The Shrewsbury and Telford Hospital NHS Trust

Neonatal/Maternity Governance Meetings
April 2024

Agenda item				
Report Title	ATAIN (Avoiding Term Admissions into Neonatal Units) report. Quarter 4 2023-2024			
Executive Lead	Hayley Flavell			
Report Author	Jo Kench -Maternity Incident Lead			
	Link to strategic goal:		**Link to CQC domain:**	
	Our patients and community	√	Safe	√
	Our people	√	Effective	√
	Our service delivery	√	Caring	√
	Our governance	√	Responsive	√
	Our partners	√	Well Led	√
	Report recommendations:		**Link to BAF / risk:**	
	For assurance			
	For decision / approval		**Link to risk register:**	
	For review / discussion			
	For noting			
	For information	√		
	For consent			
Presented to:	**Maternity and Neonatal Governance Meeting April 2024**			
Executive summary:	• Rate of admissions to the Neonatal unit for babies >37 weeks is 6.1% for quarter 4 2023/24. • The national target is 6% this is a slight increase from quarter 3 of 6.0% • The most common reasons for admission to the Neonatal Unit are respiratory distress conditions and infection. • All cases are reviewed in a fortnightly meeting with MDT representation from Obstetrics, Neonatology, Maternity, and the Governance team. • There we no Avoidable cases identified in March			
Appendices				
Executive Lead	Hayley Flavell, Director of Nursing			

ATAIN (Avoiding Term Admissions into Neonatal Units) Report for Q4 2023

Background

Admission to a neonatal unit can lead to unnecessary separation of mother and baby. There is overwhelming evidence that separating mother and baby at or soon after birth can affect the positive development of the mother-child attachment process and adversely affect maternal perinatal mental health.

Preventing separation except for compelling medical indications is essential in providing safe maternity services.

NHS providers of maternal and neonatal care can use data collected through ATAIN reviews as a resource to:

- Improve the safety of care.
- Keep mothers and babies together whenever it is safe to do so.
- Identify local improvement priorities.
- Develop an action plan to ensure any relevant resources are introduced into clinical practice.

Improving the safety of maternity services is a key priority for the NHS and the number of unexpected admissions of full-term babies (i.e., those born at 37 weeks or more), is seen as a proxy indicator that harm may have been caused at some point along the maternity or neonatal pathway.

ATAIN focuses on four key clinical areas that represent a significant amount of potentially avoidable harm to babies:

- Respiratory conditions
- Hypoglycaemia
- Jaundice
- Asphyxia (perinatal hypoxia-ischemia)

Review Systems & ATAIN process.

The Women & Childrens Division continue to have regular commitment to attend these meetings from both Obstetrics, Neonatology, Maternity, and the Governance team. Clinicians are attending on a rotational basis, with specific dates provided for all staff and a reminder sent out by the Governance team 1 week before the meeting. The proforma is completed live and any actions, comments or learning recorded on Datix. In addition, this now also includes an Action Tracker and all information recorded on Datix system.

A structured and robust process is in place to ensure that the MDT ATAIN reviews can be completed within a 14-day turnaround of incidents occurring. This allows for immediate learning from these incidents to be disseminated to all staff. Multi-Disciplinary Team (MDT) meetings continue on a fortnightly basis to review all cases which meet the ATAIN criteria. Term admissions to the neonatal unit are currently monitored utilising the neonatal BadgerNet digital system, Datix submissions, Physical review of case notes both Maternity & Neonatal and a manual check of the Neonatal Unit admissions book. A cross reference is made with all three systems as a failsafe to ensure that no case is missed. The metrics collated from these meetings are presented both monthly & quarterly for assurance, at both Maternity and Neonatal Governance meetings. Any safety concerns are immediately escalated, and any learning is shared with the multi-disciplinary teams in both areas.

The rate of term admissions to the neonatal unit are calculated as a percentage of live, **term** births in line with the NHS Improvement "Reducing harm leading to avoidable admission of full-term babies into neonatal units" paper from 2017.

Rates

The term admission rate for Q4 (January, February, March 2024) was 6.1% of all births at >37 weeks, a slight increase from the previous Q3 figure of 6.0%
The year-to-date term admission rate is 5.0%. This rate remains below the national target of 6%.

A total of 54 term babies were admitted to the NNU in Q4 2023/4 (comparing with 61 in the previous quarter.)

