

**UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST**  
**BOARD OF DIRECTORS**  
**THURSDAY 23 APRIL 2020**

<b>Title:</b>	<b>CLINICAL QUALITY MONITORING REPORT</b>
<b>Responsible Director:</b>	Prof. Simon Ball, Chief Medical Officer
<b>Contact:</b>	Mariola Smallman, Head of Medical Director's Services, 13768 James Bentley, Medical Director's Services Manager 13693

<b>Purpose:</b>	E.G: To present an update to the BOARD OF DIRECTORS
<b>Confidentiality Level &amp; Reason:</b>	None
<b>Board Assurance Framework Ref: / Strategy Implementation Plan Ref:</b>	SIP - #2 Eliminate unwarranted variation in services for patients through aligning and standardising pathways and service delivery SIP - #3 Provide the highest quality of care to patients through a comprehensive quality improvement programme To present an update to the Board
<b>Key Issues Summary:</b>	<ul style="list-style-type: none"> <li>• Latest performance for a range of mortality indicators (CUSUM, SHMI, HSMR).</li> <li>• Summary of Serious Incidents (SIs) meeting Never Event criteria reported between 07/02/20 and 08/04/20</li> <li>• Learning from Deaths, Quarter 4, 2019/20 update</li> <li>• Child Death Reviews, Quarter 3, 2019/20 update</li> </ul>
<b>Recommendations:</b>	The BOARD OF DIRECTORS is asked to: To discuss the contents of this report.

<b>Signed:</b> Prof Simon Ball	<b>Date:</b> 15 APRIL 2020
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UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST

BOARD OF DIRECTORS

THURSDAY 23 APRIL 2020

CLINICAL QUALITY MONITORING REPORT

PRESENTED BY CHIEF MEDICAL OFFICER

1. Introduction

The aim of this paper is to provide a patient safety update to the Board of Directors, based on information reported as part of clinical quality monitoring and the Clinical and Professional Review of Incidents Group (CaPRI) meetings. The Board of Directors is requested to discuss the contents of this report and approve any actions identified.

2. Mortality - CUSUM

UHB had 1 CCS (Clinical Classification System) diagnosis groups with higher than expected numbers of mortalities in December 2019:

November and December 2019 CUSUM Triggers:

- Other fractures – 13 observed deaths compared to 7 expected

November and December 2019 higher than expected CUSUM:

- Septicemia (except in labor) – 88 observed deaths compared to 68 expected
- Fluid and electrolyte disorders – 17 observed deaths compared 8 expected

The case-lists for these are subject to internal review processes.

