Update on Sunderland Neonatal Intensive Care services

1.0 Introduction and overview

NHS England commissions neonatal critical care, which encompasses intensive care, high dependency care and special care. Neonatal services are currently delivered as part of a networked arrangement across the North East and North Cumbria region. This means that when a baby needs a neonatal intensive care cot, it is dependent on cot availability – with families having to travel further to access the specialist care they need.

Babies born preterm have high rates of early, late, and post-neonatal mortality and morbidity. Extreme preterm birth, defined as birth before 27 weeks gestation, is associated with higher mortality and morbidity than later gestations, which is further compounded if babies are born outside of a neonatal intensive care unit.

For the North East and North Cumbria region, the highest level of specialist care is provided in a neonatal intensive care unit, which is currently provided from three sites:

- Royal Victoria Infirmary in Newcastle (part of Newcastle Hospitals NHS Foundation Trust)
- James Cook in Middlesbrough (part of South Tees Hospital NHS Foundation Trust)
- Sunderland Royal Infirmary (part of South Tyneside and Sunderland NHS Foundation Trust)

A further seven sites provide special care baby units (SCBUs):

- Northumbria Specialist Emergency Care Hospital, Cramlington
- Queen Elizabeth Hospital, Gateshead
- University Hospital of North Durham
- Darlington Memorial Hospital
- University Hospital of North Tees, Stockton
- Cumberland Infirmary, Carlisle
- West Cumberland Hospital, Whitehaven

The region has been progressing implementation of recommendations from a Royal College of Paediatrics and Child Health review carried out in 2015. Overview and Scrutiny Committee members may recall previous engagement regarding this review, with the most recent discussions taking place in 2018.

While most of the recommendations from the 2015 Royal College of Paediatrics and Child Health have been completed regionally, there is one outstanding recommendation that is now ready for implementation. This will see a small number of women whose babies are born before 26 weeks gestation no longer accessing intensive neonatal care at Sunderland Royal Infirmary. They will now instead travel to Newcastle or Middlesbrough depending on cot availability. This small change is expected to impact on an average of five women per year who would previously have accessed these services at Sunderland.

The change will present an opportunity for Sunderland hospital to increase levels of activity in the care it provides for some of the more poorly babies that require a level of intensive neonatal care if they are born from between 26-30 weeks gestation and require intensive care. It is expected that this will become the routine pathway for women who originate from four Northern SCBUs (Northumbria, Gateshead, Carlisle and Durham) who will *default* in the first instance to Sunderland, if they require intensive care.

Wider neonatal care provision at the region's seven special care baby units will remain the same. These will continue to provide local care for babies born from 30 weeks gestation or more who require only special care or short-term high dependency care.

| What is the proposed changed? | Sunderland Royal Infirmary will provide care for pre-term babies born from 26 weeks gestation (instead of from 22 weeks gestation). |
|--|---|
| How many babies would be impacted? | This would impact on an average of five babies per year. |
| Why this is beneficial? | The region will be able to better maintain appropriate activity levels across all three neonatal intensive care units, which is needed to maintain expertise in the management of these very sick and complex babies Ultimately, this change will ensure the highest quality of care for extremely small babies across the region. |
| What this would involve? | Pre-term babies born before 26 weeks and requiring an intensive care cot will travel to Royal Victoria Infirmary in Newcastle as default or James Cook in Middlesbrough in the absence of a neonatal cot in Newcastle. Sunderland will increase its activity in providing care for pre- term babies born from 26 weeks from across the north of the region. |

The table below summarises the proposed changes set out in this report:

2.0 How neonatal care is organised

Neonatal critical care forms a key element of the NHS maternity service, providing part of the service available for all women and their new-born babies in the birthing room and during the early postnatal period.

Neonatal critical care also provides an emergency service and ongoing support for babies and their families when a baby is born very prematurely, becomes sick or develops a medical problem.

Ensuring that implementation of both neonatal and maternity transformation plans remain coordinated and proceed together is an important part of national, regional and local planning.

The national position

Over the past 20 years neonatal services have been organised into networks of providers that work together to deliver care. Neonatal care pathways involve highly specialist care being available in local Neonatal Intensive Care Units (NICUs) in each area to minimise necessary travel for parents and their child.

Ten Neonatal ODNs are commissioned by NHS England's Specialised Commissioning team. These have a mandate to develop and implement programmes of work to improve access to specialist resources, and to improve neonatal outcomes and patient experience, working closely with both providers and commissioners.

Maternity and neonatal care are inextricably linked and work together to produce the best outcomes for women and their babies who need specialised care. Neonatal Operational Delivery Networks (ODNs) work closely with Local Maternity Systems (LMSs) to ensure that high quality care is provided that is responsive to the needs of women and their babies and maintains care as close to their home as is possible.