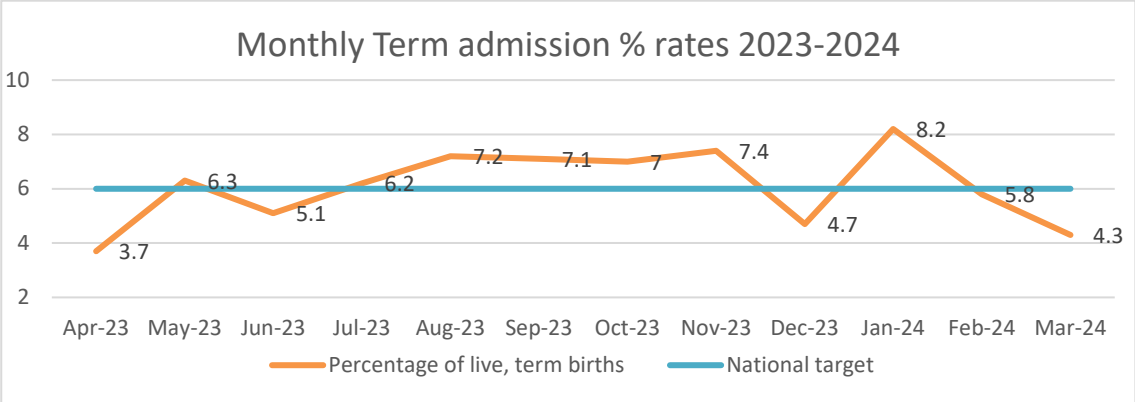
The numbers of babies admitted each month were:
306 Term births at PRH
January 2024 – 8.2% of all term births at >37 weeks (n = 25)
Avoidable admissions: (n=7)

293 Term births at PRH
February 2024 – 5.8% of all term births at >37 weeks (n = 17)
Avoidable admissions: (n=4)

276 Term births at PRH
March 2024 – 4.3% of all term births at >37 weeks (n = 12)
Avoidable admissions: (n=0)

Summary of Term admission rates for the 2023-2024

The table below shows the monthly term admissions in the financial year for 2023/24 the National target % set is below 6%.



Quarter 4 Metrics

Reason for admission	Number of babies > 37/40
Respiratory conditions	32
Infection	9
Babies who were transferred out for therapeutic hypothermia	2
Hypoglycaemia	2
Jaundice	2
Admitted poor feeding weight loss	4

For monitoring only as no Transitional support available for NG/Syringe feeding	2
Other – Admitted for Social Care issue place of safety	1
Total	54

Respiratory conditions

Respiratory conditions continue to make up most admissions to the NNU, with 16 babies this quarter. 4 of which were elective caesarean births, 12 were emergency caesarean births and 13 were vaginal births 5 of which were following induction. 2 of the respiratory admissions were babies born by forceps and 7 were spontaneous vaginal births. Where required all the babies received Antibiotics during their stay.

Mothers booked for elective caesarean sections prior to 39 weeks gestation are offered the option of antenatal corticosteroids to reduce the risk of neonatal respiratory morbidity as per the 'Caesarean Section – Emergency and Elective' Guideline. The ATAIN review group monitor whether the parents received informed discussion regarding steroids and document this conversation and its outcome in the notes.

Hypoglycaemia

During the quarter, there were 2 babies (both born to diabetic mothers) admitted to the neonatal unit due to hypoglycaemia. Both babies were admitted from the post-natal ward with low blood sugars and were promptly escalated to the neonatal team for review and management.

Neonatal Jaundice

3 babies were admitted to the neonatal unit for treatment of jaundice in quarter 4, one baby was delivered by ventouse, 1 was spontaneous vaginal birth and the 3rd was following an emergency c section. all babies were admitted from the post-natal ward.

Infection

9 babies were admitted to the neonatal unit with suspected infection this quarter. All received antibiotics following positive results for suspected Sepsis, Bacillus & Strep.

Other issues

6 babies were admitted to the neonatal unit with other reasons. 3 were admitted following poor feeding and weight loss who required either NG tube feeding or syringe feeding.

2 babies were admitted as a place of safety. One for monitoring only following an accidental fall from the bed in postnatal ward. Baby stayed on the unit for 11 hours and returned to mum well and discharged home following day. One baby was admitted as a place of safety while foster parents were allocated.

January

There have been 25 cases reviewed for Term babies admitted to NNU (these numbers have been verified against the red admission book held on NNU) This month's percentage is 8.2%, a significant increase from the previous month and above the National target of 6%.

6 cases identified as an avoidable Term admission for NNU.

Case 1 - Primary Reason for admission – Respiratory Distress

Baby born at 37+3 weeks gestation following induction of labour and a normal vaginal birth. The indication for the induction was not clearly documented and the gestation was uncertain due to the mother booking late in pregnancy. Baby was admitted from delivery suite due to respiratory distress, was intubated and required a chest drain. The baby was diagnosed with respiratory distress syndrome and remained on the neonatal unit for 16 days. The admission was deemed avoidable due to the early induction of labour.

Case 2 - Primary Reason for admission – Poor Feeding

Baby born at 41+4 weeks gestation following a caesarean birth with a significant delay from decision to birth. Learning was identified from the labour care, including fluid balance and maternal dehydration, the use of oxytocin when there are CTG concerns, delay in carrying out the caesarean section when infection is suspected. Baby required a septic screen, nasogastric tube feeding, and was admitted to the neonatal unit due to unavailable transitional care facilities able to support nasogastric tube feeding on the postnatal ward. Baby was discharged back to the postnatal ward after 15 hours.

Case 3 - Primary reason for admission Jaundice required phototherapy.

