Liverpool Women's NHS Foundation Trust

Trust Board

COVER SHEET

Meeting Date	Thursday, 11 July 2024	**Item Reference**	24/25/086
Report Title	Mortality and Learning from Deaths Report Quarter 4, 2023/24		
Author	Chris Dewhurst, Deputy Chief Medical Officer. Lidia Kwasnicka, Gynaecologist; Ai-Wei Tang, Consultant Obstetrician; Rebecca Kettle, Consultant Neonatologist		
Responsible Director	Lynn Greenhalgh, Chief Medical Officer		

Purpose of Report	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.
Executive Summary	In Quarter 4 there were the following deaths: • Adult Deaths 3 (all expected) • Direct Maternal Deaths 0 • Stillbirths 2 (excluding TOP, rate 1.1/1000births) • Neonatal Deaths (inborn) 3 (0.6/1000 live births) This is the lowest stillbirth rate per quarter in the last 5 years. This is the lowest neonatal mortality rate per quarter for several years.
Key Areas of Concern	No areas of concern to note.
Trust Strategy and System Impact	*N/A*

Links to Board Assurance Framework		-
Links to Corporate Risk Register (scoring 10+)		-

Assurance Level	1. MODERATE - Adequate system of internal control applied to meet existing objectives

Action Required by the Board	The Board is asked to take assurance that there are adequate processes and progress against the requirements laid out by the National Quality Board.

REPORT DEVELOPMENT:

Committee or meeting report considered at:	Date	Lead	Outcome
Quality Committee	**25.06.24**	**CMO**	**Assured**

MAIN REPORT

INTRODUCTION

This 'Mortality and Learning from Deaths' paper presents the mortality data for Q4 2023/24. The learning from review of deaths will be from deaths that occurred in Q4 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 4 there were the following deaths:

Adult Deaths	**3 (all expected)**
Direct Maternal Deaths	**0**
Stillbirths	**2 (excluding TOP, rate 1.1/1000births)**
Neonatal Deaths (inborn)	**3 (0.6/1000 live births)**

This is the lowest stillbirth rate per quarter in the last 5 years.
This is the lowest neonatal mortality rate per quarter for several years.

The annualised stillbirth rate (excluding TOP) is 2.2/1000 births. This is the lowest annual stillbirth rate for the past 5 years.

The annualised neonatal mortality rate for inborn babies who died at LWH is 3.6/1000 live births. This is a reduction form the mortality rate of 6.4/1000 in 2022/23 and the same as in 2021/22.

Learning from a maternal death from Q1 2023/24 is included. The Coroner's investigation has concluded as the death being a natural one due to multi-organ failure of uncertain aetiology. The MNSI report has identified learning for the trust that is included in the appendix.

The PMRT review of stillbirths in Q3 identified three cases with care issues which may have made a different to the outcome. One of these related to mis-interpretation of a CTG and triggered a PSII.

The PMRT review of neonatal deaths identified learning but there were no LWH neonatal care issues identified that may or did impact upon the outcome.

The annualised data for ethnicity and stillbirths/neonatal deaths has shown that there is not an increased risk of stillbirth or neonatal death in the non-white population who book their pregnancies at LWH. Subgroup analysis is not appropriate due to the small numbers involved.

Recommendation: It is 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.

The Board is asked to note that the requirements for submission to MIS for the reporting timescales have been met for this quarter.

The Board is also asked to take assurance regarding the ethnicity data around both neonatal deaths and stillbirths that does not show a significant difference between white and non-white populations.

ANALYSIS

This is the Quarter 4 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 Q4 2023-24. The learning relates to deaths in Q3 2023-24 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 Q4 2023/24

There were **0 maternal deaths in Q4 2023/24**.

1.2 Learning from Maternity Deaths

GO maternal death Q2 2023/24

G was a 29-year-old Black African woman in her third pregnancy who delivered by elective caesarean section at 40 weeks. She was admitted with suspected urosepsis on day 9 of her postnatal period and discharged after 48 hours with oral antibiotic cover. She re-attended on postnatal day 23 significantly unwell. Due to rapid deterioration in her clinical condition she was transferred to the Royal Liverpool University Hospital (RLBUH) for intensive care treatment and sadly died in the following day.

The coroner has now concluded their investigation. After post mortem examination which did not identify any evidence of infection/sepsis, the cause of death has been recorded as:

i. Multiple organ failure of uncertain aetiology

The MNSI report for this death has been received with the following identified as recommendations for LWH.

1. ensure that escalation pathways are consistently used regardless of any changes to service provision.
2. ensure that the care provided is in response to the clinical condition of a mother, and not restricted by her location.
3. ensure that mothers, who are critically unwell, have early escalation and review to support urgent multi-disciplinary care and discussion with intensive care services.
4. ensure (LWH) has the ability to provide high dependency services for enhanced maternal care in line with guidance with regards to environment and staffing resource.

