Royal United Hospitals Bath
NHS Foundation Trust

Report to:	Public Board of Directors	Agenda item No:	11
Date of Meeting:	1 May 2024		

Title of Report:	Maternity and Neonatal Safety Report Quarter 3
Board Sponsor:	Antonia Lynch, Chief Nursing Officer
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Appendices	Appendix 1: Transitional and ATAIN Audit report Appendix 2: Still birth and perinatal mortality report Quarter 3

1. Executive Summary of the Report

This report outlines locally and nationally agreed measures to monitor maternity and neonatal safety. The purpose of the report is to inform the Local Maternity and Neonatal System (LMNS) and Board of Directors of present and/or emerging safety concerns.

This report identifies a Royal United Hospitals Bath NHS Foundation Trust (RUH) calendar year average stillbirth rate for 2023 of 1.42 per 1000 births; this is below the reported national average of 4.2 per 1000 births (2021), and a minor reduction on internal reported rate of 1.44 per 1000 births in 2022.

The RUH Neonatal mortality rate for 2023 is 0.71 per 1000 births. This is an anticipated greater value than the internal reported RUH rate from 2022 of 0.23 per 1000 births. The increased rate is in response to 2023 figures, which account for babies born at the RUH but subsequently die elsewhere. This aligns to the stabilised and adjusted rates received via Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK (MBRRACE) national reporting. The internal only death rate was unchanged in 2023, when compared to 2022 at 0.23 per 1000 births.

During Q3, the service made 2 referrals to the Maternity and Neonatal Safety Investigations (MNSI) team hosted by the Care Quality Commission. One referral has been confirmed, as an ongoing investigation at the family's request, 1 has not progressed following MNSI triage process. One new internal Serious Incident was declared in Q3.

The report outlines the key points of progression towards the 15 Immediate and Essential Actions outlined within Ockenden 2022. Plans are in place for Q4 to align all national and local improvement drivers into a singular RUH Maternity Improvement plan, encompassing Ockenden 2022, the 3 year single delivery plan 2023, Saving Babies Lives v3 and locally identified safety priorities.

This report outlines the Trust's progress towards Year 5 full compliance of the Clinical Negligence Scheme for Trusts (CNST) Maternity Incentive Scheme (MIS), submitted in February 2024. During Q3 KPMG completed an internal audit of submitted evidence and supported compliance with 9 out of the 10 Safety Actions. Safety Action 6 was excluded from the scope of KPMGs audit due to oversight and assurance being provided by the Local Maternity and Neonatal System (LMNS). This report identifies the Trust projection and progression target towards meeting the 70% for 'implementation of the Saving Babies Lives care bundle of 2023', and therefore full compliance with all 10 Safety Actions for year 5 in February 2024.

The Avoiding Term Admissions into Neonatal Units (ATAIN) and Transitional Care (TC) reporting is included in this report. The ATAIN rate for Q3 remains stable, below the national target of 5%. An increase in the number of avoidable term admissions in Q3, and outlines the plan for an annual trend and theme analysis in Q4. The report outlines the leading cause for admission into the RUH

Neonatal Unit remains respiratory distress, and details a new practice development project; 'The COSEI project' to reduce admissions of babies with the need for transient respiratory support by providing bedside respiratory support within the birth environment for a specified period of time.

2.	Recommendations (Note, Approve, Discuss)
Discuss and approve.	

3.	Legal / Regulatory Implications
It is a legal requirement to comply with the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014 (Part 3).	

4.	Risk (Threats or opportunities, link to a risk on the Risk Register, Board Assurance Framework etc.)

In Q3 Maternity and Neonatal, services presented six new risk assessments, which was approved for the risk register:

2649	Delays to commencement of induction of labour	12
2679	Service provision of digital blood pressure monitors validated for use in pregnancy and pre-eclampsia	5
2660	Tertiary level neonatal cot capacity in the region	8
2648	Family Origin Questionnaire processing for screening of Haemoglobinopathies	9
2681	Room bookings for mandatory training programme as outlined in the maternity TNA –section 6.	9
2664	Ligature risk	5

Current Open Risks in Maternity and Neonates Q3 23/24:

1734	Day Assessment Unit patient safety risk – area not compliant or fit for purpose	15
1948	Obstetric ultra sound scan capacity	12
2359	Maternity Information System IT support/capacity	8
2417	Maternity triage	12
2467	Maternity workforce	12
2481	Staff Entonox exposure in birthing environments	4
2482	Assessment of minor and low harm Datix management in Maternity and Neonatal Division.	6
2522	The Provision of maternity care to birthing people who do not identify as a female gender	8
2483	Expiration of Maternity and Neonatal staff resources and guidelines	8
2562	There is a risk to the Electronic Patient Record (EPR) due to unsecured funding following withdrawal from Cerner Millennium	12
2581	There is a risk that we will be unable to meet the service demand for obstetric medical staging with the current unsecured establishment of Obstetric Consultant.	12
2591	There is a risk that the current funded provision of Allied Health Professionals in the Neonatal Unit will not continue following cease of fixed term funding from the neonatal Operational Delivery Network.	9
2649	Delays to commencement of induction of labour	12

	2679	Service provision of digital blood pressure monitors validated for use in pregnancy and pre-eclampsia	5
	2660	Tertiary level neonatal cot capacity in the region	8

5.	Resources Implications (Financial / staffing)
Compliance with the Maternity Incentive Scheme for Trusts, has financial and safety implications for the Trust. There is a financial commitment required by the Trust to achieve full compliancy.	

6.	Equality and Diversity
Equality and Diversity legislation is an integral component to registration.	

7.	References to previous reports
Maternity and Neonatal 2023 Q3 report, Quality Governance Committee – March 2024 Previous monthly Perinatal Quality Surveillance reporting (Integrated Performance Reports) Maternity and Neonatal Safety Report Q2 – October 2023 Safer Staffing Report – August 2023. CNST Maternity Incentive Scheme – Year 4 declaration of compliance - December 2022.	

8.	Publication
Public.	

MATERNITY AND NEONATAL Q2 23/24 SAFETY REPORT

CQC Maternity Ratings	Overall	Safe	Effective	Caring	Well-Led	Responsive
	Select Rating:	Select Rating:	Select Rating:	Select Rating:	Select Rating:	Select Rating:
Sept 2018 Inspection	Outstanding	Good	Good	Outstanding	Outstanding	Outstanding

Maternity Safety Support Programme in place	Select Y / N	**N**

	October	**November**	**December**
1.Findings of review of all perinatal deaths using the real time data monitoring tool	✓ see report	✓ see report	✓ see report
2. Findings of review of all cases eligible for referral to MNSI	✓ see report	✓ see report	✓ see report
Report on: 2a. The number of incidents logged graded as moderate or above and actions	✓ see report	✓ see report	✓ see report
2b. Training compliance for all staff groups in maternity related to the core competency framework v2 and wider job essential training	✓ see report	✓ see report	✓ see report
2c. Minimum safe staffing in maternity services to include Obstetric cover on the delivery suite, gaps in rotas and midwife minimum safe staffing planned cover versus actual prospectively	✗ see report	✗ see report	✓ see report
3.Service User Voice Feedback	✓ see report	✓ see report	✓ see report
4.Staff feedback from frontline champion and walk-about	✓	✓	✓
5.MNSI/NHSR/CQC or other organisation with a concern or request for action made directly with Trust	✓ Nil	✓ Nil	✓ Nil
6.Coroner Reg. 28 made directly to Trust	✓ Nil	✓ Nil	✓ Nil
7.Progress in achievement of CNST 10	✗ New MIS standards released 30 May 23	✗ New MIS standards released 30 May 23	✓ On Target, not yet fully compliant See report
8.Proportion of midwives responding with 'Agree' or 'Strongly Agree' on whether they would recommend their trust as a place to work or receive treatment:			Work - 65% Treatment - 75% Staff Survey 2022
9.Proportion of speciality trainees in Obstetrics & Gynaecology responding with 'excellent' or 'good' on how they would rate the quality of clinical supervision out of hours:			100% (GMC 2022)

REPORT OVERVIEW

This report outlines locally and nationally agreed measures to monitor maternity and neonatal safety, as outlined in the NHSEI document '*Implementing a revised perinatal quality surveillance model'* (December 2020). The purpose of the report is to inform the Local Maternity and Neonatal System (LMNS) Board and the Board of Directors of present or emerging safety concerns within Maternity and Neonatal services. The information within the report reflects actions and progress in line with Ockenden 2022 and the Clinical Negligence Scheme for Trusts (CNST) Maternity Incentive Scheme (MIS).

1. PERINATAL MORTALITY RATE

The following graphs demonstrate RUH performance against the national ambition to reduce stillbirth in the UK by 50%, and the local ambition for continual progression in reducing perinatal mortality at the RUH.