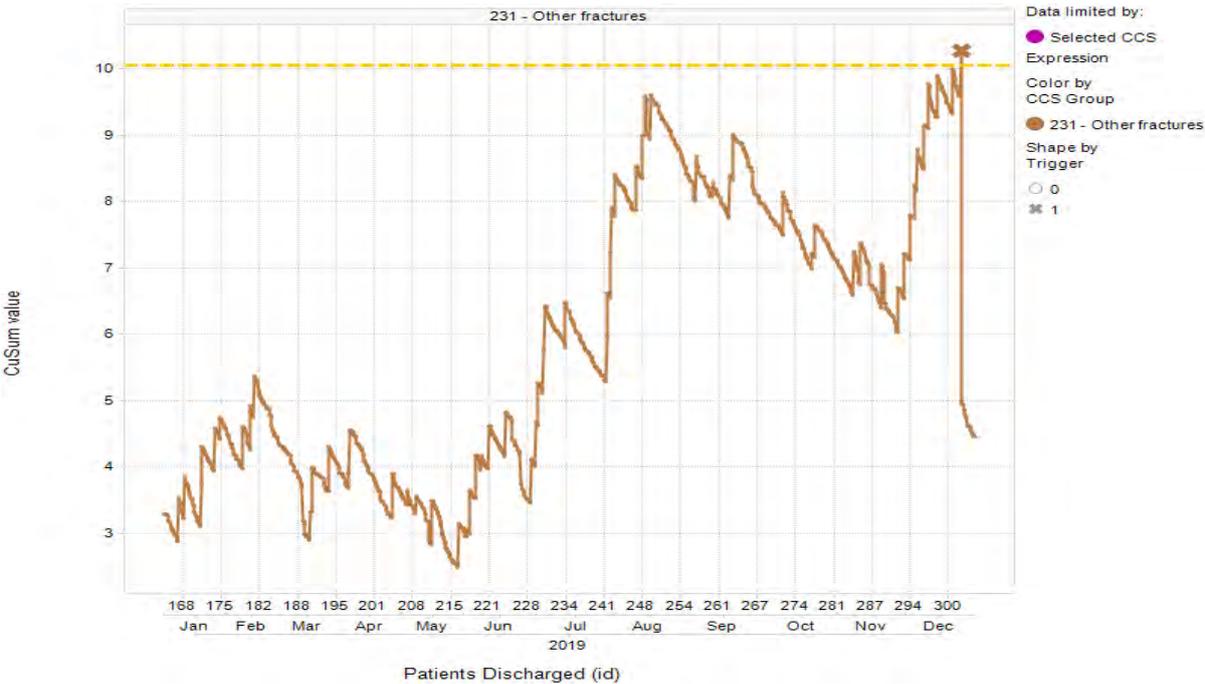


Figure 1: CCS Groups for UHB, November and December 2019

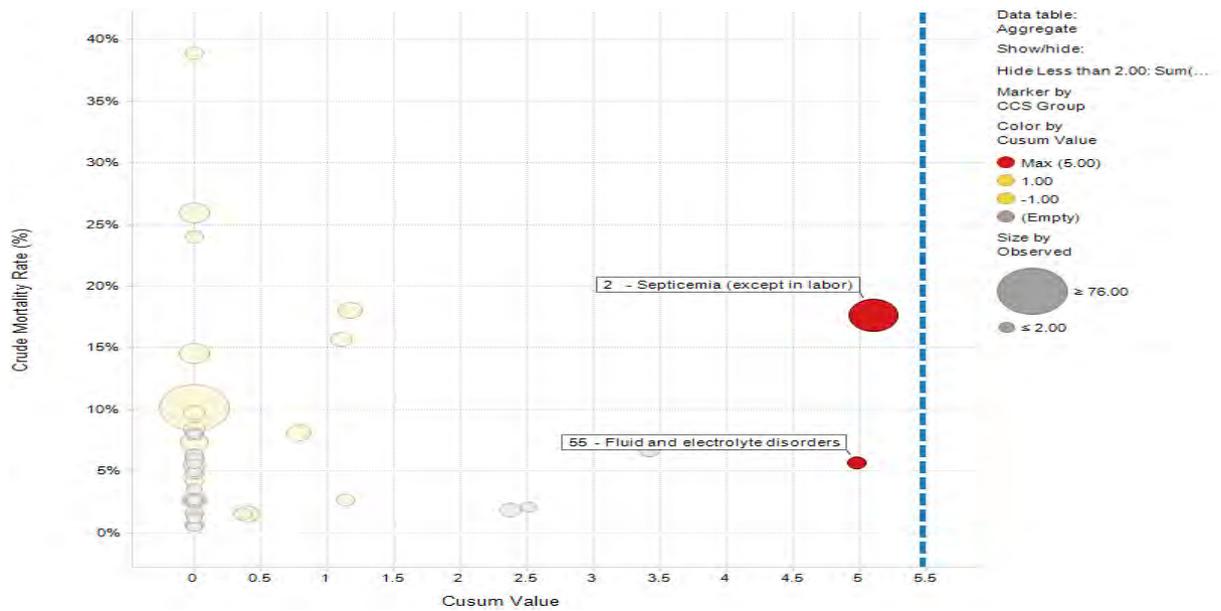


Figure 2: CCS Groups (higher than expected) for UHB, November and December 2019

### 3. Mortality - SHMI (Summary Hospital-Level Mortality Indicator)

UHB's SHMI performance for the period April 2019 to November 2019 was 99.7. The expected level is 100. There were 4549 observed deaths, compared with 4550 expected.

Please note that funnel plot is only valid when SHMI score is 100 for all the organisations (shown below) as a whole. It can be verified through highlighting all data items and checking grand total in Tab 3 breakdown table.