There are nationally three types of neonatal unit, and these units deliver 3 types of care (special care, high dependency and intensive care).

The different types of units are set out below:

- *Neonatal Intensive Care Units (NICU)* provide care for the whole range of neonatal care.
- Local Neonatal Units (LNU) provide care for all babies born at their hospital who require high dependency care.
- Special Care Units (SCU) provide local care for babies who require only special care or short-term high dependency care

The regional position

The Northern Neonatal Network consists of ten hospitals which provide special care and intensive care to newborn infants. Within the North East and North Cumbria region there are:

- 3 Neonatal Intensive Care units / High Dependency units
- 7 Special Care Units

The breakdown of these sites and what they provide is set out in the table below:

| Neonatal Intensive Care and High Dependency Units | Special Care Units | |
|--|--|--|
| Covering North and South regions: Royal Victoria Infirmary, Newcastle James Cook University Hospital Middlesbrough Sunderland Royal Infirmary | North region: West Cumberland Infirmary, Whitehaven Carlisle Infirmary, Carlisle Queen Elizabeth Hospital, Gateshead Northumbria Durham South region: Darlington Memorial Hospital University Hospital of North Tees, Stockton | |

Newcastle is the only surgical unit, and consequently babies who require surgery can only be cared for in that hospital. Therefore, these units look after babies from their own local population, as well as babies from elsewhere, who were/would have been born in a hospital which only provides special care.

All three intensive care units currently look after babies from twenty-two weeks of gestation.

3.0 Recommendations for neonatal services in the future

A recap of recommendations from the 2015 Royal College review

In August 2015 following an invited review by NHS England, The Royal College of Paediatric Child Health (RCPCH) published a report outlining some key recommendations for the reconfiguration of Neonatal Intensive Care Units services across the then four units providing intensive care within the Northern Neonatal Network.

This included the merger of both neonatal intensive care units at North Tees and South Tees leading to the establishment of one, fully operational neonatal intensive care unit in the south of the region at James Cook University Hospital at South Tees as a centre of excellence for Teesside. It also recommended the development of a dedicated neonatal transport service (NNETs) to coordinate the movement of babies around the region, which is now fully functional.

The five main recommendations from that report are summarised in the table below:

| Recommendation | Status |
|--|---|
| Re-designation of the Neonatal Intensive Care Unit at North Tees to a Special Care Units (SCU) | Complete |
| Increased capacity at South Tees to cater for the re-designation at North Tees | Complete |
| Development of a dedicated standalone neonatal transport service for the Northern Neonatal Network | Complete |
| Expansion of the Neonatal Intensive Care Unit at Royal Victoria Infirmary in | Complete |
| Newcastle | 4 Cots increased in 2018, a further 4 cots to be mobilised by July 2023 |
| Changes to service provision in Neonatal Intensive Care in Sunderland (part of South Tyneside and Sunderland NHS FT) | In progress |

4.0 Why this proposed change is important

Sunderland is currently the smallest neonatal intensive care unit in the whole country with the lowest volume of activity for a neonatal intensive care unit. This means it currently does not meet important clinical standards on the volume of activity required for looking after extremely preterm babies.

This change means that the region will be able to better maintain appropriate activity levels across all three neonatal intensive care units.

Ultimately, this change will ensure the highest quality of care for extremely small babies across the region.

Although the Sunderland NICU will no longer see babies from 22-25weeks gestation, the change will result in overall activity increasing. This is because more babies from 26 weeks gestation will be cared for in Sunderland.

5.0 Expected impact in terms of activity and patient flow

Currently all babies born from 22 weeks gestation are cared for in either Newcastle, Sunderland or Middlesbrough. This means families from across the region already travel for this highly specialist care.

After the 26 week pathway change families will still need to travel to one of these three units, however, Sunderland will become the designated unit for 26 week gestation babies from Durham, Carlisle, Gateshead and Northumbria

All pre-term Newcastle and Middlesbrough babies will still be cared for locally.

Where will pre-term babies be looked after?