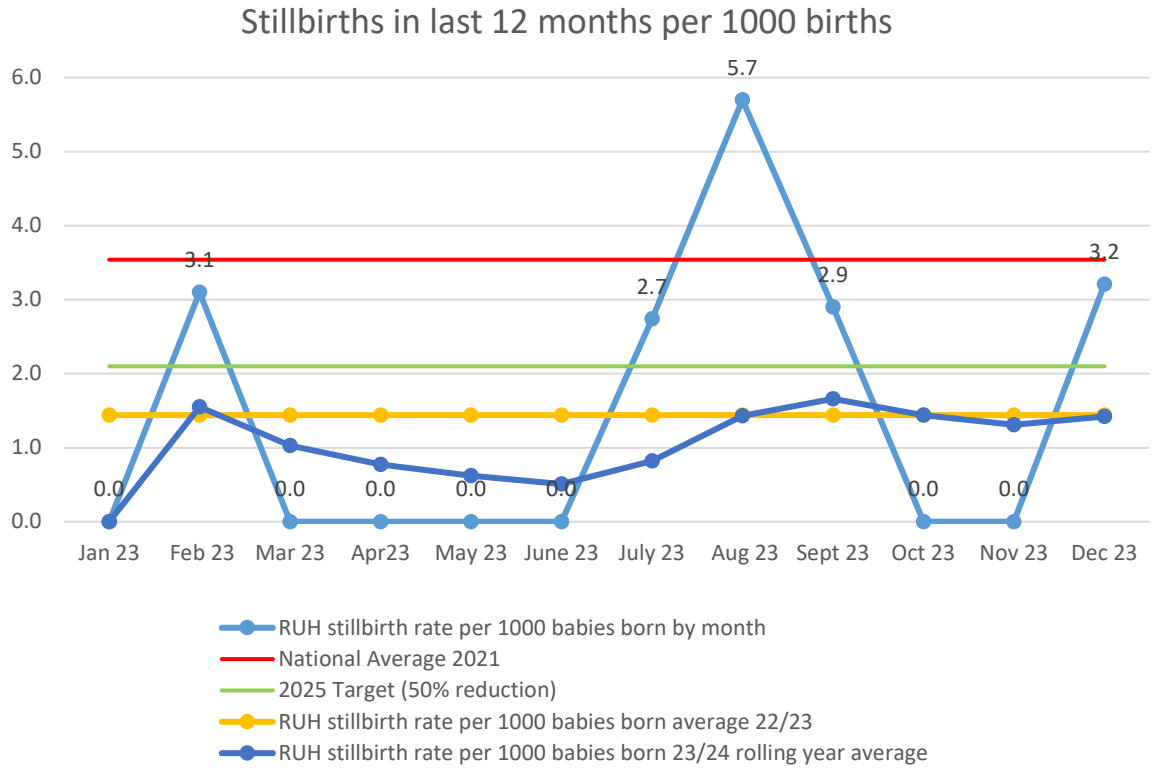


Figure 1. RUH NHS Trust stillbirth rate per 1000 births over last 12 months

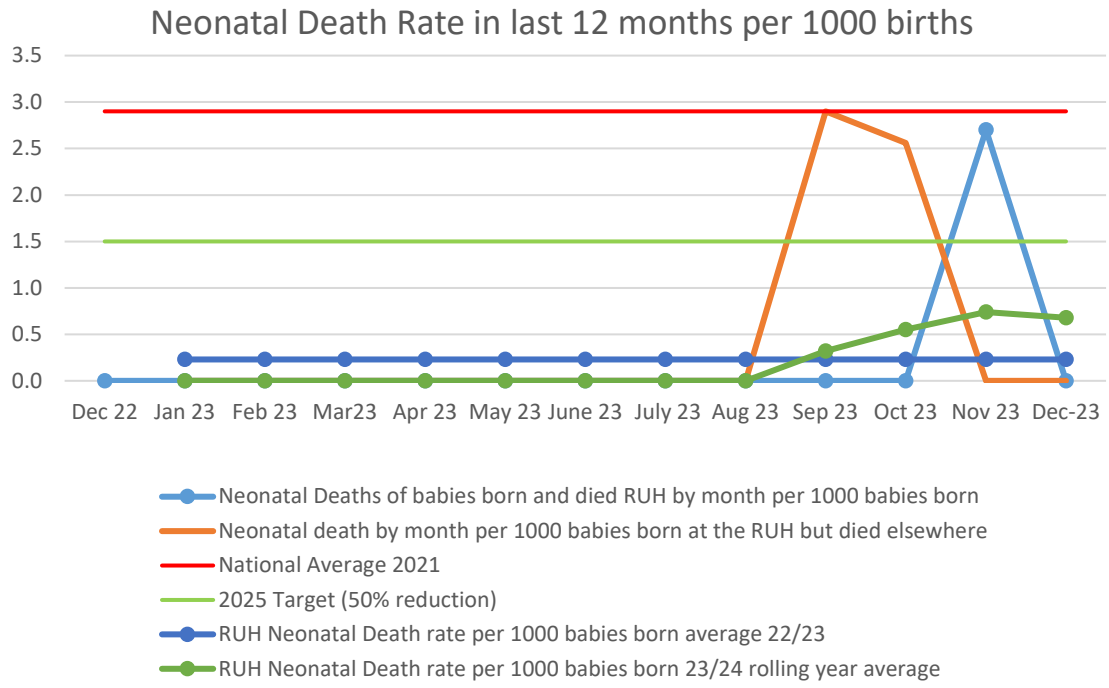


Figure 2. RUH NHS Trust Neonatal Death rate per 1000 births over last 12 months

Mothers and Babies: Reducing Risk through Audits and Confidential Enquires-UK (MBRRACE-UK) collects data on perinatal death defined as babies born without signs of life from 22 weeks gestation to term and neonatal deaths at any gestation up to 28 days of age, excluding terminations of pregnancy.

The RUH Electronic Patient Record records all stillbirths (24 weeks or greater gestation) and neonatal deaths at the RUH. Births between 22-24 weeks are pulled manually and added to the data set submitted to MBRRACE-UK as in figure 1. Perinatal deaths are defined from birth after 22 weeks gestation and include neonatal deaths at any gestation where the baby is born with signs of life, but stillbirths are defined from 24 weeks at diagnosis of death. The rate of stillbirth and perinatal death may therefore be different.

Trusts are provided with initial MBRRACE perinatal mortality rate per 1000 births, results are subsequently stabilised and adjusted to include deaths of babies who were born with Providers but subsequently died elsewhere. This report has therefore separated these values to ensure alignment of internal mortality data figures ahead of reported and adjusted MBRRACE figures, see Figure 1 and Figure 2.

Three perinatal deaths (excluding Medical Termination of Pregnancies (MTOP)) were reported in Q3. There was 1 stillbirth, and 1 neonatal death; of pre-viability pregnancy birth where the baby was born with signs of life at the RUH. We were informed of one neonatal death of a premature baby born at the RUH and subsequently transferred to a tertiary Neonatal Intensive Care Unit (NICU).

2023/24 (excluding terminations for abnormalities)	Q3 23/24	Annual total 23/24	Annual total 2023 (calendar year)
Stillbirths (>37 weeks)	1	2	2

Stillbirths(>24weeks-36+6weeks)	0	3	4
Late miscarriage (22+weeks-23+6weeks)	0	1	2
Neonatal death at the RUH	1	1	1
Neonatal death elsewhere following birth at the RUH	1	2	2
Total	**3**	**9**	**11**

Table 1. Perinatal Mortality summary by number of cases, quarter 3 2023/24

MBRRACE report mortality figures annually per calendar year therefore the mortality rates for 2023 are as follows;

- RUH stillbirth rate 1.42 per 1000 births (n=6), this is a minor reduction on the 2022 reported rate of 1.44 per 1000 births, and remains below the nationally reported rate in 2021 of 4.2 per 1000 births.
- RUH Neonatal mortality rate 0.71 per 1000 births (n=3). This is greater than the reported RUH rate from 2022 of 0.23 per 1000 births; however, this is an anticipated increased rate in response to 2023 figures accounting for those babies born at the RUH but subsequently died elsewhere. The internal death rate; babies who were born at the RUH and died at the RUH, was unchanged in 2023 at 0.23 per 1000 births (n=1).

Following the publication of the 2021 MBRRACE statistics in September 2023, a thematic review of all Perinatal Mortality Review Tool (PMRT) reviews following stillbirth (n=13) and neonatal deaths (n=4) in the year of 2021 was completed. This report identifies key priorities for improvement and progression continues towards completion (Appendix 2). The review did not identify any concerning or causal trends or themes within the cases reviewed.

The report has considered all care issues identified via PMRT in 2021 irrespective of impact upon outcome. This report identifies 3 key areas of improvement in 2021:

- Plotting of Symphysis Fundal Height measurements (n=4)
- Use of Partogram in the care of Intra-Uterine Death intrapartum care episodes (n=2)
- Provision of written information about reduced fetal movements (n=2).

Actions towards improvement undertaken at the time, and current progression/compliance in response, are outlined within the report.

2. PERINATAL MORTALITY REVIEW TOOL (PMRT)

All perinatal deaths that occur within the Trust have been reported using the PMRT tool since 2018. PMRT reporting is a requirement of Safety Standard 1 of the NHS-R Maternity Incentive Scheme year 5. All Q3 cases have been reported to MBRRACE via PMRT.

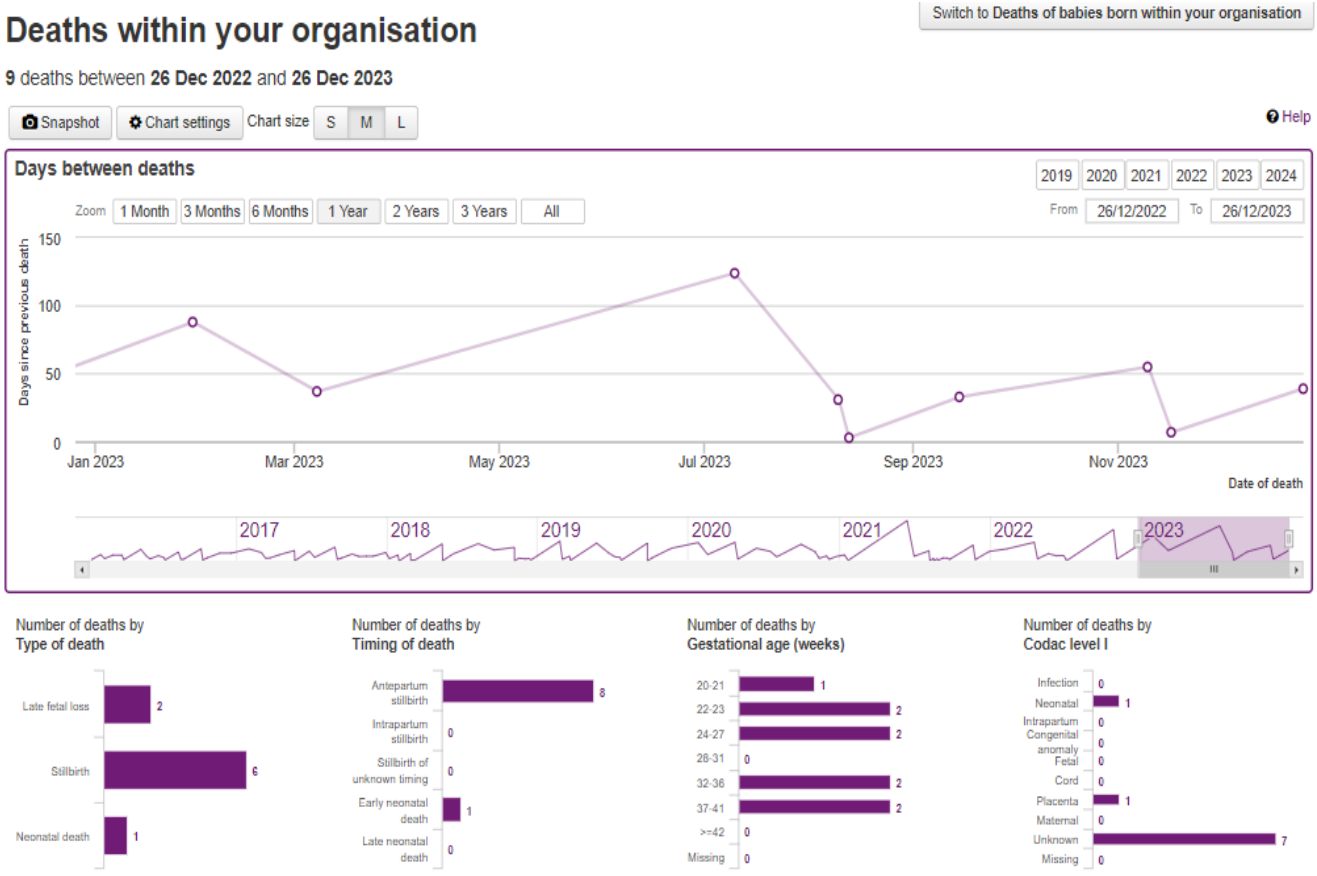


Figure 3. Reporting of RUH NHS Trust Deaths within Organisation.

2.1 LEARNING FROM PMRT REVIEWS

No PMRT reviews reached completion in Q3 of 2023.

3. MATERNITY AND NEONATAL SAFETY INVESTIGATIONS (FORMERLY THE HEALTHCARE SAFETY INVESTIGATION BRANCH) AND MATERNITY SERIOUS INCIDENTS

3.1 BACKGROUND

MNSI undertake maternity investigations in accordance with the Department of Health and Social Care criteria (Maternity Case Directions 2018), taken from Each Baby Counts and MBRRACE-UK. In accordance with these defined criteria, eligible babies include all term babies (at least 37 completed weeks of gestation) born following labour who have one of the following outcomes:

- Maternal Deaths
- Intrapartum stillbirth
- Early neonatal death
- Severe brain injury diagnosed in the first seven days of life

3.2 INVESTIGATION PROGRESS UPDATE

Two new referrals were made in Q3 to MNSI, one was rejected by MNSI following internal triaging, and one progressed at the family request.

Table 2 identifies ongoing MNSI reviews into Q3. The findings and recommendations of these reviews, and the actions taken in response, will feature in future reports.

Ref	Details of Event	confirmed Investigation	External Notifications and Other Investigations
Completed in Q3			
MI-026685	Neonatal resuscitation following home birth	May 2023	N/A
Ongoing			
MI-030349	Neonatal transfer to Tertiary Neonatal unit for ongoing care and active therapeutic cooling, Normal MRI post active therapeutic cooling progressing at family request	Sept 2023	N/A
MI-034656	Transfer to Tertiary neonatal unit for active therapeutic cooling following resuscitation at birth, Normal MRI post active therapeutic cooling progressing at family request	Oct 2023	N/A
New Referrals			
MI-036039	Baby admitted on day 2 of life transferred to Tertiary Neonatal Unit for ongoing care	MNSI reject due to diagnosis of metabolic disorder	N/A
MI-035529	Neonatal transfer to Tertiary Neonatal Unit for ongoing care and active therapeutic cooling	Normal MRI post active therapeutic cooling, progressing at family request.	N/A

Table 2. MNSI referrals and ongoing investigations Q3 2023/24

3.3 CORONER REGULATION 28 MADE DIRECTLY TO TRUST

Not applicable.