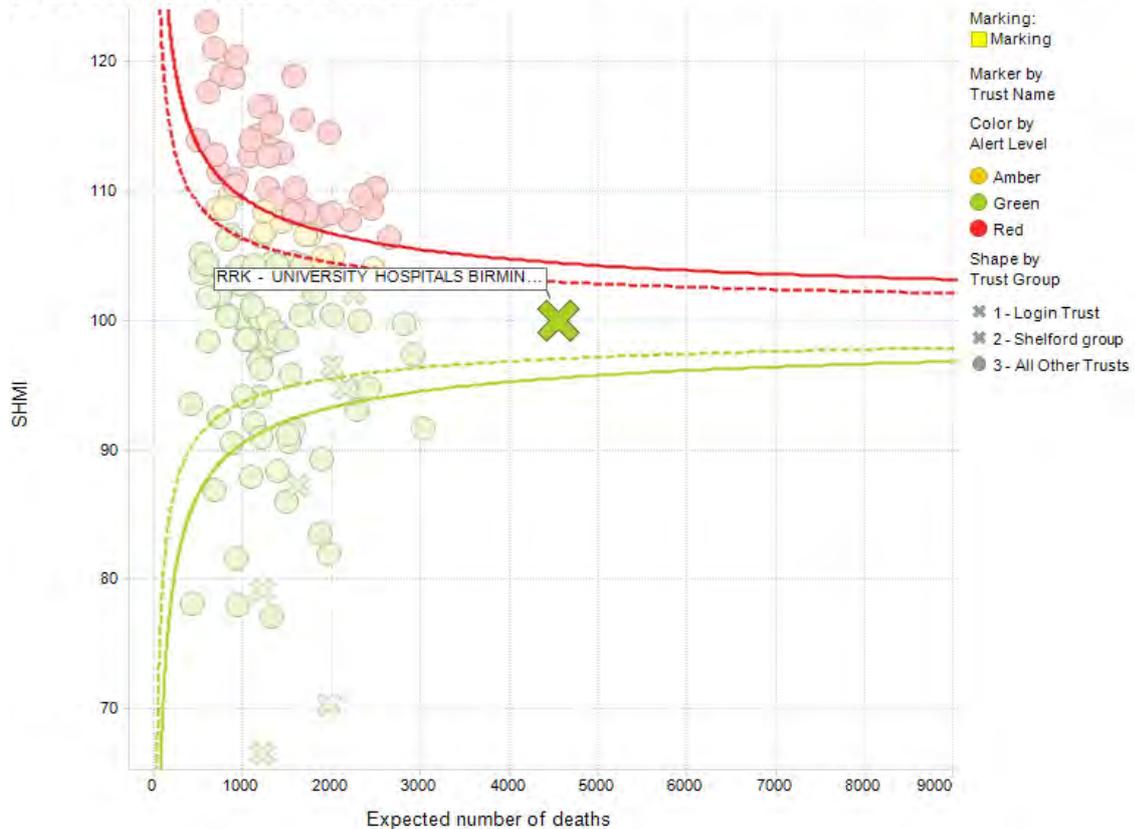


Figure 3: Trust SHMI April 2019 to November 2019

Treatment Site Name	SHMI	Expected number of deaths	Number of patients discharged who died in hospital or within 30 days	Number of total discharges	Average comorbidity score per spell	Crude mortality rate	Obs. - Exp.
RR101 - HEARTLANDS HOSPITAL	101.76	1334.54	1358	61551	3.47	2.21%	23
RR105 - GOOD HOPE HOSPITAL	96.39	1127.73	1087	41801	4.42	2.60%	-41
RR109 - SOLIHULL HOSPITAL	77.09	537.03	414	20071	5.42	2.06%	-123
RRK15 - QUEEN ELIZABETH HOSPITAL BIRMINGHAM	109.15	1540.15	1681	49157	5.51	3.42%	141
Grand total	99.97	4550.25	4549	174170	4.49	2.61%	-1

#### 4. Trust HSMR (Hospital Standardised Mortality Ratio)

UHB HSMR; between April 2019 to December 2019 was 104.6 due to 3054 observed deaths, compared to 2920 expected.

