documented procedures for triage and for requesting the assistance of other teams in these situations. Transport Services should have written agreements with all their surrounding providers regarding mutual-aid.

Where a patient is to be transferred across commissioning or network borders the responsibility for the transfer lies first of all with the team covering the infant's booking hospital of delivery. Transport Services should have written agreement with neighbouring Transport Services about referral and allocation processes in these situations.

4. Applicable Service Standards

4.1 Applicable national standards e.g. NICE

Transport Services will comply with the BAPM and Neonatal Transport Group (NTG) standards for neonatal transfer dataset and classify transfers in line with this.

Including:

- For time critical transfers the transfer team departs from base within one hour from the start of the referring call[3]
- For all other referrals, the transfer service, including ambulance provider, provides appropriately staffed and equipped transport within locally agreed time frames.

4.2 Applicable standards set out in Guidance and/or issued by a competent body (e.g. Royal Colleges)

As above.

5. Applicable quality requirements and CQUIN goals

5.1 Applicable quality requirements (See Schedule 4 Parts A-D)

There is a quality dashboard in place for neonates – the following measures are directly applicable to neonatal transport services:

NIC01	Domain 1	Number of time critical transfers where the team departs the transport base within 1 hour from the start of the referring call during period

5.2 Applicable CQUIN goals (See Schedule 4 Part E)

There are currently no CQUINs directly related to Neonatal Transport Services.

6. Location of Provider Premises

The Provider's Premises are located at:

ONLY LIST PROVIDERS IF THERE HAS BEEN A FORMAL DELEGATION PROCESS.

7. Individual Service User Placement

Not applicable

[3] For measuring this standard time critical transfers are all the categories in the NTG/BAPM dataset definitions, and no others.

Appendix One

Quality standards specific to the service using the following template:

Quality Requirement	Threshold	Method of Measurement	Consequence of breach
Domain 1: Preventing people dying prematurely			
Mobilisation time for time critical transfers	95% of retrievals annually	National benchmark data return	Non compliance with contract General Conditions 8 & 9
Referral response time (transport team to arrive with the patient (transfers for uplift of care for intensive care) within 3.5 hours of the referring call	80% of occasions (excludes uplifts for planned procedures – e.g. PDA ligation)	National benchmark data return	Non compliance with contract General Conditions 8 & 9
Domain 2: Enhancing the quality of life of people with long-term conditions			
Dedicated neonatal transport services transfer at least 95% of patients for uplift within its defined catchment area	95% (for uplift)	Annual report	Non compliance with contract General Conditions 8 & 9
Domain 3: Helping people to recover from episodes of ill-health or following injury			
Undertakes repatriation transfers to enable care to be provided as close to home as possible. Responsible for repatriation of infants to mother's booked hospital where this is within commissioned area	To be agreed	Annual report	Non compliance with contract General Conditions 8 & 9
Domain 4: Ensuring that people have a positive experience of care			
Annual report published summarising activity, compliance with quality standards/clinical outcomes	Annual Report	Annual report submitted	Non compliance with contract General Conditions 8 & 9
Domain 5: Treating and caring for people in a safe environment and protecting them from avoidable harm			
Timely collection of the data required by NTG/BAPM dataset	To be agreed	Annual report submission	Non compliance with contract General Conditions 8 & 9

Quality Requirement	Threshold	Method of Measurement	Consequence of breach
Completion of IR1's and Risk Assessments	As per national/local policies	Monthly audits and action plans	Non compliance with contract General Conditions 8 & 9