3.4 MATERNITY SERIOUS INCIDENTS

One patient safety review was completed in Q3, the findings and recommendations have been actioned as per paragraph 3.5. There was 1 new Serious Incident identified during Q3. See Table 3.

Ref	Details of Event	Review Response	External Notifications and Other

			Investigations
Completed reviews			
118499	Mother birthing outside of guidance. Shoulder dystocia, baby born in poor condition requiring resuscitation at birth Transferred to Bath Birthing Centre (BBC) no blood gas analysis performed	learning identified at Multi-disciplinary Team (MDT) regarding current care provision for women who choose to birth outside of guidance Neonate's deviation from care pathway missed opportunity for blood gas on admission and potential Cerebral Function Monitoring	STEIS 2023/15926 Downgraded from STEIS
New reviews			
121463	Neonatal death at 27 weeks gestation following a difficult caesarean section birth.	Ongoing review declared as SI in Q3.	

Table 3. Maternity and Neonatal Serious Incident reviews Q3

There were 7 moderate harm events reported during Q3, of which 2 were duplicated reports, all have received a local review, the multidisciplinary review team (MDT) which did not identify any acts or omissions in care casual to the event.

3.5 LEARNING AND IMPROVEMENT

One completed MNSI review and 1 completed local patient safety review were received in Q3 2023. The reports outlined co-incidental findings and safety recommendations, which have been assessed for future learning and improvement; action plans have been derived, and will be monitored via Maternity and Neonatal Specialty Governance for progress towards ensured completion.

A theme related to intermittent auscultation has emerged in Q3 from these reports and local clinical audit findings. A Quality Improvement project has been initiated, inclusive of ensuring alignment to national improvements outlined within Saving Babies Lives version 3. The development and continued progression of this project will be monitored within the Maternity and Neonatal QI Hub reporting into Maternity and Neonatal Specialty Governance.

Learning and Improvement drivers from these events are fed back in a variety of formats including: maternity newsletter, staff e-mails, staff safety briefings, patient safety 'Safety Catch' newsletter, Microsoft Teams RUH Maternity Team, case review QR code posters to full reports and quality and safety whiteboards displayed in clinical areas with a 'Safety Hot Spot' of the month. Safety Hotspots are identified through service insights such as themes of low and no harm incidents, audit and, or family feedback.

4. OCKENDEN UPDATE

4.1 OCKENDEN FINAL REPORT UPDATE – Q2 2023-2024

The Trust is not required to submit evidence of compliance with the 15 Immediate and Essential Actions outlined within the Ockenden report of 2022. Monitoring of compliance and improvement towards compliance is monitored via Specialty Governance, Maternity and

Neonatal safety champions via the Internal Performance Review (IPR) presentation every month.

Plans are in place during Q4 to align all national and local improvement drivers into a singular RUH Maternity Improvement plan, encompassing Ockenden 2022, the 3 year single delivery plan 2023, Saving Babies Lives v3 and locally identified safety priorities.

Key Achievements in progression during Q3:

- Completion of the second bespoke in-house multidisciplinary High Dependency Unit (HDU) training for senior midwives in November 23, increasing compliance across senior midwifery team.
- Agreement of Maternity investment case to fund consultant staffing establishment, recruitment process in place, interviews scheduled for Q4 of 23/24.
- BirthRate+ inpatient ward acuity tool re-instated November 2023 following period of unavailability for national updates.

Next Steps for Progressions:

- Continued work towards compliance with 10 safety actions for MIS, and SBLv3
- Collation and alignment of the national improvement drivers; Ockenden IEAs of 2022, the Three-year delivery plan of 2023, Saving Babies Lives v3 of 2023 into a single RUH Maternity Improvement plan to ensure cohesive tracking of progress.

Key Risks to Full Compliance:

- There are currently individual action plans in place in response to each national driver; the risk is that these are not cohesively integrated to accurately represent contemporaneous compliances.

5. TRAINING COMPLIANCE FOR ALL STAFF GROUPS IN MATERNITY RELATED TO THE CORE COMPETENCY FRAMEWORK AND WIDER JOB ESSENTIAL TRAINING

5.1 SITUATION REPORT

Compliance with fetal monitoring, neonatal resuscitation and multi-disciplinary training (MDT) Emergency Skills Training (PROMPT) across all staffing groups is required to be above 90% across all staff groups to fulfil the requirements set out within the CNST MIS and Saving Babies Lives Care Bundle v3. The reporting deadline for mandatory training compliances for CNST MIS and SBLv3 was met in Q3 with the RUH declaring >90% compliance across all staffing groups in Maternity services. See figure 4.

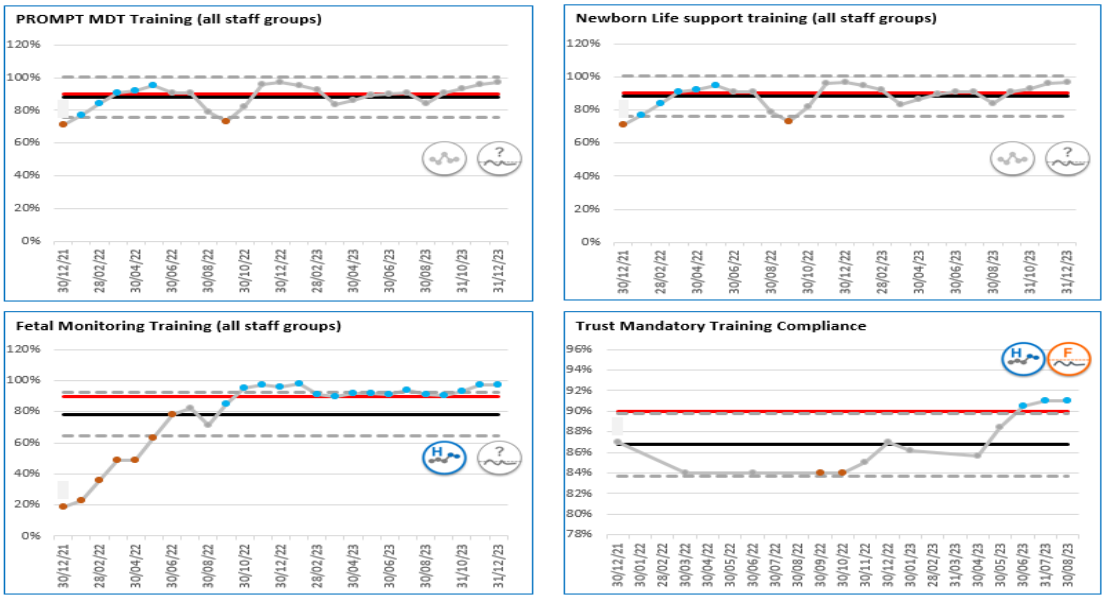


Figure 4. Maternity Training Statistical Process Charts as of 31/12/2023

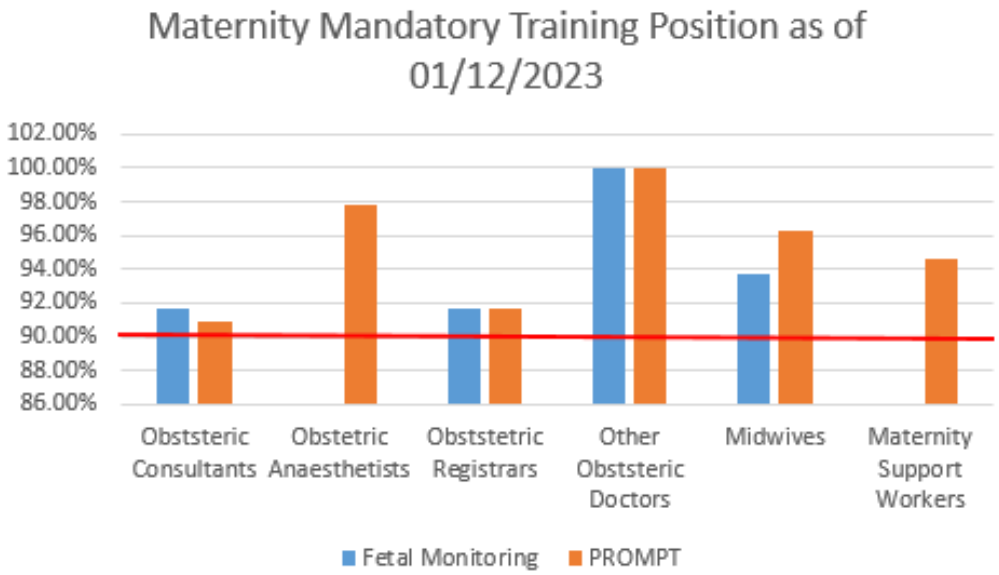
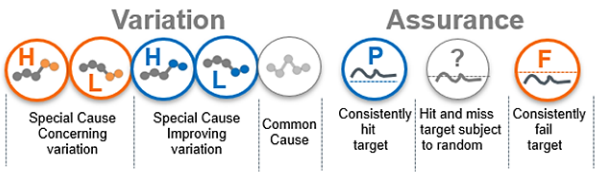


Figure 5. Prompt and fetal monitoring Training Compliance (%) by staff group as of 01/12/2023 (CNST MIS position of declaration).



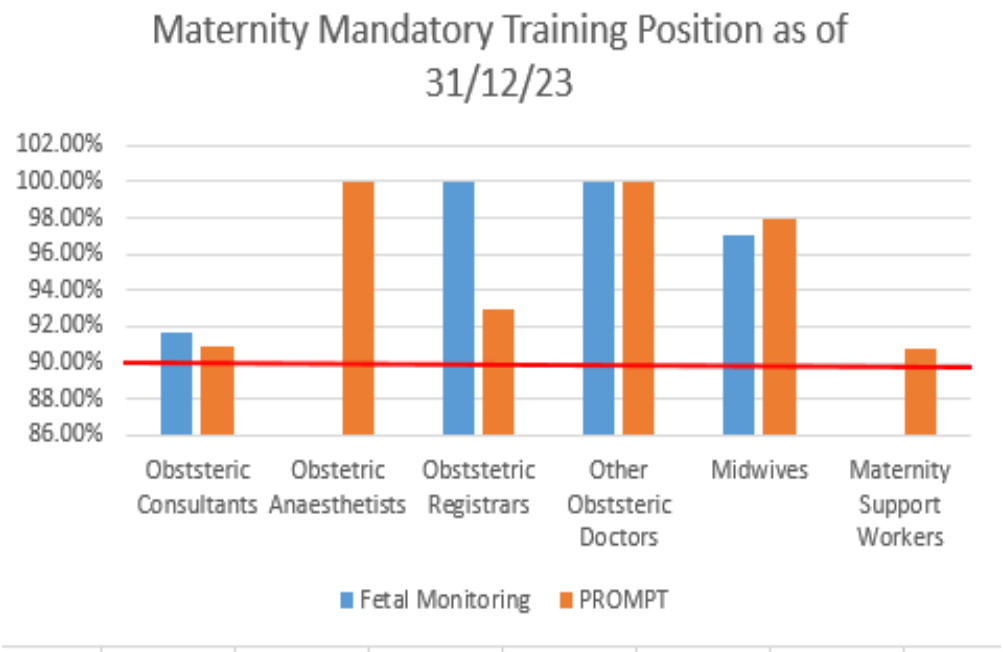


Figure 6. Prompt and fetal monitoring Training Compliance (%) by staff group Q3 2023/2024

6. BOARD LEVEL SAFETY CHAMPIONS

The Maternity and Neonatal Safety Champions are active in their role to listen to the staff voice in maternity services. All staff are invited to attend monthly 'listening event' meetings and interact with safety champions during walkabouts with the Chief Nursing Officer, the Non-Executive Director for Maternity and Neonatal services, and the Obstetric, Neonatal and Maternity Safety champions.

