Liverpool Women's NHS Foundation Trust

Quality Committee

COVER SHEET

Agenda Item (Ref)	*22/23/094*		Date: 26/09/2022	
Report Title	Mortality and Learning from Deaths Report Quarter 1, 22/23			
Prepared by	Lidia Kwasnicka, Gynaecologist; Ai-Wei Tang, Consultant Obstetrician; Rebecca Kettle, Consultant Neonatologist and Chris Dewhurst, Deputy Medical Director.			
Presented by	Lynn Greenhalgh, Medical Director			
Key Issues / Messages	The Committee members are asked to review the contents of the paper and Take assurance that there is adequate processes and progress against the requirements laid out by the National Quality Board			
Action required	Approve ☐	Receive ☐	Note ☒	Take Assurance ☒
	To formally receive and discuss a report and approve its recommendations or a particular course of action	*To discuss, in depth, noting the implications for the Board / Committee or Trust without formally approving it*	*For the intelligence of the Board / Committee without in-depth discussion required*	*To assure the Board / Committee that effective systems of control are in place*
	Funding Source (If applicable): N/A			
	For Decisions - in line with Risk Appetite Statement – Y *If no – please outline the reasons for deviation.*			
Supporting Executive:	Lynn Greenhalgh Medical Director			

Equality Impact Assessment *(if there is an impact on E,D & I, an Equality Impact Assessment **MUST** accompany the report)*							
Strategy ☐	Policy ☐	Service Change ☐	Not Applicable ☒				
Strategic Objective(s)							
To develop a well led, capable, motivated and entrepreneurial ***workforce***	☒	To participate in high quality research and to deliver the most ***effective*** Outcomes	☒				
To be ambitious and ***efficient*** and make the best use of available resource	☒	To deliver the best possible ***experience*** for patients and staff	☒				
To deliver ***safe*** services	☒						

Link to the Board Assurance Framework (BAF) / Corporate Risk Register (CRR)	
Link to the BAF (positive/negative assurance or identification of a control / gap in control) *Copy and paste drop down menu if report links to one or more BAF risks*	Comment: N/A
Link to the Corporate Risk Register (CRR) – CR Number:	Comment: No

EXECUTIVE SUMMARY

This "Mortality and Learning from Deaths" paper presents the mortality data for quarter 1, 2022/23 with the learning from the reviews of deaths from quarter 4 2021/22. The 'learning' can take some time after the death occurs due to the formal processes and MDT review process that occur. This results in the learning being presented a quarter behind the data.

The paper also provides the compliance data for the Maternity Incentive Scheme year 4, safety action 1:

> *Are you using the National Perinatal Mortality Review Tool to review perinatal deaths to the required standard?*

The MIS recommenced on May 6th 2022. This paper provides assurance to the board that we are compliant with SA1 in the current reporting period.

In quarter 1 there were the following deaths:

Adult deaths	**2 (both expected)**
Direct Maternal Deaths	**0**
Stillbirths	**7 (excluding terminations of pregnancy) (rate 3.7/1000 total births)**
Neonatal deaths	**9 inborn (rate 4.8/1000 inborn births) + 4 deaths from postnatal transfers**

The stillbirth rate is lower in this quarter than the previous 4 quarters, although caution of interpretation due to small numbers is warranted. An annual review of stillbirths for 2021/22 will be completed and presented to the quality committee as a separate item.

The neonatal mortality rate is presented. Benchmarking with the Vermont Oxford Network for babies >1500g is presented showing that the mortality for 2021 was well within the network interquartile range for the first time in several years.

Learning from PMRT reviews is presented with more detailed information relating to the reviews in the paper.

