Trust Board

COVER SHEET

Agenda Item (Ref)	*24/25/008*			Date: 11/04/2024
Report Title	Mortality and Learning from Deaths Report Quarter 3, 2023/24			
Prepared by	**Chris Dewhurst, Deputy Chief Medical Officer.** Lidia Kwasnicka, Gynaecologist; Ai-Wei Tang, Consultant Obstetrician; Rebecca Kettle, Consultant Neonatologist			
Presented by	**Lynn Greenhalgh, Chief Medical Officer**			
Key Issues / Messages	The Committee members are asked to review the contents of the paper and take assurance that there are adequate processes and progress against the requirements laid out by the National Quality Board. This paper has been reviewed and approved AT Quality Committee.			
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.*			
	It is requested that the members of the Board review the contents of the paper and take assurance that there are adequate governance processes in place when learning from deaths. *As per the Learning from Deaths framework requirements, the Board is 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.* *The Board is also asked to approve the recommendations relating to improving the clarity of reporting for neonatal deaths.*			
Supporting Executive:	**Lynn Greenhalgh, Chief Medical Officer**			

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 Q3 2023/24. The learning from review of deaths will be from deaths that occurred in Q2 2023/24 or earlier.

As per The Learning from Deaths framework requirements the Board is 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.

In Quarter 3 there were the following deaths:

Adult Deaths	**0**
Direct Maternal Deaths	**0**
Stillbirths	**6 (excluding ToP, rate 3.3/1000births)**
Neonatal Deaths (inborn)	**15 (5.0/1000 live births)**

There were no maternal or gynaecology deaths in Q3 2023/24.

The PMRT review of stillbirths from Q2 23/24 (n=5) identified one case where antenatal care was graded C (care issues identified which may have made a difference to the outcome). This case was subject to a PSII with capacity within antenatal diabetes clinic being the root cause. Further learning is included in the paper.

The PMRT review of neonatal deaths from Q2 23/24 (n=7) identified two babies with neonatal care issues that may have impacted upon the outcome. These issues were not being co-located with paediatric surgical services and the neonatal team not being aware of maternal microbiology results.

Of the 27 stillbirths (including TOPs) and neonatal deaths (including all deaths where babies were cared for at LWH) **11 (41%) were in non-white British mothers/babies**. This is higher than the birthing population for 2021-22 (c 15.5%). This is the first time an excess of deaths in the non-white population has been observed and caution must be used when interpreting one quarters data. As per the QC recommendation, a longer term will be reviewed in next quarters paper.

There were 23 cases whereby IMD scores for deprivation were available. Of these, **15/23 (65%) resided in the most deprived decile** for Index of Multiple Deprivation. This is higher than the booking population of c 50% residing in the most deprived decile, and is also the first time this has been seen.

Recommendation: It is requested that the members of the Board review the contents of the paper and take assurance that there are adequate governance processes in place when learning from deaths.

As per the Learning from Deaths framework requirements, the Board is 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.

The Board is also asked to approve the recommendations relating to improving the clarity of reporting for neonatal deaths.

MAIN REPORT

This is the Quarter 3 2023/24 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 data presented in this report relates to Q3 2023-24. The learning relates to deaths in Q2 22/23 or earlier. This is due to the multi-disciplinary review of deaths not occurring in the quarter when the death occurred.

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

1. Adult Mortality

1.1 Obstetric Mortality Data Q3 2023/24

There were **0 maternal deaths in Q3 2023/24**.

1.2 Learning from Obstetric Mortality Data

There was no new learning from the historic maternal deaths in this quarter.

1.3 Gynaecology Mortality data Q3 2023/24

There were 0 expected deaths within Gynaecology Oncology in Q3 2023/24.
There was 0 unexpected death within Gynaecology services in Q3 2023/24.

1.4 Learning from Gynaecology Mortality Q2 23/24

There were no deaths in Q2 2023/24 for learning to be gained from.