Members of the maternity and neonatal team attended the listening event meetings in Q3 from a range of areas, including neonatal services, community midwifery and specialist midwives.

Themes raised during Q3 were:

- Designated areas for breast feeding staff to express
- The movement of staff from substantive to bank contracts of employment to facilitate flexibility in shift allocations.
- Challenges with the current digital Electronic Patient Record system and data capture capabilities.

Current work is ongoing within the specialty to address the concerns raised:

- The Trust are aware of the current lack of private designated expressing areas and is part of the Trust-wide agenda and Baby Friendly Initiative (BFI) strategy group
- The Retention Midwife has begun exploring flexible rostering with the maternity Matrons
- Maternity digital system - ongoing business planning is in place to secure funding for the new system– risk register entry 2467

Themes, commonalities and actions from this feedback is monitored via the Maternity and Neonatal Safety Champions meetings and is triangulated with further service insights in the Maternity and Neonatal Bi-annual 'Insights' report to drive our continuous improvement work.

7. NHS RESOLUTION MATERNITY INCENTIVE SCHEME UPDATE Q2 2023/24

The Clinical Negligence Scheme for Trusts released their Safety Standards for Year 5 on 30 May 2023 including a new Saving Babies Lives Version 3. Updates on progress and monitoring towards achievement of the 10 safety actions outlined is completed and shared within Maternity and Neonatal Speciality Governance meeting and Board Level Safety Champions.

The current position and projection for submission in January 2024 is detailed in table 4. Of note, the Trust has had confirmation of compliance with MIS Year 5 and the Board of Directors has signed off compliance which was submitted in February 2024.

	Maternity Incentive Scheme - Safety Action Detail	RAG (Dec 2023)	Projected Submission RAG
1	Are you using the National PMRT to review perinatal deaths to the required standard?		
2	Are you submitting data to the Maternity Services Data Set (MSDS) to the required standard?		
3	Can you demonstrate that you have transitional care services in place to minimise separation of mothers and their babies?		
4	Can you demonstrate an effective system of clinical* workforce planning to the required standard?		
5	Can you demonstrate an effective system of midwifery workforce planning to the required standard?		
6	Can you demonstrate that you are on track to compliance with all elements of the Saving Babies' Lives Care Bundle Version Three?		
7	Listen to women, parents and families using maternity and neonatal services and coproduce services with users		
8	Can you evidence the following 3 elements of local training plans and 'in-house', one day multi professional training?		
9	Can you demonstrate that there are robust processes in place to provide assurance to the Board on maternity and neonatal safety and quality issues?		
10	Have you reported 100% of qualifying cases to Healthcare Safety Investigation Branch (HSIB/CQC/MNSI) and to NHS Resolution's Early Notification (EN) Scheme from 30 May 2023 to 7 December 2023?		

Table 4. Progress and projection for compliance with MIS Year 5.

This year KPMG undertook an audit of the evidence submitted from Maternity and Neonatal services to demonstrate compliance with MIS. Safety Action 6 of MIS has been excluded from the audit as this element of MIS is being over-seen by the Local Maternity and Neonatal System (LMNS).

The audit commenced in October of 2023 with a finalised report received in December of 2023 outlining compliance in all 9 of their assessed standards upon completion of 3 tasks, which fell outside of the time scale of their review.

Finding/Action	Completion
Safety Action 4 – Sharing of the anonymous staff survey regarding obstetric workforce compensatory rest shared with Trust Board	**Completed** please see Maternity and Neonatal Quality report for Q2 23/24
Safety Action 8- Sharing of the Maternity Training Needs Analysis 23/24 with the Trust Board and LMNS	**Completed** please see Maternity and Neonatal Quality report for Q2 23/24, discussed with LMNS on 21/11/2023
Safety Action 9- for the Board Level Maternity Safety Champions to complete the NHS E Perinatal Culture and Leadership Programme.	**Ongoing** Training commenced in November of 2023.
Safety Action 9- for the Perinatal 'Quad' leadership team to meet with the board level safety champions on a quarterly basis (2 within the reporting period)	**Completed** at the time of the report completion 1 meeting had taken place the second took place in January 2024

Table 5. Progress of outstanding actions upon completion of KPMG audit Dec 2023

8. SAFETY ACTION 6 OF MIS SAVING BABIES LIVES CARE BUNDLE V3.

Saving Babies Lives Version 3 implementation was assessed externally by the LMNS using the national implementation tool on NHS futures platform. The RUHs evidenced position in Q3 is reported in table 6.

Intervention Elements	Description	Element Progress Status (Self assessment)	% of Interventions Fully Implemented (Self assessment)	Element Progress Status (LMNS Validated)	% of Interventions Fully Implemented (LMNS Validated)	NHS Resolution Maternity Incentive Scheme
Element 1	Smoking in pregnancy	Partially implemented	90%	Partially implemented	70%	CNST Met
Element 2	Fetal growth restriction	Partially implemented	80%	Partially implemented	60%	CNST Met
Element 3	Reduced fetal movements	Fully implemented	100%	Partially implemented	50%	CNST Met
Element 4	Fetal monitoring in labour	Partially implemented	80%	Partially implemented	80%	CNST Met
Element 5	Preterm birth	Partially implemented	85%	Partially implemented	78%	CNST Met
Element 6	Diabetes	Fully implemented	100%	Fully implemented	100%	CNST Met
All Elements	TOTAL	Partially implemented	86%	Partially implemented	73%	CNST Met

Table 6. RUH Maternity Current position for implementation of Saving Babies Lives v3.

Ongoing work continued towards full implementation of all elements of Saving Babies Lives Version 3. CNST MIS compliance required 70% implementation compliancy by submission in February 2023 encompassing of a minimum of 50% compliancy in each of the elements. The position in Q3, projection was for >70% of compliance by submission in February, fulfilling the MIS standards requirement

Key areas of focus are:

- Element 2 - Capacity of Obstetric Ultrasound (USS) department to facilitate alignment to the national USS pathways, whilst fulfilling next working day targets for unscheduled USS in response to reduced fetal movements. Significant systems and practice changes required in response. Risk Register entry 1948. Ongoing audit plan in place; to closely monitor service change impacts.
- Element 2 - Digital Blood Pressure (BP) monitors are not currently validated for use in pregnancy and pre-eclampsia. National procurement issue in response to Saving Babies Live v3. Risk register Entry 2679.
- Element 5 - Current national shortage of evidence-based best practice Point of Care Bedside Biomarker for the assessment of Threatened Pre-Term Labour Risk currently under assessment for the risk register.

9. SAFE MATERNITY STAFFING

9.1 MIDWIFERY STAFFING

As of 15 of January 2024, the band 5/6 Midwifery Vacancy rate was 1.38 whole time equivalents (WTE), however 8.29 WTE are on maternity leave giving an overall 'gap' of 9.52 WTE.

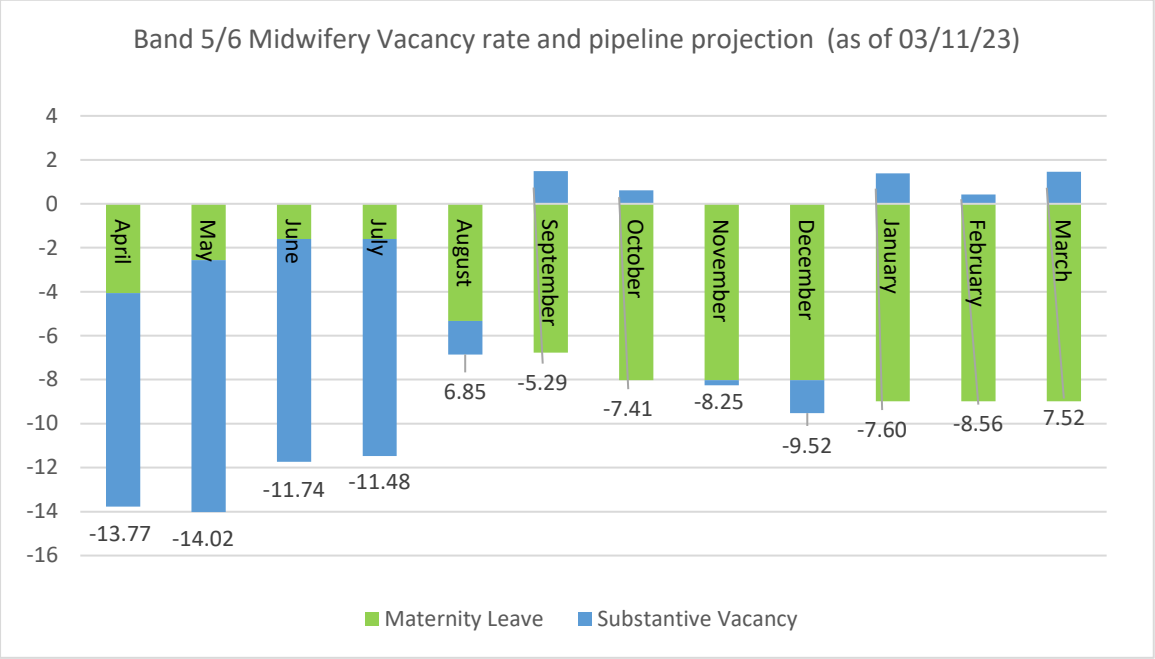


Figure 7. Band 5/6 Midwifery Workforce staffing vacancy and forecast (not including long-term sickness)

Measure	Aim	October	November	December
Midwife to birth ratio	1:24	32	30	26
Midwife to birth ratio including bank	1:24	29	27	23
Episodes of inability to maintain Supernumerary labour ward coordinator status	0	5	2	0
1:1 care not provided	0	1	0	0
Confidence factor in Birth-rate+ recording	60%	85.5%	82.78%	82.28%

Table 7. Midwifery staffing safety measures

9.2 OBSTETRIC STAFFING

Measure	Aim	October	November	December
Consultant presence on BBC (hours/week)	≥90 hours	98	98	98
Consultant non-attendance (in line with RCOG guidance)	0	0	0	0
Twice daily MDT ward round	90%	87%	50%	82%

Table 8. Obstetric staffing safety measures

MDT ward round has been negatively impacted by a change in data capture from a paper based system to digital reporting. In Q3, the decision has been agreed to revert to a paper based system to provide assurance of true 'work as done'. Following receipt of assurance of a stable position; achieving consistence of ≥90% compliance, the service intends to move towards an exception reporting model.

During the month of October 2023, a noted increased birth rate and acuity was identified with the number of births exceeding the normal average rate of approximately 340 babies born. The number of babies born in the month of October was 390. This was identified as an impacting factor on the midwifery staffing metrics.

An Obstetric workforce review has been completed and has identified a risk within the current established funding of Obstetric Consultant posts, Risk 2581. The maternity investment case has supported an increase of 2.0 WTE consultants, the posts are currently out to advert with interviews scheduled in 2024, once recruited this risk will be re-assessed with potential for closure.

10. INSIGHTS FROM SERVICE USERS AND MATERNITY VOICES PARTNERSHIP CO-PRODUCTION

10.1 COMPLAINTS/COMPLIMENTS/PATIENT ADVICE AND LIAISON SERVICE/CONTACTS

	October	November	December
Number of formal compliments	5	4	5
Number of Patient Advice and Liaison Service (PALS) contacts/concerns	8	5	10
Complaints	3	0	0

Table 9. Complaints and compliments Q3 23/24

During Q3, the service received 3 complaints, of which there were no commonalities noted; ranging between postnatal care, neonatal care and antenatal translation/interpretation during first trimester screening. Two of the complaints have been closed with responses shared with the families in December of 2023, one complaint remains open. PALS contacts varied in Q3 from parking fines received during care episodes to breastfeeding support, no clear themes were identified within the contacts made.

