Liverpool Women's NHS Foundation Trust

Quality Committee

COVER SHEET

Agenda Item (Ref)	*21/22/218*		Date: 21/02/2022	
Report Title	**Learning from Deaths Quarter 3, 2021/22**			
Prepared by	Lidia Kwasnicka, gynaecology risk lead; Ai-Wei Tan, 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 "Learning from Deaths" paper presents the mortality data for quarter 3 with the learning from the reviews of deaths from quarter 2. The learning from deaths can take some time after the death occurs, this is due to the formal processes and MDT reviews that take place. This is why the learning is a quarter behind the data. The review of stillbirths and neonatal deaths are subject to a multidisciplinary review panel meeting with external professionals utilising the Perinatal Mortality Review Tool (PMRT). All cases invited parents to be involved in the review by submitting comments and questions for discussion.

In quarter 3 there were the following deaths:

Adult deaths	**0**
Stillbirths	**10 (rate 5.1/1000 total births)**
Neonatal deaths	**11 inborn (rate 5.7/1000 inborn births) + 5 deaths from postnatal transfers**

The stillbirth rate has increased at LWH since 2019/20. It is unknown if this is a pattern replicated in the UK with ONS data awaited. There has been no increase in issues identified from reviews of stillbirths. A thematic review of stillbirths will be conducted with full year data.

Lessons learnt from quarter 2 and actions taken are presented in this paper. Common themes from recent learning from deaths reviews include:

1. Importance of integrating the electronic growth chart into the maternity electronic patient record
2. Importance of sending placentas for analysis.

Changes in clinical care due to the covid pandemic may have played a role in the outcome of 3 cases of stillbirth in Q1 and Q2.

Recommendation: 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.
- Specific recommendations
    - the monitoring and review of the stillbirth rate continues by the Family Health board, with a thematic review to be conducted with Q4 data. Issues identified at the reviews and recommendations made will now be tracked through the Maternity Clinical Meeting
    - the monitoring and review of the neonatal mortality rate continues with an external review of mortality for extremely preterm infants to be available in Q1 2022-23

MAIN REPORT

This is the quarter 3 mortality report for adults, perinatal and neonates. This report updates the Quality Committee regarding the Trust systems and processes to review and learn from deaths of patients under their care. 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 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 quarter 3 2021-22. The learning relates to deaths in Q2. This is due to the MDT review of deaths not occurring in the quarter when the death occurred. Previously, the learning from reviews of adult deaths was often presented in the same quarter as the death occurred. This report will now present the learning from adult deaths in the same time frame as stillbirths and neonatal deaths, i.e. the data from quarter 3 and learning from quarter 2. However, as the learning from deaths for quarter 2 relating to gynaecology deaths has already been presented to the committee in the Q2 it will not be included in this report.

Learning from deaths may take longer than 1 quarter to be demonstrated. This is particularly for cases that undergo an SUI or Coronial review. The learning from these deaths will be included and the dates the death occurred will be highlighted.

Additional data 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 level of mortality numbers encountered 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 Q3

There were no obstetric deaths in quarter 3.

Out of hospital deaths in Maternity are considered as community deaths and not allocated to the Trust. The Trust does however, review care provided in all these cases to determine any thematic points for learning. In Q3, there was one death of a woman who died approximately 8 weeks after delivery. This case is subject to a Coronial investigation and at the time of writing the cause of death has not yet been determined. This case has been subject to a 72 hour review and a more detailed review may be initiated following further information from the coroner. Learning from this

1.2 Gynaecology Mortality data Q3

There were no deaths within Gynaecology Oncology nor out of hospital deaths in Q3.

1.2.1 Learning from Gynaecology Mortality Q2

This was presented in the Q2 “learning from Deaths “ paper. The SI from Q2 has not yet concluded with learning form this will be presented in the Q4 paper.

2 Stillbirths

2.1 Stillbirth data

There were 10 stillbirths, excluding terminations of pregnancy (TOP), in the third Quartile of 2021/2022. This has resulted in an adjusted stillbirth rate of 5.1/1000.