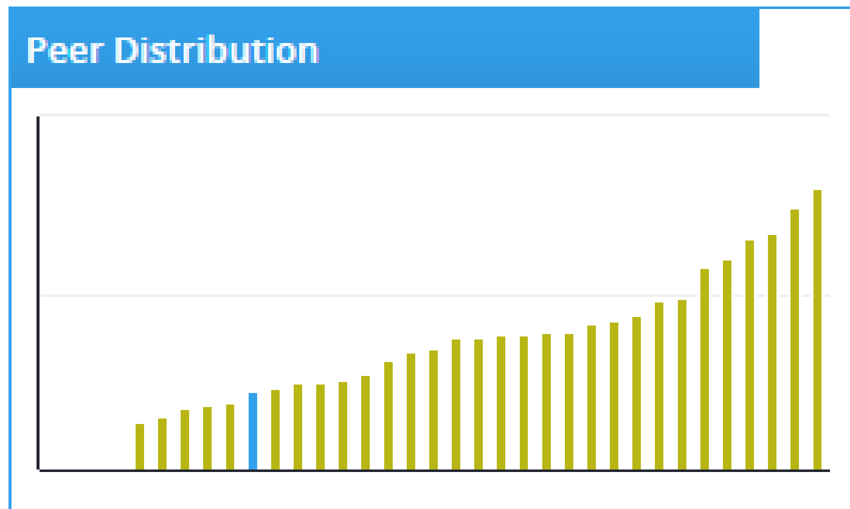
2. Stillbirths

2.1 Stillbirth data

There were seven stillbirths, excluding terminations of pregnancy (TOP) in Q3 2023/2024. This has resulted in an adjusted stillbirth rate of 3.3/1000 live births for Q3 23/24. There were 3 late fetal losses at 22 – 23+6 weeks gestational age.

Quarter	Rate 2019/20	Rate 2020/21	Rate 2021/22	Rate 2022/23	Rate 2022/23
Q1	4.0	5.5	4.0	3.7	1.7
Q2	4.1	2.5	5.3	3.6	2.2
Q3	1.5	2.7	5.1	4.3	3.3
Q4	1.7	3.2	5.0	2.3	
ANNUAL	2.9	3.4	4.9	3.5	2.6

Table 2: Quarter and Annual Stillbirth rate/1000 births since 2019/20 (excluding terminations). The stillbirth rate for the three quarters of 23/24 so far is 2.6/1000 births.



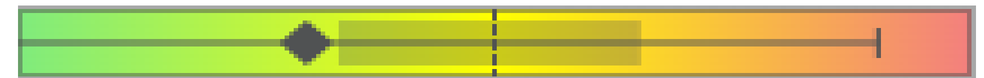


Figure 1 and 2. Stillbirth data with LWH benchmarked against other large maternity services (>7000 deliveries) Q2 2023-24. The blue bar is LWH data demonstrating the observed rate is within the lowest quartile for stillbirths. The diamond is LWH demonstrating we are within the lowest quartile for stillbirth rates.

Demographic information for the 10 stillbirths (including ToPs)

- 5/10 (50%) women were of non-white British ethnicity. This is in excess of the booking population non-white population. Booking population = c. 18%
- 8/9 (89%) women with information available live in the lowest decile for deprivation. Booking population = c 50%

In this quarter there is an increased representation of non-white women in the stillbirth population compared with the overall booking population. These data include TOPs. The absolute numbers are small and caution must be made when interpreting these data. Full year information will be included in Q4 report.

2.1 Learning from Stillbirth and PMRT reviews of stillbirths from Q2 23/24
All eligible cases (n=5) underwent a full multi-disciplinary team PMRT review with external clinician presence.

The PMRT review grades care in the antenatal, neonatal (for neonatal deaths) and post-bereavement care, assigning a grade for each aspect:

- A. No issues with care identified.
- B. Care issues that would have made no difference to the outcome.
- C. Care issues which may have made a different to the outcome.
- D. Care issues which were likely to have made a difference to the outcome.