During Q3, the service established a triangulation of feedback 'Insights group' to review the range of feedback the service receives on a monthly basis. The aim will be to assess new 'insights' identifying any areas of emerging concern and provide information for the cumulative oversight of trends and themes. This working group will support the information presented in

the Bi-Annual Maternity and Neonatal 'Insights' report aiming to identify the speciality's Safety Priorities informing future improvement work. The reporting will be shared wider within the LMNS for collaboration and regional system-wide improvement.

Compliments to the service were received across all areas of Maternity and Neonatal care including Bath Birthing Centre, Anaesthesia and Mary Ward. A continued theme amongst compliments to the service is the kindness and compassion showed to birthing people and their families from members of staff providing care. We are currently exploring a more robust method of capturing compliments received to the service as often these are received via informal routes, and kind gestures from families such as cards.

Example:
'*Massive thank you to all of the staff in the birthing centre and maternity ward. I recently gave birth and the care I received was just brilliant, everyone we came into contact with were just so caring and kind, they were all amazing. Thank you for making such a huge moment of becoming a mother and giving birth a positive one'.*

10.2 MATERNITY AND NEONATAL VOICES PARTNERSHIP PLUS (MVPP)

The Maternity and Neonatal Voices Partnership Plus (MNVPP) will hold a key stakeholder membership in the 'Insights' group and have been providing feedback into the meetings since their commencement in October 23.

The NHSE Maternity and Neonatal Programme have published the Maternity and Neonatal Voices Partnership Guidance in November 2023; a gap analysis will be undertaken with the RUH MNVP lead in Q4.

MNVP hours have been increased and agreed via the LMNS Programme Board to support the work plan across the BSW system. This will support delivery of the key priorities;

- Listen to Women & Families from all backgrounds & ethnicities
- Support improvement of Antenatal and Postnatal care
- Support development of perinatal specialist services
- Improve digital systems and process for our families
- Improvement of intrapartum care – Induction of Labour (IOL) flow, supporting birth choices and consent
- Improved involvement in governance and communication to support delivery of the 3 year Maternity and Neonatal delivery plan and transformation

11. AVOIDING ADMISSION INTO THE NEONATAL UNIT (ATAIN) & TRANSITIONAL CARE

During Q3, the Transitional care service was facilitated 100% of the time with >50% of neonatal care provision within a Transitional Care Pathway (TCP), providing neonatal care at the mother's bedside.

Q3 saw the launch of the new TCP guidance increasing the scope to encompass clinically well babies born ≥34+0 (previously 35+0), and all babies born <2nd centile for birth weight. This will further reduce separation of mothers and babies for those families requiring increased clinical care and support.

A new named link midwife role for TCP was established to ensure effective communication and collaborative service planning across the service. The service looks towards establishing a core TCP working group consisting of clinicians across the Multidisciplinary team to continue the assessment and evaluation of the service's effectiveness and improvements/developments.

The Avoiding Term Admissions into the Neonatal unit (ATAIN) working group identified 7 avoidable admissions into the Local Neonatal Unit (LNU) in Q3. There were no clear commonalities seen within the modifiable factors in care resulting in admission. Immediate learning was identified in one case regarding escalation of Fetal Heartrate concerns from the outset of CardioTocoGraph (CTG) monitoring. This has been addressed via the monthly 'safety catch' vignette news flash, and added to the safety briefing within the antenatal/intrapartum care settings.

The Q4 ATAIN report will provide an annual review for themes and trends to feed into improvement work streams and wider correlation for thematic assessment via the Maternity and Neonatal 'Insights' report.

The leading cause for admission into the neonatal unit both locally and nationally remains respiratory distress. The RUH remains committed to reducing separation of mothers and babies, by avoiding term admissions into the neonatal unit (ATAIN) therefore will be embarking upon a practice development project called the 'COSEI project' . The COSEI project aims to deliver nasal continuous positive airway pressure (NCPAP) within the birth room via a ventilator whilst babies are skin to skin with a parent. It is designed for babies that develop transient respiratory distress around the time of birth, which can resolve following additional support via NCPAP. Simulation training is in progress with an anticipated launch date during Q4 23/24.

12. RISK REGISTER

In Q3 Maternity and Neonatal, services presented six new risk assessments, which were approved for the risk register:

2649	Delays to commencement of induction of labour	12
2679	Service provision of digital blood pressure monitors validated for use in pregnancy and pre-eclampsia	5
2660	Tertiary level neonatal cot capacity in the region	8
2648	Family Origin Questionnaire processing for screening of Haemoglobinopathies	9
2681	Room bookings for mandatory training programme as outlined in the maternity TNA –section 6.	9
2664	Ligature risk	5

Table 10. New Risks for the Maternity and Neonatal risk register Q3 2023

During Q3 one risk was closed, following installation of Emergency Bells in all Obstetric Theatres in October of 2023

2396	Obstetric theatre emergency call bells	12

Table 11. Closed Risks for the Maternity and Neonatal risk register Q2 2023

A full summary of the Maternity risk register is detailed in table 14. Actions towards closing the

gaps identified within the individual risk assessments on datix, and continued mitigation of risk, will be monitored through Specialty and Divisional governance with Trust Management Executive, oversight to ensure appropriate actions are taken in accordance with the Trust risk framework.

1734	Day Assessment Unit patient safety risk – area not compliant or fit for purpose	15
1948	Obstetric ultra sound scan capacity	12
2359	Maternity Information System IT support/capacity	8
2417	Maternity triage	12
2467	Maternity workforce	12
2481	Staff Entonox exposure in birthing environments	4
2482	Assessment of minor and low harm Datix management in Maternity and Neonatal Division.	6
2522	The Provision of maternity care to birthing people who do not identify as a female gender	8
2483	Expiration of Maternity and Neonatal staff resources and guidelines	8
2562	There is a risk to the Electronic Patient Record (EPR) due to unsecured funding following withdrawal from Cerner Millennium	12
2581	There is a risk that we will be unable to meet the service demand for obstetric medical staging with the current unsecured establishment of Obstetric Consultant.	12
2591	There is a risk that the current funded provision of Allied Health Professionals in the Neonatal Unit will not continue following cease of fixed term funding from the neonatal Operational Delivery Network.	9
2649	Delays to commencement of induction of labour	12
2679	Service provision of digital blood pressure monitors validated for use in pregnancy and pre-eclampsia	5
2660	Tertiary level neonatal cot capacity in the region	8
2648	Family Origin Questionnaire processing for screening of Haemoglobinopathies	9

Table 12. Maternity and Neonatal Risk Register December 2023

13. MATERNITY CQC INSPECTION

The CQC undertook an announced inspection of Maternity services in November 2023 as part of the national maternity inspection programme. As detailed in the Chief Executive Report, Maternity services on the Combe Park site were rated overall as ‘outstanding’. Chippenham and Frome Birth Centres were inspected for the first time, they were both rated as ‘good’. The finalised report was published in March 2024 and will feature in the Q4 report.

14. RECOMMENDATION

The Board of Directors is asked to receive and discuss the content of the report.

Appendix 1 TC and ATAIN report Q3 23/24

Appendix 2 2021 MBRRACE stillbirth and neonatal death thematic analysis report

Appendix 1

Clinical Audit Report

Transitional Care Pathway and Avoiding Term Admissions Into Neonatal (ATAIN) Audit Q3 2023/2024

Speciality: Local Neonatal Unit

Division: Family & Specialist Services Division

Project team				
Kirstie Flood	Title/grade:	Lead Nurse	Data period:	Q3 October 2023 – December 2023
Sarah Goodwin	Title/grade:	Quality and Education Neonatal Sister	Report completion:	January 2024

Transitional Care Pathway and ATAIN Audit Q3 2023/2024

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Background
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Key findings

Clinical audit report
Project title
Division
Specialty
Disciplines involved
Project leads

Standards
Sample
Data source
Audit type
Audit findings

Transitional Care Pathway (TCP) and Avoiding Term Admissions Into Neonatal (ATAIN) Action Plan

Appendix 1: Detailed analysis of babies requiring TCP

Appendix 2: Detailed analysis of term babies admitted to the Neonatal Unit

Executive Summary

1. Background

Avoiding Term Admissions Into Neonatal (ATAIN) Services and Transitional Care services at the RUH, strives to reduce the separation of mothers and babies, by providing services and staffing models that keep mother and baby together. This is pivotal in reducing the harm caused by separation.

The continued monitoring of admission data and modifiable factors enable RUH Maternity and Neonatal services to continuously evaluate current systematic care provision and seeks to identify key areas of improvement.

Pathways of care into transitional care have been jointly approved by maternity and neonatal teams with a focus on minimising the separation of mothers and babies (Neo-056). Neonatal teams are involved in decision making and planning care for all babies in transitional care.
The pathway of care into transitional care has been fully implemented and is audited on a quarterly basis. Findings are shared with the Neonatal Safety Champion, Local Maternity and Neonatal System (LMNS), and Integrated Care System (ICS) quality surveillance meeting every quarter.

This audit report is demonstrative of the upward reporting from the ATAIN working group's Terms Of Reference (TOR) supporting the continued improvement of services and supplementary evidence of the Maternity Incentive Scheme - year five, Safety Action 3*.

**Safety Action 3: To demonstrate that you have transitional care services in place to minimise separation of mothers and their babies and to support the recommendations made in the avoiding term admissions (ATAIN) into Local Neonatal Units (LNU) programme.*

2. Objectives

- To evaluate the number of admissions into the neonatal unit that would have met transitional care (TC) admission criteria but were admitted to the neonatal unit (NNU) due to capacity or staffing issues.
- To evaluate the number of babies that were admitted to, or remained on NNU because of their need for nasogastric tube feeding, but could have been cared for on a TC if nasogastric feeding was supported there. 34+0 - 36+6
- To provide a data record of existing transitional care activity, (regardless of place - which could be a TC, postnatal ward, virtual outreach pathway etc.) The data should capture babies between 34+0-36+6 weeks gestation at birth, who neither had surgery, nor were transferred during any admission, to monitor the number of special care or normal care days where supplemental oxygen was not delivered
- Analysis of staff/parent data, captured via a questionnaire relating to satisfaction, quality and safety of care
- Outline the key findings and improvements identified by the ATAIN working group's activity on a quarterly basis for sharing within Maternity and Neonatal Governance structures and the Board Level Safety Champions

- To provide evidence and assurance of sharing with the Neonatal and Maternity Safety Champions, and Board Level Safety Champions, LMNS and ICS quality surveillance meeting each quarter
- To provide an audit trail of evidence that reviews all term babies transferred or admitted to the LNU, irrespective of their length of stay.

The ATAIN working group is responsible for completing a thematic review of the primary reasons for all admissions, with a focus on the leading cause/reason(s) for admission through a deep dive to determine relevant areas of improvement to be addressed. This is in line with the working group's TOR.