Table 1 Stillbirth rates for 2021-22

STILLBIRTHS	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	TOTAL 2021/22
Total Stillbirths	3	6	4	7	4	2	4	6	3	39
Stillbirths (excluding TOP)	3	3	2	7	3	1	3	5	2	29
Births	639	672	696	692	695	684	655	665	622	6020
Overall Rate /1000 births	4.7	8.9	5.7	10.1	5.8	2.9	6.1	9.0	4.8	6.5
Rate (excluding TOP)/1000	4.7	4.5	2.9	10.1	4.3	1.5	4.6	7.5	3.2	4.8
Quarterly rate/1000 births (excl TOP)		**4.0**			**5.3**			**5.1**		**4.8**

The annual stillbirth rate for 2021-22 is on trajectory to be higher than for previous years. (see fig 2 below). The NHS Long Term plan has set a target of reducing stillbirths by 50% by 2025. That would require England to reduce its stillbirth rate to 2.6 stillbirths per 1,000 births. The most recent ONS data from 2020 records the still birth rate for England and Wales to be 3.8/1000 births. There has been a slow decline in the national stillbirth rate in the years prior to this.

Quarter	Rate 2019/2020	Rate 2020/2021	Rate 2021/2022
Q1	4.0	5.5	4.0
Q2	4.1	2.5	5.3
Q3	1.5	2.7	5.1
Q4	1.7	3.2	TBC
ANNUAL	**2.9**	**3.4**	**4.8**

Table 2: LWH Stillbirth rates by quarter in and year since 2019. NB The difference between 2020/21 and 2021/22 is not statistically significant, though it is statistically significantly increased when 2021/22 is compared with 2019/20

It is not clear if the increasing still birth rate in the LWH data is replicated throughout the UK. There have been worldwide reports of an increased stillbirth rate during the covid pandemic. UK data from a single centre in London demonstrated a fourfold increase in the still birth rate during the first lockdown of 2020. The ONS data for 2020 however showed a still birth rate of 3.8/1000 births, a decrease from 3.9/1000 in the previous year. The ONS data relating to stillbirth rates for 2021 are not yet available. We are not therefore unable to determine if the rise in stillbirth rate at LWH since 2020 is also seen on a national scale and await the ONS national data to benchmark against.

National data is available from the NHS trusts that submit data to the CHKS group for benchmarking. CHKS data for Jan – Dec 2021 are below demonstrating that LWH stillbirth rates are within the expected range when compared with peers.

Fig 1. LWH within the interquartile range for stillbirths amongst CHKS data.

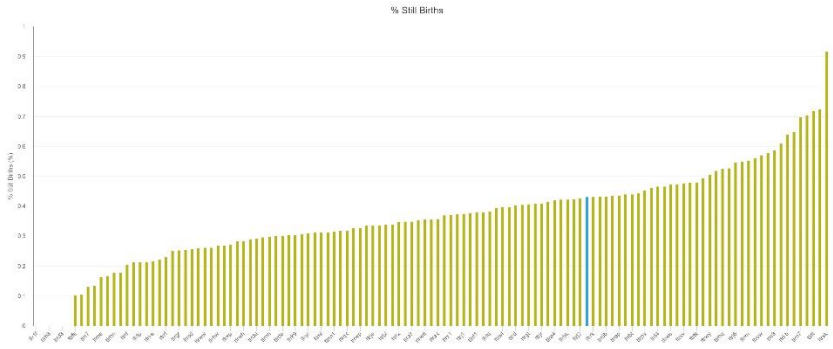


Chart 1 Stillbirths for Jan – Dec 21, LWH in blue.

2.1 Learning from Stillbirth reviews Q3

2.1.1 Impact of covid

In the review of Stillbirths in Q1 and Q2, changes in the service and operational provision of clinical care due to the Covid 19 pandemic (either directly or indirectly) were identified as a contributory factor in 3/26 cases.