The table below shows where babies born from 22 to 26 weeks will be looked after:

| Northern Neonatal Network – NICU level 1 units | | | | | |
|--|---|---------------------------------------|--|--|--|
| Royal Victoria Infirmary, Newcastle | Sunderland Royal Hospital | James Cook Hospital, Middlesbrough | | | |
| All Newcastle babies | South Tyneside and Sunderland babies above 26 weeks | All Middlesbrough babies | | | |
| Northumbria babies below 26 weeks | Northumbria babies above 26 weeks * | All North Tees babies * | | | |
| South Tyneside and Sunderland babies below 26 weeks | Gateshead babies above 26 weeks * | All Darlington babies * | | | |
| Carlisle babies below 26 weeks | Durham babies above 26 weeks * | All Whitehaven babies * | | | |
| All surgical babies across the Northern Neonatal Network | Carlisle babies above 26 weeks | | | | |
| * Any babies born at 30 weeks and over will be cared for in their local SCBU | | | | | |
| Indicates changes in patient flow due to the 26 week pathway change | | | | | |

Expected impact in terms of patient numbers

Our neonatal intensive care units in the region look after approximately 1658 baby admissions every year. Of these 984 admissions are for pre-term babies (less than 37 weeks)

Of the total number of babies born less than 26 weeks:

- Newcastle looked after 128 admissions over 3 years
- Middlesbrough looked after 97 admissions over 3 years
- Sunderland looked after 37 admissions over 3 years

In a one year period, of 12 Sunderland admissions, five were Sunderland 'booked' Mums.

We expect the main impact of this 26 week pathway change will be for families in South Tyneside and Sunderland who would usually have gone to Sunderland Royal Hospital if their baby was born from 22 weeks.

This will affect approximately five families a year from Sunderland who will now go to Newcastle as default or Middlesbrough if there was no intensive care cot available in Newcastle. This information is based on data provided by the Northern Neonatal Network from a three-year average for these services between 2019-2022.

6.0 Patient involvement and engagement to date

Patient involvement and engagement

Patient representation to date has fed back on the following considerations specific to the proposed changes to the Sunderland neonatal pathway:

'Parents need to understand the reasons why they are being sent where they are being sent'

'There is a need for support travelling to a non-local neonatal unit – more information should be made available about this.'

'There is a need to consider the mental health impact for Mums who are accessing neonatal services'

'There is only a small number impact, but what about the financial impact for these families'

The key themes from discussions to date have focussed on clearer communication for families accessing neonatal services, specifically in relation to support services that might be available.

In light of the patient feedback, further focus groups are being held with families that have recently used neonatal services to review and update patient information that is provided to families. The impact of the proposed recommendation on the patient experience will also be monitored as part of any transition to the new service arrangements.

Previous engagement following the 2015 Royal College Review

A comprehensive communications and engagement plan was developed as part a system wide response to Royal College Review in 2015. This included:

- 1. Attendance at Overview and Scrutiny
- 2. Patient engagement activities with parent advisory groups
- 3. Briefings to system partners, including Healthwatch
- 4. Staff engagement and communications
- 5. Patient communications, for those directly impacted by service changes
- 6. MP briefings
- 7. Media activity

Ongoing stakeholder involvement

There is a dedicated task and finish group that is overseeing the development of plans for the future delivery of neonatal services regionally, including the

implementation of this recommendation. This has cross system involvement and includes patient representatives.

Commissioner and wider stakeholder support

This proposed pathway change at Sunderland has been reviewed and is fully supported by the following stakeholders:

- 1. Northern Neonatal Network
- 2. The North East and North Cumbria Local Maternity and Neonatal System
- 3. South Tyneside and Sunderland NHS Foundation Trust

NHS England (North East and Yorkshire region) regional assurance team and North East and North Cumbria Integrated Care Board also have oversight of the proposed pathway change (via its Joint Committee arrangements with Specialised Commissioning).

7.0 Summary and next steps

Summary

The Northern Neonatal Network seeks support to progress with implementation of the 26 week pathway change. This is planned to take place on 1 August 2023.

This is the last recommendation from the 2015 Royal College review and seeks to make sure the best quality of care can be provided for pre-term babies across the region.

Further involvement and engagement with patients will take place over the summer as transition to the new pathway takes place. The impact of the change and on patient experience will be monitored closely.

Next steps

Since the Royal College review in 2015, a further national report has been published in 2019 called the Neonatal Critical Care Review (NCCR). This aims to facilitate the transformation of Neonatal Critical Care services even further by 2025 by:

- Aligning capacity
- Developing the expert neonatal workforce
- Enhancing the experience of families

Significant work has taken place for 'developing the workforce' theme including funding for neonatal nurses, allied health professionals and neonatal quality roles.

For the 'enhancing the experience of families' theme, The Northern Neonatal Network established the first neonatal care coordinator team in the UK in April 2021.

No work has taken place in the region yet in relation to the 'aligning capacity' theme. This is because we need to complete the recommendations from the 2015 Royal College review first. This will, however, help us towards meeting the NCCR ambition to 'align capacity' and work towards meetings standards set out in the NCCR.

We would welcome the opportunity to come back to scrutiny once we understand more about the NCCR and what this means for the region.

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