The MNSI report is included as appendix to this paper. An action plan has been developed and will be monitored through the maternity risk meeting and family health divisional board.

1.3 Gynaecology Mortality data Q4 2023/24

There were 3 expected deaths within Gynaecology Oncology in Q4 2023/24.
There was 0 unexpected death within Gynaecology services in Q4 2023/24.

1.4 Learning from Gynaecology Deaths

There were no deaths in Q3 2023/24 for learning to be gained from.

2. Stillbirths

2.1 Stillbirth data

There were two stillbirths, excluding terminations of pregnancy (TOP) in Q4 2023/2024. This has resulted in an adjusted stillbirth rate of 1.1/1000 live births for Q4 23/24, the lowest rate for several years. There were an additional 2 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
Q4	4.1	2.5	5.3	3.6	2.2
Q4	1.5	2.7	5.1	4.3	3.3
Q4	1.7	3.2	5.0	2.3	1.1
ANNUAL	**2.9**	**3.4**	**4.9**	**3.5**	**2.2**

Table 2: Quarter and Annual Stillbirth rate/1000 births since 2019/20 (excluding terminations). The stillbirth rate for the 23/24 is 2.2/1000 births.

Demographic information for the 4 stillbirths and late fetal losses:

- 1/4 cases was an unbooked pregnancy
- 1/4 women were of non-white ethnicity.
- 2/3 where IMD scores were available lived in the most deprived decile.

The small number of stillbirths in this quarter make any meaningful interpretation of these data impossible.

On reviewing the previous Learning from death reports for 23-24, 9/25 (36%) stillbirths and late fetal losses have occurred in non-white women. The percentage of non-white women booking at LWH is 24% (MSDS data 2023-24). This is not statistically significant (chi-square at 5% level). In other words, there is no increased risk of stillbirth/late fetal loss in the non-white population who book their pregnancies at LWH. Due to the small numbers, it would not be appropriate to analyse subgroups within the non-white population.

2.1 Learning from Stillbirths

All eligible cases from Q3 23/24 (Stillbirths > 22 weeks but excluding ToPs, n=10) underwent a full multi-disciplinary team PMRT review with external clinician presence. Care from across the antenatal and intrapartum period was subject to clinical and managerial scrutiny. All 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 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.

The MDT reviews of 7 Stillbirths and 3 late fetal losses (22-24 weeks gestation) found no antenatal care issues identified (Grade A) in 4 cases, and care Graded B in 3 cases. There were 3 cases where care was graded C, one of these cases which related to CTG mis-interpretation is being investigated through a PSII. The other 2 'C' graded cases have contributed to a QI project for induction of labour and a thematic review of electronic GROW charts to be conducted. Detail of the learning is included in the appendix report.

3. Neonatal Mortality

3.1 Neonatal mortality Data Q4 2022/23

Neonatal deaths can be reported in several ways. The population can include in-born babies only (includes in-utero transfers) 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 (reported in MBRRACE) those occurring prior to discharge from the NICU and those who die following transfer to another hospital. The population can be further refined by weight and/or gestational age. The data may include or exclude babies with congenital anomalies (MBRRACE).

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. This last group is reported nationally by the National Neonatal Audit Project and monitored locally by the ODN. The benchmark of 6.3% is locally derived by the ODN. The threshold was the overall mortality in the UK between 2015 – 2018 for the population of 24 – 31+6 week babies. As LWH receives IUTs of (higher risk) preterm mortality it is unlikely that our mortality would be below the average for the whole population. In addition, as this is an absolute measure, it would be expected that 50% of neonatal units would be above this figure. As can be seen in the chart, 1 death in the last quarter has resulted in being higher than the population measure.

	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	573	583	586	7140
INBORN Neonatal Mortality (all live births)	2	1	9*	3*	4	1	6*	6*	3	0	1	2*	38
Total mortality on NICU	3	1	6	3	4	1	6	5	2	1	1	2	35
INBORN + DIED LWH Neonatal mortality	2	1	6	2	4	1	4	4	1	0	1	0	26
IUT Mortality	0	0	5*	0	4	0	2	3	1	0	1	0	16
PNT Mortality	1	0	0	1	0	0	2	1	1	2	0	3	11
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	0	1.7	0	3.6
MBRRACE eligible deaths *Excl. congenital anomaly*	*0* *0*	*1* *1*	*3* *2*	*1* *0*	*4* *2*	*1* *1*	*6* *4*	*3* *2*	*1* *0*	*0* *0*	*1* *1*	*1* *0*	*22* *13*
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*	*0* *0*	*1.7* *1.7*	*1.7* *0*	*3.1* *1.8*
NWNODN benchmark INBORN 24-31 w	*0*	*1*	*2*	*0*	*3*	*1*	*3*	*3*	*1*	*0*	*1*	*0*	*15*
Benchmark (NNAP >6.3% of admissions)	*0*	*5.3*	*14.2*	*0*	*25*	*10*	*37.5*	*23*	*10*	*0*	*14*	*0*	*11.6%*
NWNODN benchmark INBORN 24-27 w	*0*	*1*	*1*	*0*	*1*	*1*	*3*	*2*	*1*	*0*	*1*	*0*	*11*
Benchmark (NNAP >15% of admissions)	*0*	*20*	*50*	*0*	*25*	*25*	*60*	*50*	*33.3*	*0*	*33.3*	*0*	*19%*