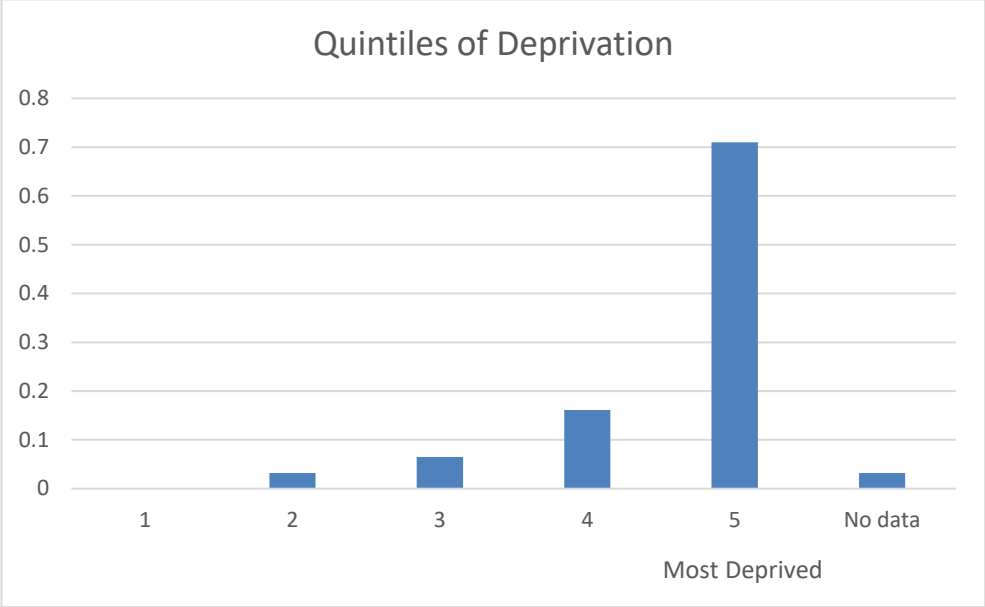
- Two cases relate to the change from face-to-face booking appointment to telephone booking appointments. We are expecting this to no longer be identified as an issue as all antenatal bookings have now reverted to face to face as per the pre covid pandemic provision of care.
- The remaining case relates to the rescheduling of USS appointment due to unexpected medical sickness related to COVID 19. This led to a delay in the ultrasound provision scan in FMU and the delayed potential to identify fetal growth restriction, which may have led to a differing care pathway. This case has been escalated as a SUI.

2.1.2 Multiple pregnancy

In Q1-3 2021-2022, there were seven twin pregnancies reported in the stillbirths cohort compared with 1 twin pregnancy on 2020-21. In Q4, data and learning from a thematic review of these twin pregnancies will be presented.

2.1.3 Social deprivation

The quintile of deprivation for Women who suffered a stillbirth are presented below. This demonstrates that of the stillbirths so far in 2021-22, 71% live in the most deprived quintile. This distribution is similar to the population deprivation distribution for Liverpool. There is a need to have a multi-agency targeted approach to support women in these areas to reduce perinatal mortality. The proposed Continuity of Carer model is part of this approach.



2.1.4 Still birth case reviews

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. (Table 4 in additional information shows the current MBRRACE criteria for grading)

All 14 cases (including pregnancy losses at 22-24 weeks) in Q2, have been reviewed and subject to grading of care provided as below. In the antenatal period, the proportion of cases with no care issues identified has remained similar to those percentages reported in Q1.

Grade	Care in antenatal period	Percentage (%)	Care in postnatal period	Percentage (%)
A	9	64.3	9	64.3
B	2	14.3	4	28.6
C	2	14.3	1	7.1
D	1	7.1	0	0
Total cases reviewed	14		14	

Table 3: Grading of care for babies in Q2 of 2021-22 (14 cases including 22-24 week loss)

Given the increasing stillbirth rate it is reassuring to note that when comparing 2021-22 with 2020-21 there has not been an increase in the proportion of cases where antenatal care issues have been identified which may have impacted on the pregnancy outcome. (See additional data table 6 and 7).