Recommendation: It is it is requested that the members of the Trust Board review the contents of the paper and take assurance that there are adequate governance processes in place when learning from deaths. In addition, as per The Learning from Deaths framework requirements the board are requested to note:

- number of deaths in our care
- number of deaths subject to case record review
- number of deaths investigated under the Serious Incident framework
- number of deaths that were reviewed/investigated and as a result considered due to problems in care
- themes and issues identified from review and investigation
- actions taken in response, actions planned and an assessment of the impact of actions taken.
- Compliance with SA1 for the MIS of CNST.

MAIN REPORT

This is the quarter 1 2022/23 mortality report for adults, stillbirths and neonates. The report is part of the regular reporting schedule of the Trust to ensure that there is oversight and assurance monitoring of the mortality rates related to the clinical activity of the Trust. This is in accordance with recommendations by the National Quality Board "National Guidance on Learning from Deaths" and the Care Quality Commission. It outlines the work taking place operationally and being overseen by the Safety and Effectiveness Sub - Committee and Quality Committee. The paper also provides the evidence required for the Maternity Incentive Scheme (MIS) which was recommenced on May 6th 2022.

The data presented in this report relates to quarter 1 2022-23. The learning relates to deaths in Q4 2021-22. This is due to the multidisciplinary review of deaths not occurring in the quarter when the death occurred.

Additional data/information relating to mortality is presented in the embedded word document.

1 Adult Mortality

The data relating to adult mortality is pure data and is not standardised mortality data (such as SHMI) due to the low number of deaths in our care and the complexity of the patients cared for by the Trust. The use of pure data and not standardised mortality rates has been previously agreed with the CCG as the Trusts approach to monitoring mortality rates.

1.1 Obstetric Mortality Data Q1 2022/23

There were no direct maternal deaths (deaths within 42 days of delivery) in quarter 1.

1.2 Learning from Obstetric Mortality Data

In Q3 2022/23, there was one death of a woman who died approximately 8 weeks after delivery. This case is subject to a Coronial investigation and, as per the requirements of the Ockenden review, a multiagency review has been initiated. This review is on-going. The outcome and learning from the review and investigation will be included in this report when available.

1.3 Gynaecology Mortality data Q1 2022/23

There were 2 deaths within Gynaecology Oncology in Q1 2022/23. Both were expected deaths due to gynaecological malignant conditions.

1.4 Learning from Gynaecology Mortality Q4 2021/22

There were no deaths subject to investigation in Q4 2021/22.

2 Stillbirths

2.1 Stillbirth data

There were 9 stillbirths, excluding terminations of pregnancy (TOP) in Q4 2021/2022. This has resulted in an adjusted stillbirth rate of 3.7/1000 live births for Q1.

STILLBIRTHS	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	TOTAL 2022/23
Total Stillbirths	7	4	2	4	6	3	7	4	6	3	4	3	10
Stillbirths (excluding TOP)	**7**	**3**	**1**	**3** (2 preg)	**5**	**2**	**4**	**0**	**5**	**1**	**4**	**2**	**7**
Births	692	695	684	655	665	622	659	561	595	602	654	613	1869
Overall Rate /1000 births	10.1	5.8	2.9	6.1	9.0	4.8	10.6	7.1	10.1	5.0	6.1	4.9	5.4
Rate (excluding TOP)/1000	**10.1**	**4.3**	**1.5**	**4.6**	**7.5**	**3.2**	**6.0**	**0**	**8.4**	**1.7**	**6.1**	**3.3**	**3.7**

Table 1 Stillbirth rates for 2021-22

Table 2: Annual Stillbirth rate/1000 births (excluding terminations)

Quarter	Rate 2019/20	Rate 2020/21	Rate 2021/22	Rate 2022/23
Q1	4.0	5.5	4.0	3.7
Q2	4.1	2.5	5.3	
Q3	1.5	2.7	5.1	
Q4	1.7	3.2	5.0	
ANNUAL	**2.9**	**3.4**	**4.9**	

The annual stillbirth rate for 2021-22 was higher than in previous years. (see fig 2 above). The Maternity team have conducted a thematic review data and will present this to QC in September 2022.