**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)	0.6
Total	**3.6/1000**

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

There were 3 babies who were born at LWH who died in this quarter. This results in the lowest mortality figure recorded at LWH since current recording methods began. (0.6/1000 live births). One of these deaths was following an in-utero transfer (IUT). A further 5 babies were transferred to LWH and died either at LWH or elsewhere following transfer.

There was 1 baby who died after being born at 24 – 31+6 weeks gestational age.

Demographic data (n = 8 babies cared for at LWH)

- 2/8 (25%) babies were born to mothers of non-white background

For the year 2023-24, 10/46 (22%) neonatal deaths (where data was available) were born to non-white women. This is not statistically significantly different from the booking population. Comparison to the neonatal unit admission population will be presented in the annual report, but this is unlikely to be significantly different to the booking population.

3.3. Learning from neonatal mortality reviews for neonatal deaths from Q4 23/24

There were 15 deaths in Q3 23/24 subject to a PMRT review. There was no cases in which neonatal care issues at LWH identified were graded C or D. There were 4 antenatal issues and 6 neonatal care issues identified that didn't make a difference to the outcome with associated learning included in the appendix.

The majority of cases there were no issues identified in either antenatal or postnatal care.

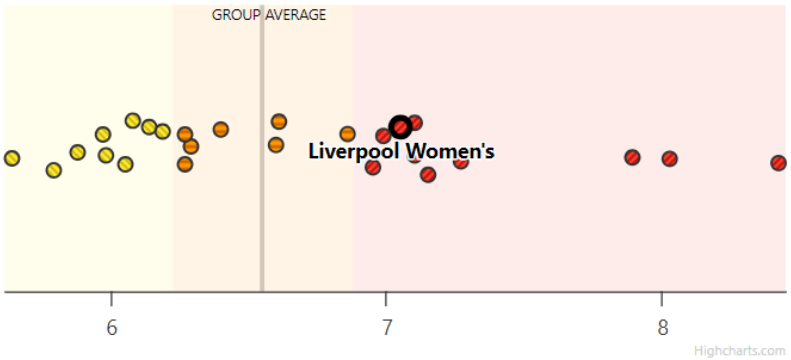
There were several examples of parental feedback received about the high quality of care they received with examples included in the attached appendix.

4. MBRRACE data 2022

The data from 2022 MBRRACE report were published in Q4 23-24. These data show that the extended perinatal mortality (stillbirths and neonatal mortality within 28 days) at LWH is >5% higher than comparator trusts. However, this is explained by the high incidence of lethal congenital anomalies delivered at LWH due to the services provided at both LWH and Alder hey Children's Hospital; 60% of neonatal deaths were in babies with congenital anomalies.

Mortality rates, Level 3 NICU & neonatal surgery, 2022

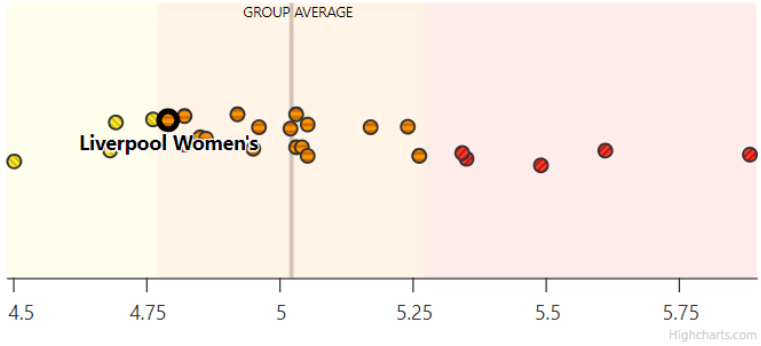
Stabilised & adjusted extended perinatal mortality rate per 1,000 total births



Once congenital anomalies are removed, LWH has a lower than average mortality for extended perinatal mortality and the neonatal mortality is between 5 and 15% lower than comparator trusts.

Mortality rates excluding congenital anomalies, Level 3 NICU & neonatal surgery, 2022

Stabilised & adjusted extended perinatal mortality rate per 1,000 total births excluding congenital anomalies



A separate paper has been submitted to Quality Committee on the MBRRACE data.

5. Recommendations

It is requested that the members of the Committee 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
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The Board is also asked to take assurance regarding the ethnicity data around both neonatal deaths and stillbirths that does not show a significant difference between white and non-white populations.

6. Appendices

Q4 SB report 2023-24.docx

Q4 23_24_1 (1).docx