There was one case (20%) where antenatal care issues were identified that may have made a difference to the outcome. This related to non-attendance at diabetes and antenatal clinics as well as a scan appointment. This case was subject to a PSII (STEIS 2023/15842) which concluded in December 2023. The care issue centred around the woman not being seen in a consultant gestational diabetes clinic within the required timescale. This report identified the root cause being a lack of capacity in gestational diabetes mellitus clinics with additional lessons learned around improving the management of capacity and demand in GDM clinics as well as improving SOPs for referral into specialist clinics.

Two (40%) case had antenatal care issues which would not have changed the outcome of the pregnancy. This related to midwifery reviews when patients are under the care of the FMU service.

3. Neonatal Mortality

3.1 Neonatal mortality Data Q3 2022/23

Neonatal deaths can be reported in several ways. The table below presents the total number of deaths at LWH, the mortality for babies born at LWH, the number of deaths eligible to report to MBRRACE and the number of deaths of inborn babies born at between 24 to 31+6 weeks gestational age.

Reporting of Neonatal Mortality

The author recognises the complexity in reporting of mortality and in turn clarifying assurance around neonatal mortality data. There is work ongoing nationally regarding what data to report for assurance to boards and externally around neonatal mortality. Whilst these recommendations are awaited, it is proposed from next quarter that the data is presented in the following format:

1. Time trended data for mortality on NICU and Delivery Room deaths. This will provide a measure of 'safety' identifying any spikes in neonatal deaths.
2. Time-trended data for the number of deaths within 28 days for babies born alive from 24+0 weeks gestational age. These are the deaths included in MBRRACE data and will provide early information and assurance regarding neonatal mortality. The data will not be adjusted for socio-demographic and other variables but will be compared against the most recent MBRACCE data for LWH.
3. Mortality data for the preterm cohort of infants admitted to LWH neonatal unit at 24 – 31+6 weeks gestational age.

	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	March-24	Total
Births	613	599	554	629	612	587	619	594	591				5398
INBORN Neonatal Mortality (all live births)	2	1	9*	3*	4	1	6*	6*	3				35
Total mortality on NICU	3	1	6	3	4	1	6	5	2				31
INBORN + DIED LWH Neonatal mortality	2	1	6	2	4	1	4	4	1				25
IUT Mortality	0	0	5*	0	4	0	2	3	1				15
PNT Mortality	1	0	0	1	0	0	2	1	1				6

INBORN (+died LWH) Neonatal Mortality Rate/1000LB	3.2	1.7	10.8	4.8	6.5	1.7	6.5	6.7	1.7				4.6
MBRRACE eligible deaths *Excl. congenital anomaly*	*0* *0*	*1* *1*	*3* *2*	*1* *0*	*4* *2*	*1* *1*	*6* *4*	*3* *2*	*1* *0*				*20* *12*
Benchmark: MBRRACE data 2021 ***3.36/1000LBs*** ***(excl. congenital anomaly)*** ***1.44/1000LBs***	*0* *0*	*1.7* *1.7*	*5.4* *3.6*	*1.6* *0*	*6.5* *3.3*	*1.7* *1.7*	*9.7* *6.5*	*5.1* *3.4*	*1.7* *0*				*3.7* *2.2*
NWNODN benchmark INBORN 24-31 w	*0*	*1*	*2*	*0*	*3*	*1*	*3*	*3*	*1*				*14*
Benchmark (NNAP >6.3% of admissions)	*0*	*5.3*	*14.2*	*0*	*25*	*10*	*37.5*	*23*	*10*				*15%*
NWNODN benchmark INBORN 24-27 w	*0*	*1*	*1*	*0*	*1*	*1*	*3*	*2*	*1*				*10*
Benchmark (NNAP >15% of admissions)	*0*	*20*	*50*	*0*	*25*	*25*	*60*	*50*	*33.3*				*29%*

*Includes babies inborn at LWH then transferred to another hospital who died in the neonatal period prior discharge

Table 4: NICU Mortality by month for the past 12 months. Red indicates breaching the NWODN threshold. This threshold however is being challenged as not appropriate for level 3 NICUs.