In Q1 2022/23 the still birth rate of 3.7 stillbirths/1000 live births is lower than all the previous 4 quartiles however the numbers are small and caution in interpretation is warranted.

The ONS data for 2021 stillbirths in England and Wales was confirmed in August 2022. The stillbirth rate increased to 4.1 per 1,000 total births, an increase from 3.8 in 2020. This is higher than the pre-coronavirus rate (3.9 stillbirths per 1,000 total births) in 2019. It is thought likely that the increase in stillbirths in 2021 is related to the COVID–19 pandemic. The nature of the link is not yet clear, but may be due to the impact on maternity services of lockdowns and pressures on the NHS, or in some cases may be the direct effects of the COVID-19 virus on pregnant mothers or on the placenta.

2.1 Learning from Stillbirth reviews Q4

All eligible cases undergo a full PMRT review, with care from across the antenatal and intrapartum period being subject to clinical and managerial scrutiny. The care that the mother receives is subject to a grade which aligns with the MBRRACE-UK grading system Postnatal care is reviewed, typically with a focus on the bereavement care the family receive. Any complications of labour and within the postnatal period are subject to the same grading system

All stillbirths in Q4 2021/22 have been subject to a full multidisciplinary review panel meeting utilising the PMRT tool with external clinician presence. All ll bereaved parents were invited to be involved in the review process by submitting comments and questions via the Honeysuckle Team for discussion at the MDT Review.

The reviews of Q4 cases (N=11) has evaluated that 4/11 (36.4%) had appropriate antenatal care and 6/11 (54.5%) identified care issues which would not have changed the outcome of the pregnancy.

One case was investigated as a Steis reported Serious Incident (Grade D care). This case identified there was a missed opportunity for earlier delivery. The importance of re-evaluation of a situation when new findings are identified and the education of staff on computerised CTG interpretation with STV has been implemented.

Grade	Care in antenatal period	Percentage (%)	Care provided after Stillbirth	Percentage (%)
A	4	36.4	7	63.6
B	6	54.5	4	36.4
C	0	0	0	0
D	1	9.1	0	0

Table 3 PMRT review panel grading of care provided in cases of Stillbirth (N=11, including 2x 22-24 weeks pregnancy losses)

Learning from Q4 in the provision of antenatal care includes:

- Consideration of developing a defined role for a MW within the community hub to include review of investigation results and triage calls
- Review feasibility to have 'interpreter services on wheels' permanently in all areas to facilitate increased utility of interpreters
- The need for increased fetal medicine consultants
- Educational package for staff on utility of computerised CTG and interpretation with STV

In the care provided after delivery, there remains:

- a need to educate on the importance of arranging for stillbirth investigations, thus the plan to develop a pictorial graph with all the SB investigations required, with the appropriate blood sampling bottles, to facilitate and remind all on the need to arrange for investigations.
- the work in progress to increase availability of Honeysuckle team members to provide support out of hours

Actions that are completed from areas of learning from previous quartiles include:

- Integration of K2 with electronic GROW package to have an electronic system for fetal growth surveillance

There is ongoing progress with the following:

- Implementation of the CoC model to improve process in arranging for FU for CMW reviews, while working towards developing a defined role for a midwife in the community hub to review investigation results
- Ongoing recruitment of more fetal medicine consultants

- Business case to increase provision of bereavement care and support out of hours

The attached appendices provide information on progress with on-going actions from related to prior stillbirths.

3. Neonatal Mortality

3.1 Neonatal mortality Data

Neonatal deaths can be reported in several ways. The population can include in-born babies only, LWH booked pregnancies or all babies cared for in LWH (including babies transferred to LWH from other care providers). Deaths may be those within 28 days, those occurring prior to discharge from the NICU and those who die following transfer to another hospital. The data may include or exclude babies with congenital anomalies. The table below presents the total mortality at LWH, and mortality for those babies born at LWH in a rolling 12 month period.

