

Update on Neonatal Services

Airedale NHS Foundation Trust

NHS England - Specialised Commissioning (Yorkshire and Humber)



Thriving people,
healthy communities

Introductions

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Today's Presentation

- Background
- Overview of Neonatal Care
- Update on Airedale services
- Impact for patients and families
- Activity and travel analysis
- Patient feedback and system engagement
- Summary and next steps



Background

- In 2019/20 Airedale NHS Foundation Trust made a temporary change, in agreement with NHS England and the Yorkshire and Humber Neonatal Operational Delivery Network, to its neonatal service due to operational pressures linked to Consultant Paediatrician staffing levels and in consideration of the recommendations of the Neonatal Critical Care Transformation Review.
- This meant that the unit at Airedale NHS Foundation Trust started operating as a Special Care Unit (SCU) instead of as Local Neonatal Unit (LNU), with approximately 24 families per year being transferred to a neighbouring unit (mostly Bradford Teaching Hospitals Trust) for delivery of their premature baby.
- This change also supports the new national standards for minimum unit activity number for Neonatal Intensive Care Units (NICUs), LNUs and SCUs set out in the National Neonatal Critical Care Review (published in December 2019¹).
- The Trust has asked that NHS England (NHSE) approve the formalisation of this arrangement, and in 2022/2023 NHS England Specialised Commissioners notified both North Yorkshire Overview and Scrutiny Committee and Bradford Overview and Scrutiny Committee of the temporary service change, as well as the request to formalise the arrangement.
- Before NHSE can approve the formalisation of the change to the neonatal pathway, the Trust is required to provide further information and assurance about the impact of the change on babies and their families, and on the wider population.
- The Trust and NHSE would like to seek the views and support of Overview and Scrutiny for making this change permanent by presenting:
 - Information about the service change
 - Information about the impact on Babies, Families, and Services

Overview of Neonatal Care

- Neonatal Units are the part of hospitals which provide care for babies who are born prematurely (before 37 weeks gestation), with a medical condition which needs treatment, or at a low birthweight.
- Neonatal care services are provided in a variety of settings dependent upon the interventions required for the baby and with dedicated transport services to support babies being transferred to and from neonatal care units.
- There are three levels of units:
 - Neonatal Intensive Care Units, for complex care (for example from 22 weeks gestation)
 - Local Neonatal Units, for high dependency care (for example from 27 weeks gestation)
 - Special Care Unit, for initial and short term care (for example from 31 weeks gestation)



Neonatal units deliver 3 different levels of neonatal care:

Neonatal Intensive Care Unit (NICU):

Provide care for the whole range of neonatal care. They are staffed to care for the sickest and most immature babies. Cared for by one nurse to 1 or 2 babies.

Provides care for babies with the highest level of dependency.

The NHSE Neonatal Critical Care service specification indicates that all women and their babies who are born <27 weeks of gestation or birthweight <800g, and multiple pregnancies <28 weeks of gestation, should receive perinatal and early neonatal care in a maternity service with a NICU facility.

The survival of babies born before 27 weeks is improved when this occurs in a maternity service with a Neonatal Intensive Care Unit (NICU). Survival is improved if NICUs look after at least 100 very low birth weight (VLBW) infants (2000 intensive care days

Local Neonatal Unit (LNU):

Provides care for all babies born at their hospital at 27 weeks of gestation or more, >800g birthweight or multiple pregnancies >28 weeks (which includes short-term intensive care where necessary) and they may receive babies 27-31 weeks who require high dependency care.

Babies are cared by one nurse to 2- 3 babies.

Special Care Unit (SCU):

Provide local care for babies born at 32 weeks or more and >1000g birthweight who require only special care or short-term high dependency care.