2.1.4 Learning from Stillbirths

Review of cases in Q2 identified the following learning:

- Improvement in the process for follow up by Community Midwife teams after the booking appointment. The Continuity of Care model being implemented is aimed to address this issue.
- Need to integrate the fetal growth charts with the electronic patient records. The transition to the electronic patient records from January 2021 has led to the difficulty in collating evidence for monitoring of fetal growth in some cases. The GROW chart and K2 systems will be integrated to allow this function Q4 2021-22.
- To adhere to the growth screening pathway for small for gestational age fetuses. The SGA guideline has been updated to be aligned with Saving Babies Lives initiative
- To learn the importance of accurate antenatal risk assessments when reviewing patients who access care. In a case, smoking was not identified as a risk factor for stillbirth. A lesson of the week has been circulated related to this.
- To accurately risk assess when rescheduling appointments in the fetal medicine unit. The FM team are reviewing the process for rescheduling of appointment.

There has been an increase in care issues identified in the provision of Postnatal care, 2 of which were identified through parental feedback. Learning from these issues include:

- Continue to provide support and training to MW in providing bereavement care.
- Review the Honeysuckle service provision.
- Reminder of the importance postnatal investigations in the investigation of stillbirth. A LOTW has been disseminated to all staff with discussion with the team members involved and maternity team are reviewing the process for storing and sending placentas for analysis.

In order to maintain a close monitoring of any identified themes, trends, rising data and issues resulting from stillbirth reviews, the stillbirth data and a summary of cases discussed at the PMRT MDT reviews will be an agenda item at the monthly Maternity Clinical Meeting.

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.

Table 4 details the mortality for babies born at LWH only and admitted to the neonatal unit. These data exclude post-natal transfers.

NICU (LWH INBORN)	**Apr 21**	**May 21**	**Jun 21**		**Aug 21**	**Sep 21**	**Oct 21**	**Nov 21**	**Dec 21**	**21/22 Total**
Discharges	100	97	106	93	119	113	129	129	114	628
Total Mortality	2	0	0	3	2	2	4	4	3	20
Births	622	654	673	692	695	684	655	665	622	5962
Mortality Rate per 1000 births	3.2	0	0	4.3	2.9	2.9	6.1	6.0	4.8	3.3

Table 4: NICU Mortality (inborn LWH). These data are the numbers of deaths of babies born in LWH and admitted to NICU.

In addition to babies who are born at LWH, some babies are transferred into LWH following birth in another centre. This is because they require level 3 neonatal care and their local unit is unbale to provide this, or they require specialist surgical or cardiac care that can only be provided in large tertiary neonatal units. Examples would include extremely preterm infants, those with congenital anomalies or acquired surgical conditions such as necrotising enterocolitis in preterm infants. Data relating to babies transferred into LWH and mortality is presented below.

NICU PNT into LWH	**Apr-21**	**May-21**	**Jun-21**	**Ju 21**	**Aug-21**	**Sep-21**	**Oct-21**	**Nov-21**	**Dec-21**	**21/22 total**
Number of PNTs (babies)	12	10	10	11	13	12	20	8	8	104
Mortality following transfer into LWH	1	1	2	2	1	1	4	1	0	13

Table 5: Mortality from babies transferred into LWH.

Babies also die in the delivery room or after transfer to another care setting for ongoing management, or to hospice for end of life care. If a baby dies after transfer to AH (Alder Hey) the case is reviewed through the AH mortality review process by the hospital mortality review group (HMRG) with neonatal input from the Liverpool Neonatal Partnership. These mothers and babies' are reviewed through the LWH PMRT process which will then feed into the AH HMRG for a complete review of the mother and babies' care.

If a baby is transferred from LWH to hospice or home for end of life care the case is reviewed through the LWH PMRT process. In Q3, 2 babies died after transfer to other care settings for palliation, there was 1 delivery room death this quarter of an extremely preterm baby with multiple congenital abnormalities and 2 babies died at AHCH with complications of complex congenital heart disease.

Table 6: Mortality ***before or after*** NICU admission

	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21
Delivery room deaths	1			1	1	1		1	
Alder Hey Children's Hospital	2								2
Hospice	1			1					
Repatriation to booking hospital									
Home		1						**1**	
Other									**1**

3.2 Benchmarking data

We benchmark our mortality through MBRRACE nationally and the international VON network. MBRRACE has reported most recently on 2019 data, figure 1 demonstrates mortality rates over time, the grey lines demonstrate UK average for the LWH comparator group i.e. other NICUs with neonatal surgery. As the graph demonstrates for 2019 LWH has moved back towards the UK average in comparison to 2018. MBRRACE data includes only babies born >24 weeks gestational age and deaths within 28 days of birth. The VON data will be presented when 2021 data is complete and benchmarking can be made.