	Jul-21	*Aug-21*	*Sep-21*	*Oct-21*	*Nov-21*	*Dec-21*	*Jan-22*	*Feb-22*	*Mar-22*	*Apr-22*	*May-22*	*Jun-22*	*Total*
Total Neonatal Mortality	5	3	3	8	5	3	2	3	3	*3*	*7*	*3*	48
INBORN Neonatal Mortality	**3**	**2**	**2**	**4**	**4**	**3**	**2**	**3**	**3**	***2***	***4***	***3***	**35**
Deliveries	692	695	684	655	665	622	659	561	595	*602*	*654*	*613*	7697
INBORN Neonatal Mortality Rate/1000 deliveries	**4.3**	**2.9**	**2.9**	**6.1**	**6.0**	**4.8**	**3.0**	**5.3**	**5.0**	***3.3***	***6.1***	***4.9***	**4.5**

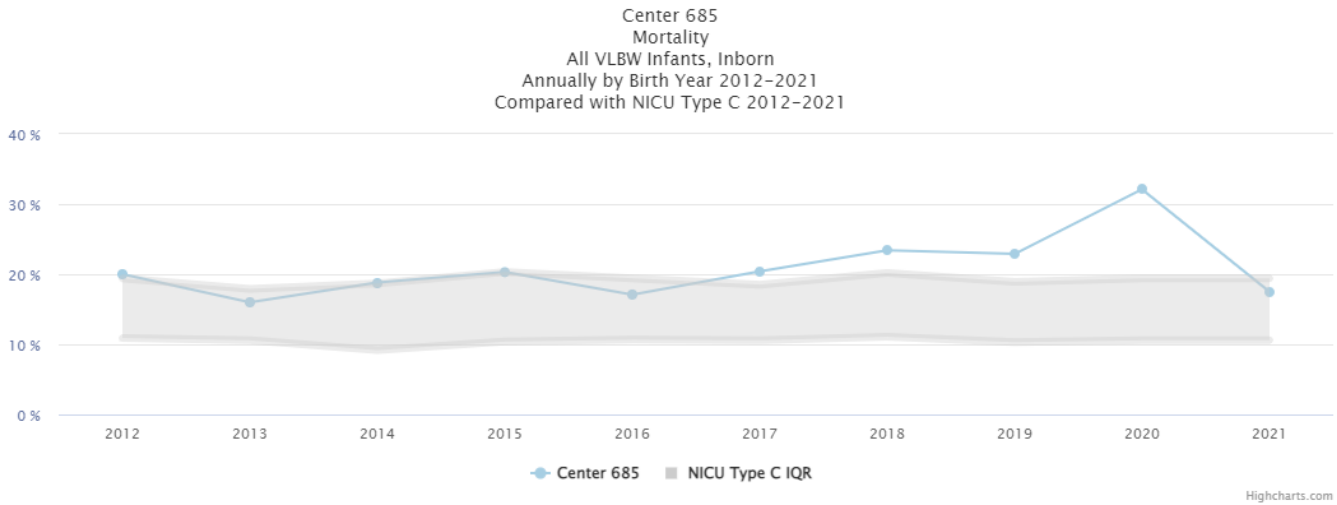
Table 4: NICU Mortality.

Quarter	NMR all babies	NMR *in born*
Q2 (21_22)	5.3	3.3
Q3 (21_22)	8.2	5.7
Q4 (21_22)	4.4	4.4
Q1 (22_23)	7.0	4.8

Table 5: Neonatal Mortality Rate per quarter

Benchmarked mortality for all babies <1500g in the Vermont Oxford Network

The chart below shows the mortality for VLBW babies born in LWH between 2017 and 2021. The grey bar indicates the interquartile range for similar centres in the Vermont Oxford Netowrk (international). These data do not risk adjust for case mix, but are comparing similar units with a surgical and cardiac service. For the first time since 2016, the mortality rate is within the network interquartile range. Benchamrked data with UK centres is not yet available and will be shared when produced.