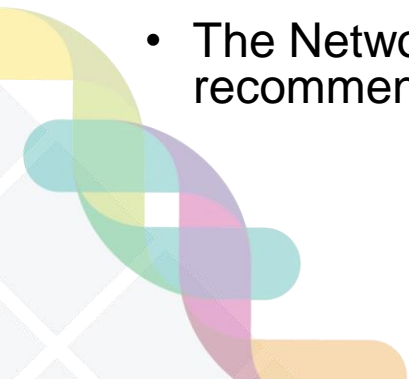
Ill pregnant women who fall outside these categories or babies who unexpectedly need intensive care are transferred to an appropriate unit in the local care pathway.

Babies are cared by one nurse to 3-4 babies.



Yorkshire & Humber Neonatal Network

- Y&H Neonatal Network help to manage patient flow across the network, balancing capacity and demand, ensuring services meet the needs of patients
- The Y&H Neonatal Network comprises neonatal services including 4 Neonatal Intensive Care Units (NICU), 9 Local Neonatal Units (LNUs) and 3 Special Care Units (SCUs). There are also 3 neonatal surgery units and Embrace – the Y&H Neonatal Critical Care Transfer service.
- These units work together as a network to deliver local care pathways, with the capacity and resources to care for the babies of women who live within the network area.
- Babies requiring the highest levels of care are concentrated in relatively few specialist centres, and it is the networks' role to develop coordinated patient pathways across neonatal units and supporting transport services.
- Wherever possible the network ensures appropriate level of care for babies as close to home as possible.
- The Network also advises on any reconfiguration of services across the network area in line with the recommendations of the Neonatal Critical Care Review.



Overview of Neonatal Care ₂

Y&H Neonatal Network

Neonatal Intensive Care Units (NICU)

- Bradford
- Hull
- Leeds
- Sheffield

Local Neonatal Units (LNU)

- **Airedale**→
- Barnsley
- Calderdale
- Doncaster
- Grimsby
- Mid Yorks
- Scunthorpe
- Rotherham
- York

Special Care Units (SCU)

- **Airedale** - temporary designation
- Bassetlaw
- Harrogate
- Scarborough

This is the service we want to talk to you about today



The Neonatal Service at Airedale

- The consultant paediatric team at Airedale covers both the neonatal and paediatric service. The number of consultants fell during 2019/20 resulting in significant staffing and recruitment challenges. The medical staffing challenges that were being experienced within the Airedale Paediatric team have now significantly improved.
- To mitigate this staffing risk across both paediatric and neonatal services the Local Neonatal Unit (LNU) at Airedale temporarily changed to a Special Care Unit (SCU). This was to ensure that elective and emergency paediatric services could be fully maintained at Airedale.
- During this time Airedale neonatal service has worked closely with counterparts at Bradford Teaching Hospitals NHS Foundation Trust. Babies who are between 27 and 31 weeks gestation, who may previously have been delivered at Airedale, have been delivered at an alternative hospital with an onsite and appropriate neonatal unit (in most cases Bradford).
- Airedale NHS Foundation Trust are seeking support to formalise and make permanent this temporary service change.

Airedale Neonatal Activity Analysis

	2019	2020	2021	2022	2023
HRG 1	83	24	14	28	24
HRG 2	220	138	80	178	140

The recommendations of the Neonatal Critical Care Transformation

Review state that:

- Local Neonatal Units should aim to undertake a minimum of 500 days of combined intensive and high dependency care per year.
- This is a minimum requirement to maintain expertise.
- Services providing ongoing high dependency care should be expected to have higher levels of activity and all should work towards becoming services that provide at least 1000 combined Intensive Care/High Dependency days in the long term.
- Smaller services would be designated as Special Care Services.

Since 2020 the Airedale unit has on average carried out an average of 2 days of intensive care per month

- It has been identified that the figures submitted in 2020 used original HRG data rather than HRG 2016 definitions. This updated table uses 2016 definitions. The original HRG included non-invasive ventilation as HRG1 (ICU), so these babies tend to move into HRG2 (HDU) using the 2016 definitions
- Note this analysis includes all babies not just those <32 weeks

Airedale Neonatal Activity Analysis

There are also the British Association of Perinatal Medicine (BAPM) recommendations (Optimal arrangements for Local Neonatal Units and Special Care Units (SCU) in the UK (2018) - A BAPM Framework for Practice) –