Baby was born at 37 weeks gestation via a normal vaginal birth and was admitted to the neonatal unit at 2 days of age due to severe jaundice. A technical issue was identified with the blood gas machine on the postnatal ward when there was a significant discrepancy in the results between this machine and the machine on the neonatal unit. Specialist advice was sought, and the discrepancy was thought to be linked to the handling of the samples. Therefore, a new process has been put in place whilst additional training is provided. Baby was discharged back to the postnatal ward at 3 hours of age.

Case 4 - Primary reason for admission Jaundice required phototherapy.

Baby was born at 37+2 weeks gestation via an emergency caesarean section and admitted to the neonatal unit at 5 hours of age due to elevated bilirubin levels. The technical issue regarding a discrepancy in the bilirubin results between the blood gas machines on the postnatal ward and the neonatal unit affected this baby's care. Baby required double phototherapy which can be provided on the postnatal ward. Baby was discharged back to the postnatal ward at 11 hours of age.

Case 5 Primary reason for admission was Respiratory Distress

Baby was born at 3+1 weeks gestation via an emergency caesarean birth due to respiratory distress. There was significant meconium at birth, baby required active resuscitation and supplemental oxygen at birth. The recognition and escalation of chronic hypoxia was appropriate, as was the decision to deliver the baby. However, the baby was born on the 98.6th centile for growth and there were risk factors for gestation diabetes during pregnancy. The mother had changed maternity care providers during the pregnancy and GTT screening was missed by both providers. The baby had unrecordable blood sugar levels and required a glucose bolus. The admission was deemed avoidable due to this possibly being an undiagnosed diabetic mother, which may have contributed to placental insufficiency and baby's low blood sugar readings. Baby remained on the neonatal unit for 18 days.

Case 6 - Primary reason for admission Convulsions

Baby was born at 40+4 weeks gestation via an emergency caesarean birth at 20 hours of age due to suspected seizure activity. The admission was deemed avoidable due to CTG

concerns which suggest chronic hypoxia. The chronic hypoxia sticker was not completed and there was a delay in making the decision to deliver. The case was reviewed further in the maternity incident review meeting to ensure that all learning was captured. The baby remained on the neonatal unit for 76 hours.

February

There have been 17 cases reviewed for Term babies admitted to NNU (these numbers have been verified against the red admission book held on NNU).
This month's percentage is 5.8% a decrease in previous months and is below the National target of 6%.

4 identified avoidable Term admissions for NNU

Case 1- Primary reason for admission was infection.
Baby was born at 39+5 weeks gestation via a forceps birth. Baby had raised lactate at birth which was not investigated further. Baby was admitted to the neonatal unit with suspected sepsis at 11 hours old. The admission was deemed avoidable because it was felt that baby could have been investigated and received antibiotics on the postnatal ward, thereby avoiding the separation of mother and baby.

Case 2 – Primary reason for admission HIE
Baby was born at 37 weeks gestation via an emergency caesarean birth after the mother suffered an eclamptic fit. Baby had suspected HIE and was transferred to a tertiary centre for therapeutic hypothermia. Baby responded well to treatment and an MRI scan completed was normal. Learning was identified around management of protein urea in the community and opportunities to escalate for review. Delays in care were in the antenatal period were noted, and learning was identified around the management of eclampsia on the delivery suite.

Case 3 - Primary reason for admission Hypoglycaemia
Baby was born at 41 weeks gestation via a normal vaginal birth and admitted to the neonatal unit at 22 hours of age due to hypoglycaemia. The mother had received Labetalol during labour and baby had appropriate monitoring after birth. The admission was deemed avoidable due to the lack of transitional care facilities able to support nasogastric tube feeding on the postnatal ward. Baby was discharged back to the postnatal ward after 20 hours.

Case 4 - Primary reason for admission Poor feeding.
Baby was born at 39+1 weeks gestation via a normal vaginal birth. Baby was admitted to the neonatal unit at 14 hours of age due to poor feeding and requiring nasogastric tube feeding. The admission as deemed avoidable due to the lack of transitional care facilities able to support nasogastric tube feeding on the postnatal ward.

March

12 cases of term babies admitted to the neonatal unit were reviewed in March (these numbers have been verified against the red admission book held on NNU).
This month's percentage is 4.3% a decrease in previous months and is below the National target of 6%.

Immediate learning and actions are shared through Safety brief and Actions tracked in Datix. There were no avoidable identified in March.

Plan for Q1 2024/25

1. Continue two-weekly MDT meetings to review all eligible cases. Encourage more MDT engagement with the Neonatal Nursing team These meetings will now be reviewing the most recent term admissions to the NNU.
2. Continue to ensure failsafe processes are in place to confirm all eligible cases are captured for review whilst awaiting outcome of Neonatal Full BadgerNET.
3. Share learning from ATAIN reviews with all staff.
4. Develop a monthly ATAIN specific Clinical Gem publication which can be shared across Maternity & Neonates
5. To monitor and review more closely the babies admitted with respiratory conditions and/or infection with a view to establish if admission to the neonatal unit can be avoided by alternative methods of treatment.
6. To monitor number of babies admitted to NNU where Transitional Care facility would have been more appropriate setting.
7. To present the report monthly to Maternity and Neonatal Governance meetings.
8. To include any learning in the ATAIN presentation for Maternity Specific Mandatory Training Day 2