Mortality for all Very Low Birth Weight babies in the VON network. LWH data is the blue line with surgical/cardiac NICU interquartile range being the shaded grey area.

3.3. Learning from neonatal mortality reviews for Q4

There were 10 deaths subject to a PMRT review. There were no cases identified with care issues which were likely to have made a difference to the outcome. 3/10 cases were identified with issues which may have made a difference to the outcome.

Learning included the following:

- To include “high risk” antenatal cases in the twice daily MDT maternity/neonatal huddle
- Lesson of the week about hypocarbia identification and management
- Development of a themed week to promote thermoregulation

The attached appendices provide information on progress with on-going actions from related to prior deaths.

3.3. External Review of Preterm mortality by the NWODN

An external review by the North-West Neonatal ODN of LWH mortality for extremely preterm infants has been published and presented to LWH. This was initiated following benchmarking data relating to a higher mortality in infants of 24 weeks gestation age when compared with other level 3 neonatal units in the North-West and a spike in mortality rates in 2020. This report has been presented to QC with an action plan developed by the division.

5. Revised Year 4 Maternity Incentive Scheme requirements

The MIS was paused in Q3. However the adherence to the safety actions continued. The MIS year 4 recommenced from May 6th 2022 and adherence to safety action 1 is presented below.

This quarterly report (and previous quarterly reports) will continue to be discussed with the maternity, neonatal and Board level safety champions. Dissemination of learning will continue through associated clinical meetings and feedback to staff.

Standard	Number Eligible	Number Achieved and % age compliance	Status – Green/red
All perinatal deaths eligible to be notified to MBRRACEUK from 6 May 2022 onwards must be notified to MBRRACE-UK within seven working days and the surveillance information where required must be completed within one month of the death.	13 cases notified (1 < 22 weeks so review with Perinatal Mortality Review Tool was not required)	13 – 100%	Green
A review using the Perinatal Mortality Review Tool (PMRT) of 95% of all deaths of babies, suitable for review using the PMRT, from 6 May 2022 will have been started within two months of each death.	12	12 – 100%	Green
At least 50% of all deaths of babies (suitable for review using the PMRT) who were born and died in your Trust, from 6 May 2022, will have been reviewed using the PMRT, by a multidisciplinary review team.	8 reviewed 4 pending and anticipated within the reporting period	8 – 66%	Green
Each of these reviews will have been completed to the point that at least a PMRT draft report has been generated by the tool within four months of each death	5 draft reports completed 4 drafts pending for completion within the reporting period due by 17th October on track *3 cases have the four-month deadline fall after the reporting period ends on 5th Dec	Currently 5 – 45% Anticipated 9 – 100%	Green
and the report published within six months of each death.	5 reports published **7 cases have the six-month deadline fall after the reporting period ends on 5th Dec	5 – 100%	Green
For at least 95% of all deaths of babies who died in your Trust from 6 May 2022, the parents will have been told that a review of their baby's death will take place, and that the parents' perspectives and any questions and/or concerns they have about their care and that of their baby have been sought	12	12 – 100%	Green

4. Recommendations

It is it is requested that the members of the quality committee review the contents of the paper and take assurance that there are adequate governance processes in place when learning from deaths. In addition, as per The Learning from Deaths framework requirements the board are requested to note:

- number of deaths in our care
- number of deaths subject to case record review
- number of deaths investigated under the Serious Incident framework
- number of deaths that were reviewed/investigated and as a result considered due to problems in care
- themes and issues identified from review and investigation
- actions taken in response, actions planned and an assessment of the impact of actions taken.
- Compliance with MIS year 4.

Q1 SB report 2022-23 final.docx

22_23 Q1 Neonatal mortality report.doc