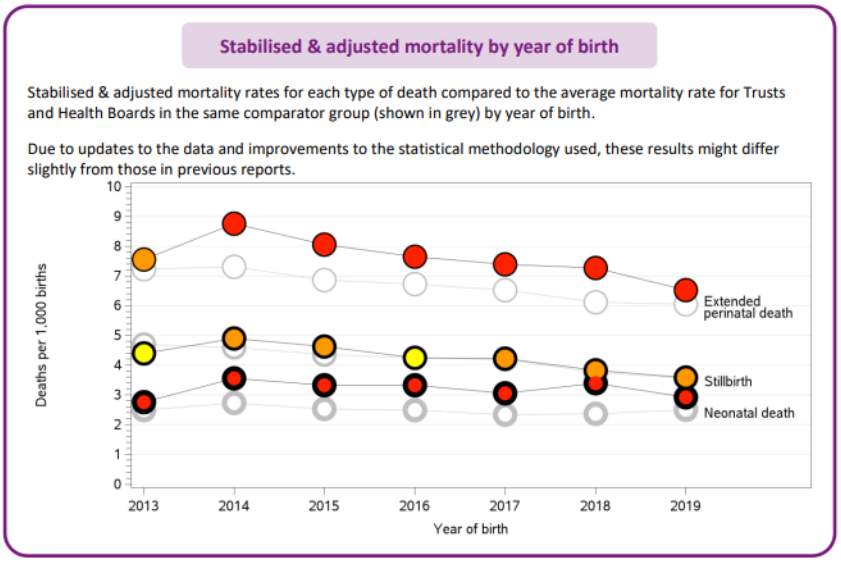


Figure 2. Embrace data 2013 - 2019

An ongoing external review by the North West Neonatal ODN of LWH mortality for extremely preterm infants is continuing. 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 is now due to be available in Q1-Q2 2022.

3.3. Learning from neonatal mortality reviews for Q2

All neonatal deaths on NICU are reviewed using the standardised national perinatal mortality review tool (PMRT) (see additional information for further details). All Q2 reviews have been completed (11/11).

Of 11 reviews 5 were found to have care issues which would not have affected the outcome, 1 case identified care issues which may have made a difference to the outcome, the care issue in that case was in respect of care at the referring hospital prior to transfer to LWH.

LWH Learning identified included the following (see additional information)

- Incomplete investigations completed for a baby with hydrops fetalis. An electronic investigation form is now created on the Badger EPR.
- There was a delay in a radiograph being performed out of hours. This has been escalated to CSS for review of out of hours radiology provision.
- There was a delay in management in the first hour for an extreme preterm infant. A new extreme preterm pathway has been developed and is now in use to act as a prompt for intervention.

5. Revised 2021/2022 Maternity Incentive Scheme requirements

The Trust was in receipt of the revised maternity incentive scheme guidance which has included updated timescales and deadlines for the reporting and reviewing of stillbirths and neonatal deaths. The detail below, demonstrates our current position against the newly revised timescales.

A. i) 100% all deaths have been reported to MBRRACE within the seven working day timeframe with 100% of deaths having surveillance completed within one month to date.
B. ii) 87% - 27 of 31 cases have had their review started within two months of the death, standard is 95%. By way of assurance processes to ensure that compliance is achieved, the FHD have implemented actions to ensure timely commencement of case reviews.
C. All reports are either in draft format or are planned to be in draft status by the timeline for CNST.
D. 100% of families have been informed and offered involvement in the review of their care and that of their baby.
E. All quarterly Learning from Deaths Reports have been submitted to Trust Board in a timely manner

This quarterly report (and pervious 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.

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.
- Specific recommendations

- the monitoring and review of the stillbirth rate continues by the Family Health board, with a thematic review to be conducted with Q4 data. Issues identified at the reviews and recommendations made will now be tracked through the Maternity Clinical Meeting
- the monitoring and review of the neonatal mortality rate continues with an external review of mortality for extremely preterm infants to be available in Q1 2022-23