Table 1 details the key findings from the audit

Standard	Compliance October 2023	Compliance November 2023	Compliance December 2023	Quarter 3 23/24 Totals
Audit findings shared with neonatal safety champion	**Complete**	**Complete**	**Complete**	**Complete**
The number of admissions to the neonatal unit that would have met current TC admission criteria but were admitted to the neonatal unit due to capacity or staffing issues	**0**	**0**	**0**	**0**
The number of babies that were admitted to, or remained on NNU because of their need for nasogastric tube feeding, but could have been cared for on a TC if nasogastric feeding was supported there. 34+0 -36+6	**5**	**6**	**3**	**14**
% of shifts TCP nurse provided as per TCP staffing model	**100%**	**97%**	**90%**	**95.6%**
TCP open	**100%**	**100%**	**100%**	**100%**
Number of babies readmitted to neonatal unit from TCP	**0**	**0**	**1**	**1**
Of the cases reviewed, the number of avoidable term admissions 37+0 weeks gestation and	**1**	**4**	**2**	**7**

above admitted to the neonatal unit				
The number of term babies transferred or admitted to the neonatal unit from other areas – for example Emergency Department, Children's ward.	**2**	**1**	**3**	**6**

Table 1: Key findings from the audit

3. Clinical Audit Report

Project title

Transitional Care and ATAIN Audit Q3 2023/2024 October - December 2023

Division

Family & Specialist Services Division

Specialty

Local Neonatal Unit

Disciplines involved

Neonatal Nurse Consultant, Neonatal Senior Sister

Obstetric Consultant, Patient Safety Midwives

ATAIN working group

Project leads

Kirstie Flood Lead Nurse

Sarah Goodwin Quality and Education Neonatal Sister

Standards

Maternity Incentive Scheme - year five. Safety Action 3.

Sample

All admissions to LNU and TCP from 01/10/2023-31/12/2023 to determine if the correct location of care was achieved.

All babies born at 37+0 weeks gestation and above from 01/10/2023-31/12/2023 who were admitted to the LNU.

Data source

Badger Net, NNU and TCP admission book and individual medical notes.

Audit type

Retrospective and live data collection.

3.1 Transitional Care Audit Findings

3.1.1 In Q3, 57% of the total number of admissions to the Local Neonatal Unit (LNU) (102 babies) were cared for on the transitional care pathway for some or part of their admission. Out of this, 35% (62 babies) spent the entirety of their admission on the TCP.

3.1.2 One baby was identified as a potential missed opportunity to have facilitated non-separation of mother and baby via the TCP. The baby was admitted from home with hypothermia but their temperature very quickly normalised, therefore at review it was assessed that they could have been admitted with their mum on the TCP.

3.1.3 Compliance with the staffing model outlined in the Maternity Safety Standards for staffing of the TCP was 100% of shifts for October, 97% November and 90% for December. The decrease in compliance in December was attributable to the neonatal unit being over capacity with high acuity, vacancies in B6 and B5 posts, higher than average study leave (due to supporting staff to complete their Qualified in Speciality course) and 4.4% sickness. Some shifts showed the TCP nurse looking after more than the four recommended babies. Due to the workload on the neonatal unit, staff could not be redeployed from LNU to assist on TCP. Other shifts showed staff looking after babies on TCP and babies in LNU.

3.2 ATAIN Audit Findings

3.2.1 The ATAIN working group identified seven avoidable admissions during Q3. Two babies were identified as avoidable in response to modifiable factors within their maternity care, which may have changed the neonatal care pathway. The other five were in response to modifiable factors in their neonatal care, which may have avoided their subsequent admission.

3.2.2 October admissions - Baby 1 was admitted from home with a skin abrasion in their groin. The care was reviewed and it was declared an avoidable admission to the LNU, this baby could have been admitted either into the Children's ward or under the TCP.

3.2.3 November Admissions - Baby 2 had a pathological cardio-tocograph (CTG) in labour, which if escalated sooner; the subsequent birth may have been expedited. This may have improved the baby's condition at birth and avoided the baby's admission to the LNU. Babies 3 and 4 were twins who were admitted to the LNU with hypothermia and hypoglycaemia. Following review of their care, it was recognised that the mother had been on labetalol in pregnancy, the recommended postnatal care for this was for the babies to receive blood glucose monitoring. This monitoring did not occur as per guidance, subsequently it was identified that the babies had low temperatures and were hypoglycaemic.

Baby 5 was a baby admitted to the LNU with poor adaptation, the review highlighted that due to the poor recording of the fetal heart rate during re-siting of an epidural, there was a potential opportunity for fetal concerns to have been noted earlier and a decision to deliver could have been expedited.

3.2.4 December Admissions - Baby 6 was a known to be subject to safeguarding plan, this outlined that mother was not to be unsupervised with her baby. Children's social care did not provide cover for overnight and the maternity service was unable to provide 1:1 care due to service acuity, therefore the baby had to be admitted to the LNU as a place of safety. Baby 7 was admitted from home with poor feeding; upon review it was deemed he TCP would have been a more appropriate location than the LNU. The cases have highlighted learning that is cascaded to the teams. Learning has been highlighted on the Safety Catches, shift Safety Briefs, Local Newsletters, Quality Board displays and is shared at the Maternity Neonatal Governance meeting. In line with the Standard 3, neonatal unit transfers or admissions regardless of their length of stay, of all term babies transferred or admitted to the neonatal unit from other areas within the RUH, are reviewed. This includes, Emergency Department and the Children's ward. In Q3 23/24 there were 3 babies that were admitted, a decrease on the previous quarter, admissions are assessed against current admission guidance seeking to ascertain if the LNU was the appropriate care setting. In all cases, the admission to the LNU was considered appropriate.

4. Quality Improvement Projects

The Newborn Early Warning Trigger and Track (NEWTT2) charts and toolkit has been implemented for all TC babies in Q3, 2023-2024. The NEWTT2 chart and framework encompass parental concern into escalation scoring, in acknowledgement of the importance of the family voice as part of holistic care reviews.

This extended framework provides an escalation tool and a standardised response and review too using the PIER principles of 'Prevention, Identification, Escalation, and Response' adopted by the National Patient Safety Improvement Programme. NEWTT2 outlines a standardised escalation response including who is responsible, time scale of

review target, and support information for further escalation. This tool is designed to support recognition and escalation of the deteriorating Newborn under the care of TCP. Audit results for the use of NEWTT2 charts identify full completion, an audit of 10 sets of notes from Q3 identified 2 occasions where there was a lack of documented escalation in line with the framework. This was communicated to the team via e-mail correspondence and information in the newsletter to remind staff to follow the correct escalation pathway as per instructed on the charts.

- Fund-raising continues to covert clinical room G into a 4 bedded nursery with beds alongside each cot for a parent to sleep
- New named link midwife role for TCP to improve communication and collaborative working amongst the clinical team
- TCP MDT working group in the process of being established, aiming to work together to implement change and improve and progress TCP service.

5. COSEI Project

The leading cause for admission into the LNU at the RUH is respiratory distress (appendix 1) The project, 'continuous positive airway pressure on skin to skin early intervention' (COSEI), aims to reduce admissions with transient respiratory distress. The COSEI Project is a practice development project that aims to deliver nasal continuous positive airway pressure (NCPAP) in Bath Birth Centre via the ventilator while babies are skin to skin on a parent. It is designed to reduce maternal separation rates for babies that develop transient respiratory distress around the time of birth that fit a certain criteria. Simulations are in progress, with launch date anticipated in Q4 to ensure staff training has been facilitated.

The project aims to:

- Reduce parental-infant separation, avoiding unnecessary admission to the Neonatal Unit
- Reduction of parental-infant stress levels
- Promote bonding and increased breastfeeding rates
- Improve long-term family outcomes
- Reduce of term admissions to the Neonatal Unit

6. Conclusion

RUH Maternity and Neonatal services remain committed to ensuring progression towards a reduction in preventable or avoidable separation of mothers and babies wherever possible. The progression of quality improvement and learning initiatives within this report will be monitored through Maternity and Neonatal governance with progress updates, and clinical outcome measures within future reporting.