Local Neonatal Units (LNU)

- Units designated as LNUs should admit >25 infants <1500g admission weight
- Perform >365 RCDs annually

Operational Delivery Networks(ODN) should consider re-designating LNUs with less activity as SCUs, with the more preterm babies being transferred to other LNUs or Neonatal Intensive Care Units (NICUs) as appropriate within the network

BAPM recommends LNUs should see >25 babies/ year

BAPM recommends units should perform >365 RCDs/ year

Year	<1500g babies delivered at AGH*	Respiratory care days (RCD) **
2019	26	222
2020	7	143
2021	3	91
2022	7	179
2023	9	143

Of the 9 babies delivered in 2023, 8 were transferred out.
Of the 7 babies delivered in 2022 5 were transferred out/ the increase in RCDs is mainly due to a small number of babies that stayed on respiratory support a long time (as with HRG2).

Note-the above analysis includes babies who delivered at AGH but were then transferred to a NICU due to gestation i.e. <27 weeks/800gr. The respiratory support includes high flow, CPAP and conventional ventilation.

Airedale Neonatal Activity Analysis

2022 Review (babies born below 32 weeks gestation):

- Admitted no babies below 27 weeks gestation
- Admitted 11 babies below 32 weeks gestation (born at Airedale)
 - 10 were transferred out
 - 1 was almost 32 weeks gestation and very stable so after discussion with Bradford the baby remained at Airedale
- In addition a further 11 babies were born between 27 and 32 weeks gestation and were delivered at another unit and were transferred to Airedale's Unit when appropriate.



Airedale Neonatal Activity Analysis

2023 Review (babies born below 32 weeks gestation):

- Admitted 10 babies below 32 weeks gestation (born at Airedale)
 - 9 were transferred out
 - 2 were below 27 weeks gestation (for NICU care)
- In addition a further 12 babies were born between 27 and 32 weeks gestation and were delivered at another unit and were transferred to Airedale's Unit when appropriate.

Comparison of Transfers rates

- 2015-2018 (inclusive) – 766 babies admitted to Airedale neonatal unit. 12.1% were transferred out – this could be for any reason, to any hospital
- 2020-2023 (inclusive) – 819 babies admitted to Airedale neonatal unit. 13.6 % were transferred out.



Why is this important?

- Airedale is a small Local Neonatal Unit, with a low volume of high dependency care activity.
- There is good evidence that units with higher activity have better outcomes.
- If Airedale NHS Foundation Trust were operating as a Local Neonatal Unit it would not meet the clinical standards on the volume of activity required for a Local Neonatal Unit to look after high dependency babies as set out in the Neonatal Critical Care Review 2019.
- Ultimately, this change will ensure the highest quality of care for premature babies across the region.
- Although Airedale will no longer routinely provide high dependency care of babies between 26-31 weeks gestation, if required, the unit will still provide initial and short term care for these babies, in limited circumstances.



What is the impact for families of very small pre-term babies?

Now

- In the Y&H Neonatal Network, all premature babies born from 22 to 27 weeks gestation are currently cared for in Neonatal Intensive Care Units (NICUs) at Bradford, Hull, Leeds or Sheffield. This means families from across the region (including Airedale) already travel for this highly specialist care.
- In these circumstances facilities are available to support families eg accommodation, car parking support, food provision etc.

After changes to the 27 week pathway at Airedale

- Babies who are between 27 and 32 weeks gestation are delivered elsewhere (most likely Bradford) then, when appropriate to do so, are transferred back to Airedale for ongoing care.
- This is likely to impact approximately 24 families per year.
- The proposed changes to Airedale's pathways are consistent with how other Special Care Units operate and that all these SCU units including Airedale have <2000 births per annum

Impact Analysis₁

EQIA (Equality Impact Assessment)

- The EQIA was completed by the Trust. This covers Duty of Quality, Patient Experience, Patient Safety, Clinical Effectiveness, Prevention, Productivity and Innovation, Resourcing, Resource Impact, People Experience, and Equality, Diversity and Inclusion.
- No significant risks were identified.