Quarter	NMR *in born*
Q1 (23_24)	5.1
Q2 (23_24)	3.8
Q3 (23_24)	5.0
Q4 (23_24)	

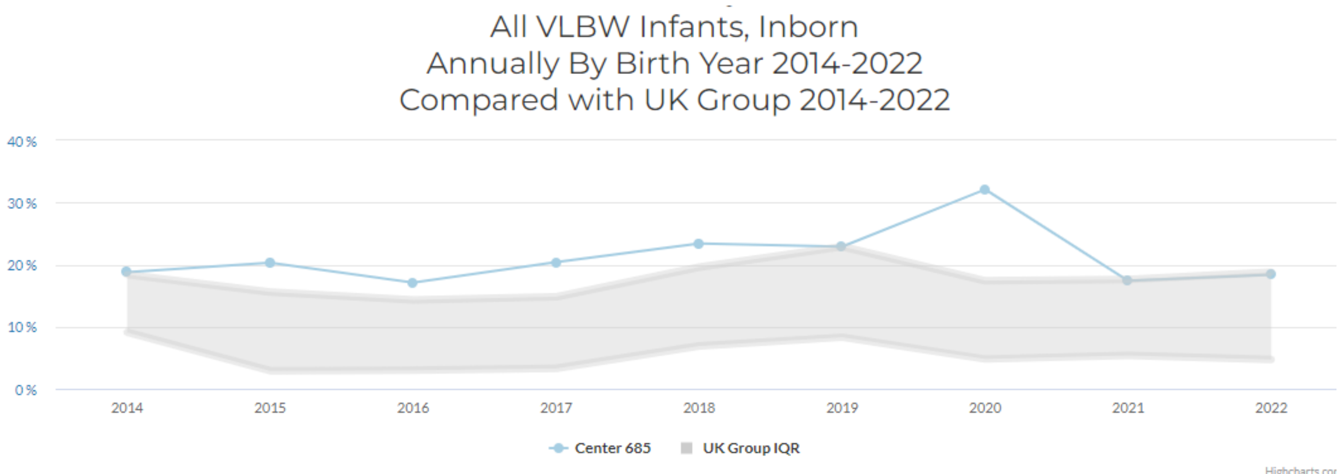
Table 5: Neonatal Mortality Rate per quarter (born and died at LWH)

Demographic data (n = 17 babies cared for at LWH)

- 11/17 (65%) babies were born to mothers of white-British background,
- 3 babies born to mothers of black-African or black-other ethnicity
- 1 described as white other
- 1 mother of Polish origin,
- 1 mother of mixed white / Asian origin.

Benchmarking via Vermont Oxford Network

The VON benchmark international neonatal outcomes for babies weighing <1500g and/or < 30 weeks gestational age. It includes >1400 neonatal units, including 33 units in the UK. The chart below shows LWH inborn mortality compared against the interquartile range for UK hospitals. The mortality is higher than the IQR as LWH is a tertiary neonatal unit with both surgical and cardiac services and is comparing against neonatal units who do not care for the most at-risk infants.



3.3. Learning from neonatal mortality reviews for neonatal deaths from Q2 23/24

There were 7 deaths in Q2 23/24 subject to a PMRT review.

There were 2/7 case where a care issue was identified that may have impacted upon the outcome. One related to non-colocation with paediatric surgical services. The second related to communication of maternal microbiology results to the neonatal team. Clarifying the process, roles and responsibilities through the Intrapartum Working Group will occur.

4. Recommendations

It is requested that the members of the Board review the contents of the paper and take assurance that there are adequate governance processes in place when learning from deaths.

As per the Learning from Deaths framework requirements, the Board is 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.

The Board is also asked to approve the recommendations relating to improving the clarity of reporting for neonatal deaths.

A larger data set relating to the demographic data for stillbirths and neonatal deaths will be presented with the next Quarters report.

5. Appendices

- Cheshire and Mersey Maternity Provider Standardised Quarterly Perinatal Board Report
  - Q3 (Oct – Dec 2023)

- Cheshire and Mersey Maternity Provider Standardised Quarterly Perinatal Board Report Template