Appendix 1: Detailed analysis of babies requiring TCP

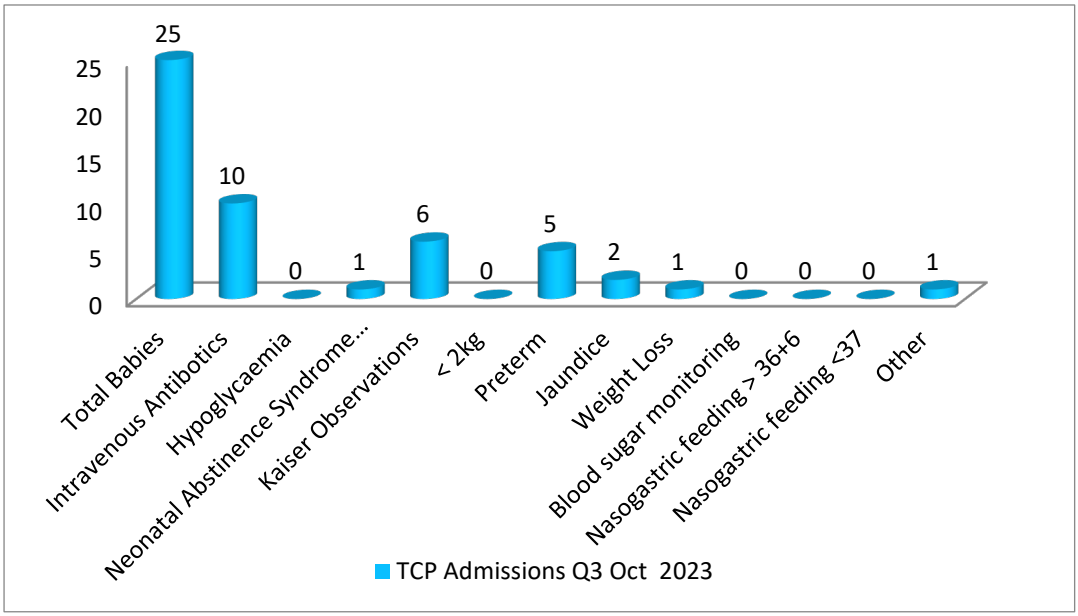

Figure 1: The reason for admission to Transitional Care for October 2023

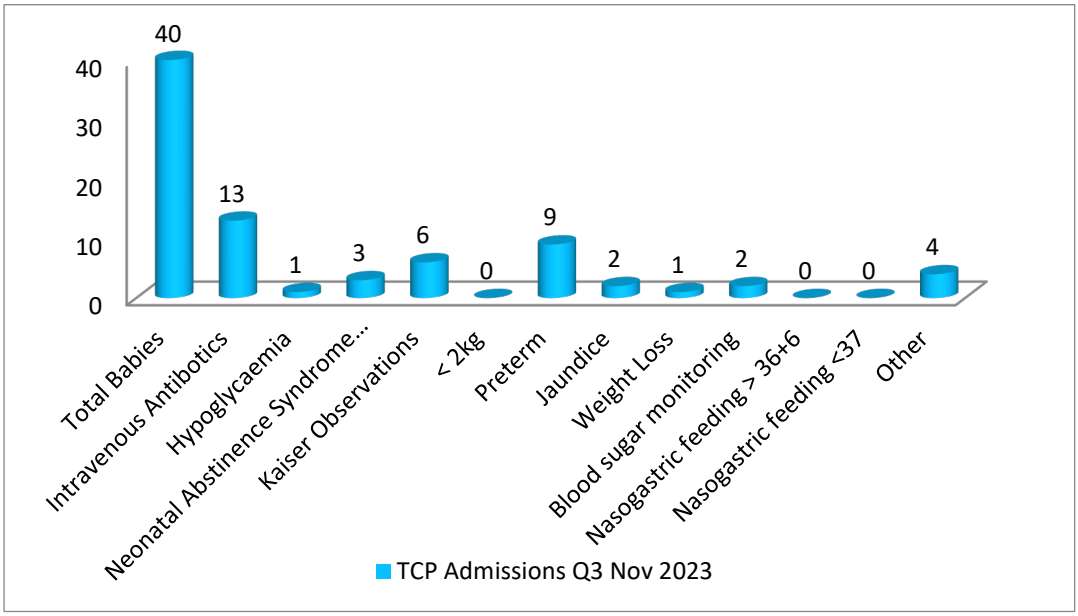

Figure 2: The reason for admission to Transitional Care for November 2023

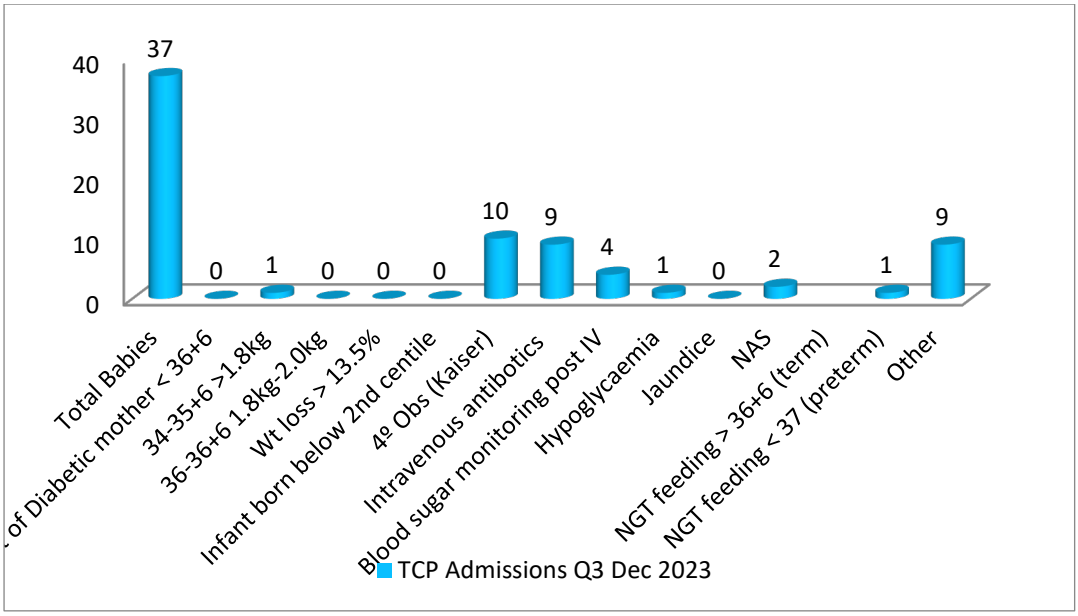

Figure 3: The reason for admission to Transitional Care for December 2023

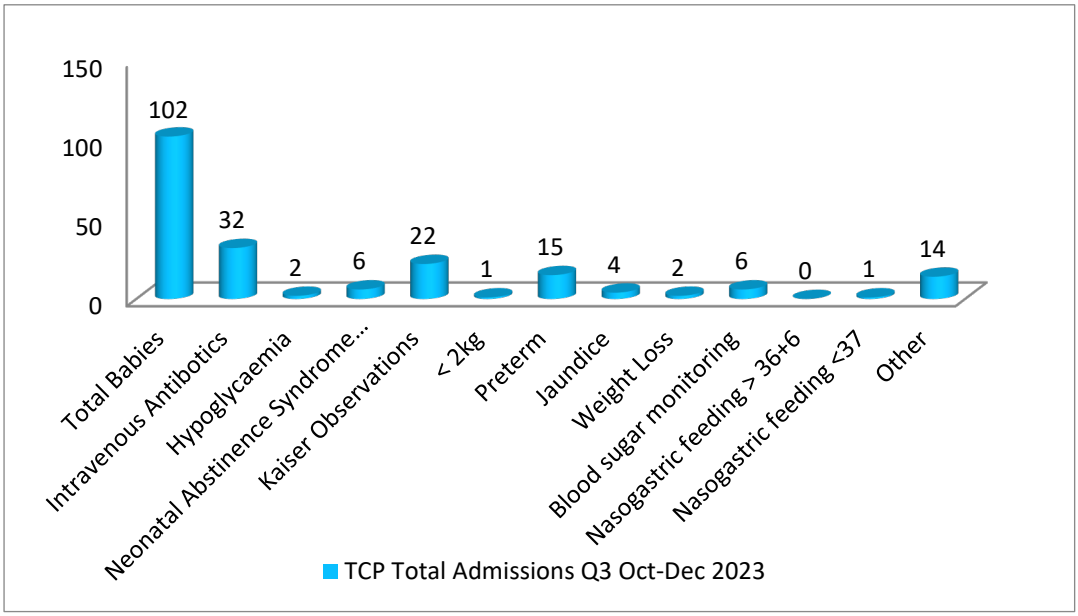

Figure 4: Reasons admissions to Transitional Care for Q3

Title: RUH TC and ATAIN Audit Q3 2023/2024 October 2023 – December 2023	Authors: Kirstie Flood Lead Nurse Neonatal Unit Sarah Goodwin Quality and Education Neonatal Sister
Date January 2024	Version: 1

Appendix 2: Detailed analysis of Term admissions to NNU

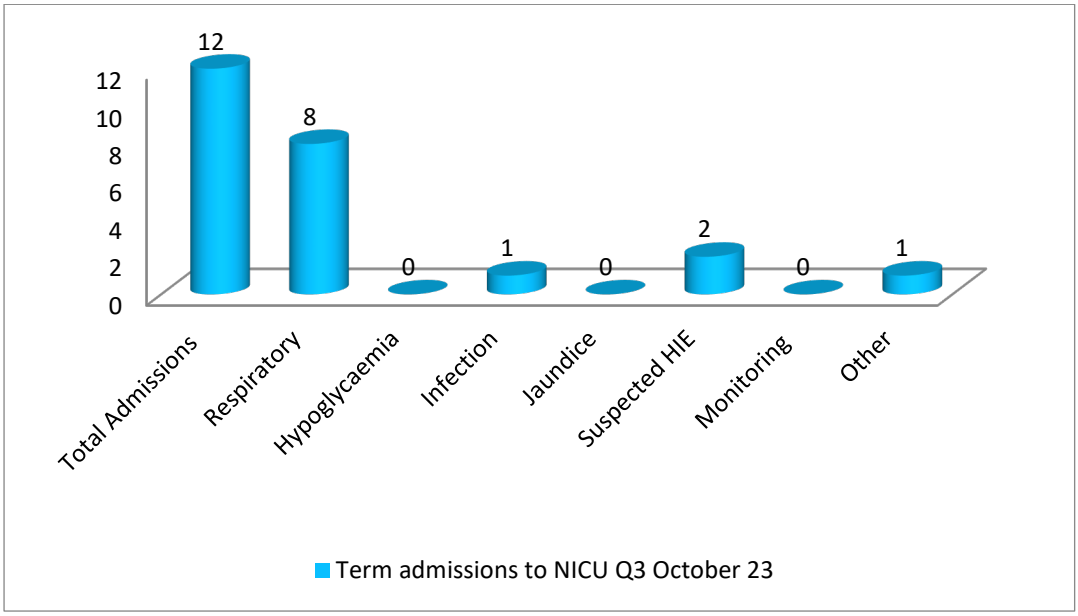

Figure 5: Reason for term admissions to NNU in October 2023

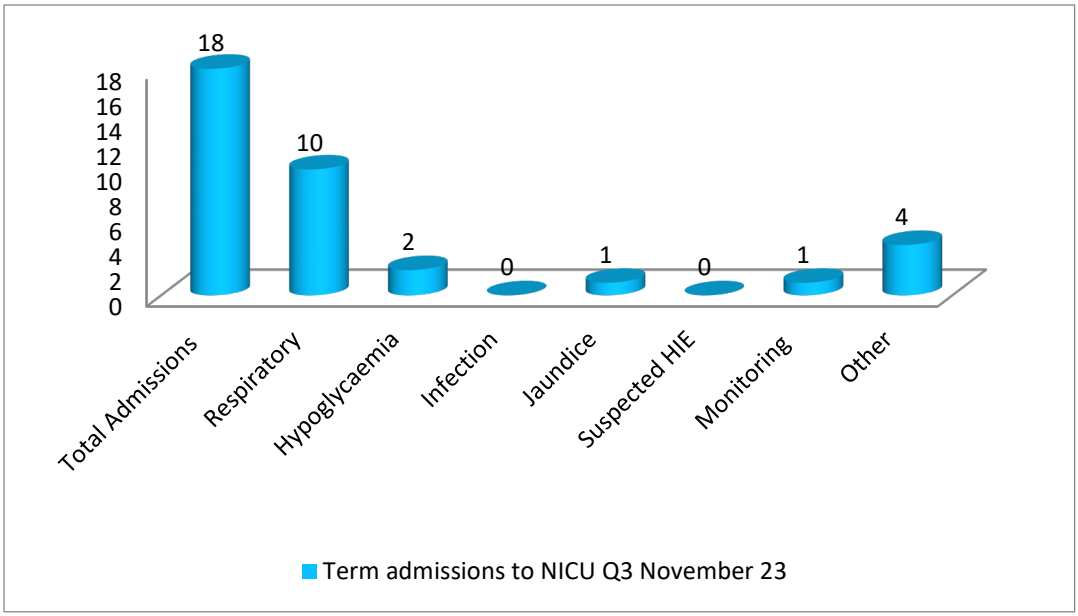

Figure 6: Reason for term admissions to NNU in November 2023

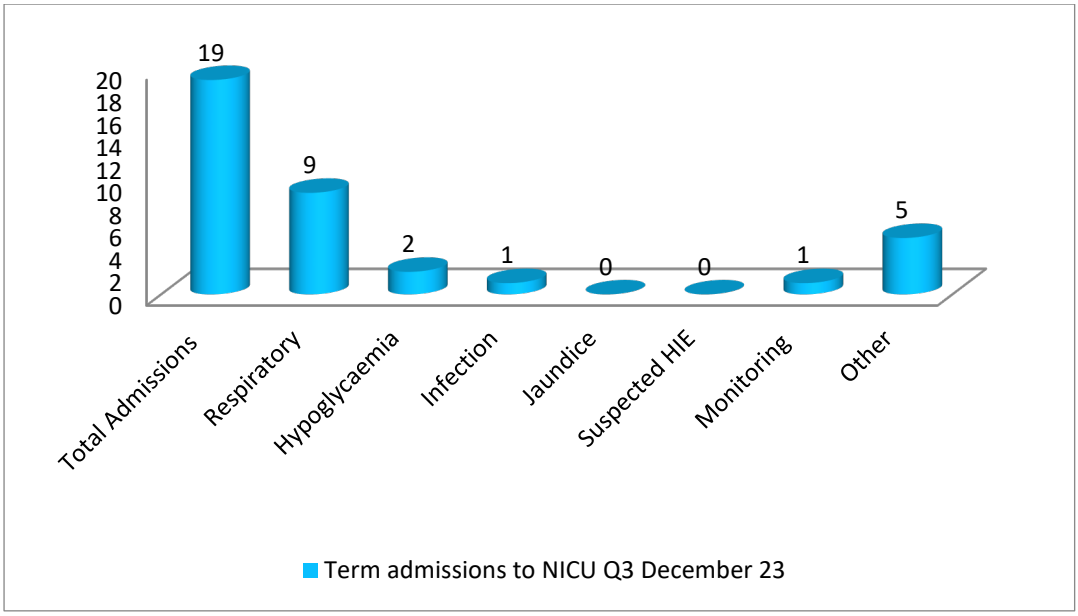

Figure 6: Reason for term admissions to NNU for December 2023

Appendix 2

Stillbirth and Neonatal Mortality review of 2021 cases for learning and improvement in Royal United Hospitals (RUH) Bath Maternity and Neonatal Services.

October 2023
Bex Walsh Bereavement Midwife

1. Report Terms of Reference, Background and Context.

Following the publication in September 2023 of the National Mothers and Babies Reducing Risk through Audit and Confidential Enquiries (MBRRACE) Perinatal Mortality Surveillance report of births during 2021, this report aims to review and analyse the learning and improvement findings, recommendations, and actions, in response to Stillbirth and Neonatal Mortality across the RUH Maternity and Neonatal service in 2021. The national ambition through the Maternity Safety Strategy comprises of evidence based initiatives to implement best clinical practice through a culture of continuous learning and improvement.