Impact Analysis₂

Travel Impact

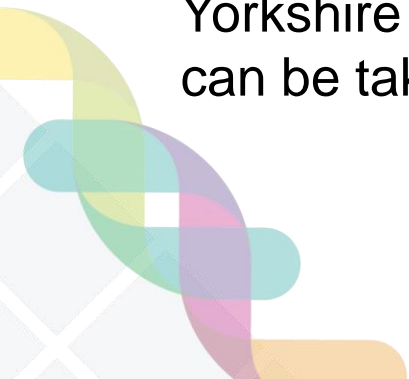
- Travel impact has also been considered. As this is a networked service, families already travel to access specialist care.
- For the majority of families, there will be limited impact. Most will now travel to Bradford to receive high dependency neonatal care.
- North Yorkshire / Craven families will experience the most impact in terms of travelling further to access care (these families account for an estimated 20 per cent of Airedale activity).



Impact Analysis₃

Family Engagement

- Patient engagement created which surveyed 34 families who experienced the change in pathway.
- 3 responses were returned
 - Positive comments received regarding care, informed about the care provided, information provision and discharge planning.
 - Opportunities to learn from patient experience and support families from admission to discharge from the service.
- Further patient focus group activity is planned for families (to include Craven and North Yorkshire parents) to secure wider input on the patient experience and any suggestions that can be taken forward to improve the neonatal pathway.



Comments from patients...

It was positive in ways that I knew my baby was going to get the care she needed but it also was hard been transferred to different units ... it was just sudden on the day no preparation or time to get used to the idea or find more information out about the units so I found that hard.

My experience at Bradford neonatal was amazing caring and just exceptional. The staff explained things well and were extremely caring. The experience at Airedale upon returning was not good. The arrival in part was bad because I had lived in at the hospital at Bradford while my baby was ill and had been told this would most likely be a possibility when I got to Airedale. Everything at Bradford was caring, understanding. The second I got back to Airedale, the care was completely different; they told me I wouldn't be staying, a complete shock to me as I don't drive and lived a distance from the hospital

All the care we received throughout our stays on the three units were amazing and as a family we are so thankful

Bradford was very pro breastfeeding and Airedale not so much. On a positive note, I will say my delivery at Airedale although a traumatic one was fantastic and all the staff were fantastic from start to finish. It was specifically Airedale neonatal I had a bad experience with (see quote above).



Impact Analysis₄

Impact on Bradford Neonatal Unit

In December 2023 NHS England and West Yorkshire Integrated Care Board carried out a quality commissioning review to clarify whether the Bradford neonatal service is providing safe, high-quality care for babies and families.

Peer review findings:

- There was clear safety culture demonstrated
- The team were responsive to incidents, there was clear governance structure in place, the team were focused on learning, the ethos was about learning and a no blame culture.
- The team were enthusiastic, and passionate about the care and the unit
- They were aware of the service challenges and were addressing them

Overall conclusion: This quality commissioning review found that the neonatal service at BRI is providing safe, high-quality care to its patients, family, and services users.

Stakeholder Involvement

The change to the Airedale Neonatal pathway is being progressed in discussion with system partners including:

- Bradford Teaching Hospitals Trust
- Yorkshire and Humber Neonatal Network
- The West Yorkshire and Harrogate Local Maternity and Neonatal System
- NHS England Specialised Commissioners (North East and Yorkshire)
- West Yorkshire Integrated Care Board (via the Joint Committee arrangements with Specialised Commissioning)



Summary

- Airedale NHS Foundation Trust seeks support to progress with formalising the pathway change for Airedale neonatal unit, so that it continues to operate as a special care baby unit, but no longer provides high dependency care as a local neonatal unit.
- Further involvement and engagement with patients will take place to understand if any further arrangements can be made to strengthen the neonatal pathway and transition between services.
- Although the impact is small in terms of numbers, the impact of the change and on patient experience will continue to be monitored closely



Thank you and questions





Airedale

NHS Foundation Trust

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