The MBRRACE report identified that in 2021, the RUH Maternity and Neonatal services rate of stillbirth was 3.24 per 1000 births (2.89 per 1000 births when excluding death due to congenital abnormalities). This data set has been analysed by MBRRACE to account for factors such as maternal age, deprivation, baby's gender, ethnicity, multiplicity and gestation at birth. This stabilised and adjusted rate, according to MBRRACE is around the average for similar Trusts and Health boards, producing an amber classification (Table 1).

When reviewing Neonatal Mortality, MBBRACE identified a rate of 1.1 per 1000 births (0.89 per 1000 when excluding deaths due to congenital abnormalities). This data set has been stabilised and adjusted as above and according to MBRRACE is in line with the average for similar Trusts and Health Boards, producing an amber classification.

Type of death	Number	Crude rate	Stabilised & adjusted rate (95% C.I.)		Comparison to the average for similar Trusts & Health Boards
Stillbirth	13	2.89	3.24	(2.54 to 4.21)	Up to 5% higher or up to 5% lower
Neonatal	4	0.89	1.10	(0.69 to 1.73)	Up to 5% higher or up to 5% lower
Extended perinatal	17	3.77	4.33	(3.62 to 5.58)	Up to 5% higher or up to 5% lower

Perinatal mortality (excluding deaths due to congenital anomalies)

Type of death	Number	Crude rate	Stabilised & adjusted rate (95% C.I.)		Comparison to the average for similar Trusts & Health Boards
Stillbirth	13	2.89	2.98	(2.38 to 3.81)	Up to 5% higher or up to 5% lower
Neonatal	3	0.67	0.83	(0.53 to 1.33)	Up to 5% higher or up to 5% lower
Extended perinatal	16	3.55	3.80	(3.22 to 4.87)	Up to 5% higher or up to 5% lower

Table 1 – RUH Bath Perinatal Mortality statistics MBRRACE report 2021 available at: RUH MBRRACE report 2021-rep.pdf

2. MBRRACE recommendations

The stabilised and adjusted mortality rates for RUH were similar to, or lower than, those seen across similar Trusts and Health Boards (table 1). However, the aspiration is to seek rates comparable with the best performing countries, for example those in Scandinavia. MBRRACE stipulates that all trusts ensure a review using the Perinatal Mortality Review Tool (PMRT) has been carried out for all the deaths in this report to assess care, identify and implement service improvements to prevent future similar deaths.

The scope of this report is to undertake a review of the RUH PMRT response at the time of all stillbirths and neonatal deaths. This report will analyse the issues, actions or themes identified across the cases.

3. Stillbirths

In 2021, the RUH Maternity and Neonatal services reported 13 stillbirths and 2 neonatal deaths (MBRRACE referrals). Two further Neonatal deaths were reported, these babies had been transferred for higher neonatal care needs.

Two cases were investigated by the maternity branch of the Healthcare Safety Investigation Branch as intrapartum stillbirths, all other cases were reviewed within the PMRT framework. All cases reviewed within the PMRT framework received a Multi -Disciplinary Team (MDT) review with external representation from a clinical professional outside of the RUH services.

4. Neonatal Deaths

In the 2 cases of Neonatal deaths at the RUH, PMRT has been completed.

One baby was known to have congenital anomalies which were incompatible with life, this case was identified in the antenatal period and managed jointly between the bereavement midwife, screening, obstetric and neonatal teams to facilitate the care pathway chosen by the family.

In 1 case the mother was known to be COVID-19 positive prior to the birth and the baby tested positive for COVID 19 three days following birth.

In the 2 cases where the babies were transferred due to requiring a higher level of neonatal care, the hospital where the death occurred become the reporting hospital. Learning is included below and both cases were scrutinised by an MDT.

5. Findings and Recommendations

5.1 Plotting of symphysis fundal height measurements

In 4 cases, the symphysis fundal height (SFH) measurements were not always plotted. The review process identified that the current charts do not allow for pregnancies beyond their due date, standardised charts have now been added to the notes. Training on measuring and

plotting symphysis fundal measurements has also been provided and is mandatory for all midwifery and obstetric staff. Current processes require the measurement of SFH (Q1 audit compliance 100%) to be re-plotted onto the SFH chart two pages subsequent, this presents an inherent risk to the process of error. Current compliance of plotting the subsequent plotting in Q1 23 was 75%. This forms part of an ongoing audit programme in maternity and as part of the quality improvement trajectory within Saving Babies Lives. Digital transformation and procurement of a new Electronic Patient Record will facilitate automated plotted of SFH following data input of measurement.

5.2 Use of partograms

In 2 cases, the PMRT process identified that partograms had not been fully completed during labour. Partograms aid the identification of the normal progress in labour, safe uterine activity and early identification of the deteriorating mother. The use of partograms has been added to the stillbirth care pathway and included in the new mandatory perinatal bereavement study day launched in 2023.

5.3 Written information about Reduced Fetal Movements (RFM)

In 2 cases, the PMRT process identified that written information about what to do if RFM is experienced during pregnancy was not given. The 'Tommy's' pregnancy charity RFM leaflet should be given and discussed during antenatal appointments; in both cases RFM information was discussed however, there was no evidence that the Tommy's leaflet had been given. The Maternity Service has subsequently changed practice, the Tommy's leaflet is provided electronically via a QR code within the mother's handheld maternity record, this will also facilitate the provision of the leaflet in the mothers preferred language via the Tommy's leaflet.

5.4 Other learning -The following was identified in singular cases

- Need for clear documented plans for repeat CardioTocography (CTG)s
- Fresh eyes implemented in routine midwifery care to ensure referrals, pathways and additional tests are conducted robustly
- Safeguarding team audited enquires about domestic abuse
- Antenatal referral process updated to include the type of appointment
- Information was disseminated to detailing availability of services for those with a learning disability
- Feedback was given to the clinical team regarding maintaining a baby's temperature during resuscitation
- Start and finish group reviewed how to support transfers to hospice/home in the future.

5.5 Percentage of ethnicity and deprivation on perinatal mortality

Within this data set, 3 (17.6%) of the 17 mothers were of non-white British ethnicities. Data collected for the number of women who birthed at the RUH from 2021-2022 and 2023, thus far, identifies that approximately 90.5% and 90.94% of birthing people respectively, were from white group as detailed in tables 2 and 3.

		2021/2022	
		Total	
Measure	Ethnic Group	Total	%
Women who have birthed by Ethnicity	White (A,B &C)	3,989	90.5%
	Mixed (D,E,F & G)	48	1.1%
	Asian or Asian British (H,J,K &L)	80	1.8%
	Black or Black British (M,N & P)	34	0.8%
	Any other Ethnic Group (R &S)	67	1.5%
	Not Stated/ Not Known (Z, 99)	185	4.2%
	Blank Data	3	0.1%
	Total	4,406	

Table 2 – Births by ethnicity 21/22

		2022/2023															
		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov	
Measure	Ethnic Group	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Women who have birthed by Ethnicity	White (A,B &C)	293	86.94%	312	88.64%	308	91.12%	312	91.76%	334	89.78%	339	93.13%	340	93.92%	311	90.94%
	Mixed (D,E,F & G)	9	2.7%	4	1.1%	7	2.1%	6	1.8%	8	2.2%	9	2.5%	5	1.4%	8	2.3%
	Asian or Asian British (H,J,K &L)	9	2.7%	14	4.0%	10	3.0%	10	2.9%	10	2.7%	3	0.8%	4	1.1%	11	3.2%
	Black or Black British (M,N & P)	4	1.2%	3	0.9%	2	0.6%	2	0.6%	6	1.6%	4	1.1%	5	1.4%	2	0.6%
	Any other Ethnic Group (R &S)	6	1.8%	9	2.6%	1	0.3%	3	0.9%	4	1.1%	7	1.9%	3	0.8%	4	1.2%
	Not Stated/ Not Known (Z, 99)	9	2.7%	4	1.1%	7	2.1%	6	1.8%	10	2.7%	2	0.5%	5	1.4%	6	1.8%
	Blank Data	7	2.1%	6	1.7%	3	0.9%	1	0.3%	0	0%	0	0%	0	0%	0	0%
	Total	337		352		338		340		372		364		362		342	

Table 3 – Births by ethnicity 22/23

This indicates a proportionate representation of ethnicity within the stillbirth and Neonatal death data set and the number of birthing people at the RUH.

5.6 Index of Multiple Deprivation (IMD) deciles

This report could find no clear trends, or correlations between the proportion of birthing people within the RUH per decile of IMD, and the proportion of stillbirth cases encountered per decile of IMD.

Measure	IMD	2021/2022 Total No.	2021/2022 Total %	Measure	IMD	2021/2022 Total
Women who Birthed by IMD	1	49	1.1%	Number of Women who have had a Stillbirth	1	0%
	2	149	3.4%		2	0%
	3	203	4.6%		3	0.5%
	4	379	8.6%		4	0.8%
	5	478	10.8%		5	0.4%
	6	650	14.8%		6	0%
	7	448	10.2%		7	0.7%
	8	687	15.6%		8	0.6%
	9	626	14.2%		9	0%
	10	667	15.1%		10	0.3%
	No IMD	70	1.6%			

Table 4 – Births by IMD 21/22

Number of Women who have had a Stillbirth	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
	2	0	0%	0	0%	0	0%	1	8.3%	0	0%	0	0%	0	0%	0	0%
	3	0	0%	0	0%	1	8.3%	0	0%	0	0%	0	0%	0	0%	0	0%
	4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
	5	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
	6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
	7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
	8	0	0%	0	0%	0	0%	0	0%	1	1.6%	0	0%	0	0%	1	1.8%
	9	0	0%	0	0%	0	0%	1	1.8%	0	0%	0	0%	1	1.6%	0	0%
	10	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

Table 5 – Births by IMD 22/23

The IMD decile for cases of Neonatal death is not a routine data set collected at the RUH, the provision of this data set is being explored with the Business Intelligence Unit (BIU). On reviewing the IMD deciles for the 4 Neonatal deaths within this data set, no clear trend was identified and numbers are in keeping with the data above.

5.7 Social circumstances and lifestyle factors.

From this data set, 5 people never smoked, 7 people ceased smoking prior to the pregnancy, 2 people ceased smoking in pregnancy and 3 continued to smoke.

In 2021, the actions undertaken in response to the 2020 MBRRACE cases have remained in place. Routine fetal growth surveillance for all smoking birthing people/mothers and the introduction of a fetal growth Ultrasound (USS) for all smoking mothers at 38-39 weeks of gestation. The service recognises that at the time of writing this report (October 23) the USS pathways in place at the RUH were not fully aligned to the national USS pathway as outline within Saving Babies Lives v3 due to Obstetric USS capacity; this is recognised as a high risk on the risk register. Work is ongoing towards implementation of the SBL V3 national pathway the implementation is planned in a two phased approach aiming for phase one to be rolled out in Q4 of 2023/24, with projected compliance in Q4 of 23/24 supported by the securement of funding for a further 2 trainee midwife sonographers in Jan 2024. Phase 2 will encompass uterine artery Doppler for all pregnancies at the 20 week USS from Q2 of 24/25.

6. Summary

This report has reviewed the cases of neonatal death and stillbirth reported to MBRRACE in 2021 and has been unable to identify any clear, concerning, or causal trends within the findings and recommendations. Areas for learning and improvement within our services have been identified within the implementation of Saving Babies Lives Version 3, the continued improvement journey is imperative to the safe provision of maternity care and outstanding actions will be monitored monthly via the Maternity and Neonatal Specialty Governance meeting, Family and Specialist Services Divisional Governance and Maternity and Safety Champions.