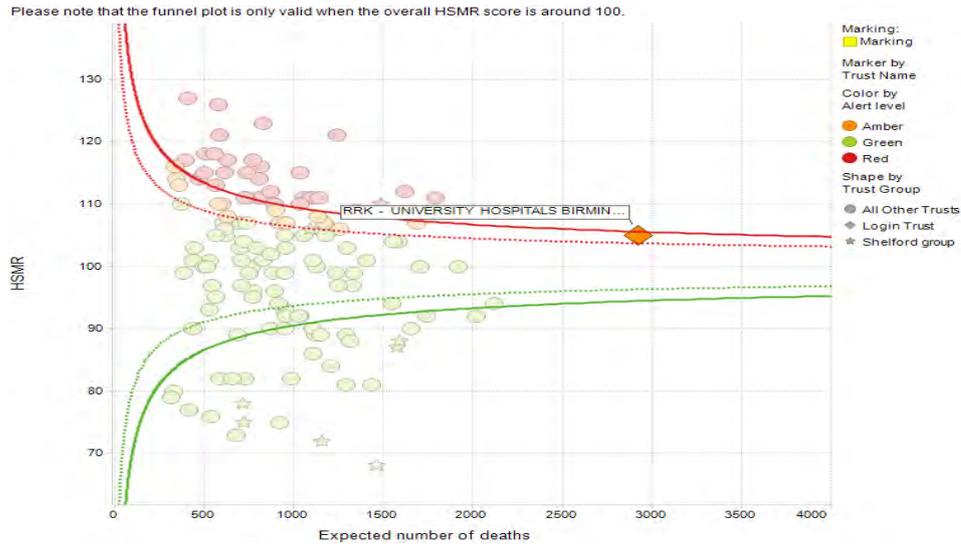


Figure 4: Trust HSMR April 2019 to December 2019

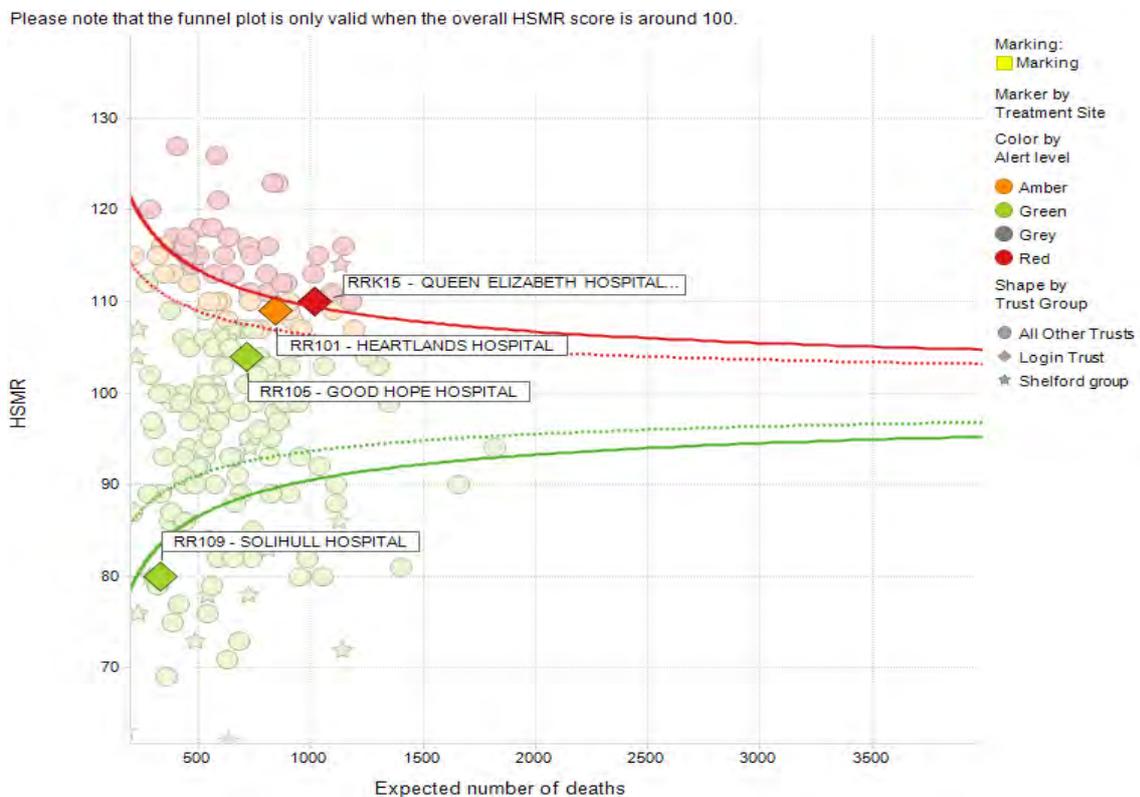


Figure 5: HSMR April 2019 to December 2019 by Hospital Site

Treatment Site	Number of discharges	Expected number of deaths	Number of deaths	HSMR	Average comorbidities per	Crude mortality rate	Obs. - Exp.
RR101 - HEARTLANDS HOSPITAL	29661	841.65	917	108.95	5.13	3.09%	75
RR105 - GOOD HOPE HOSPITAL	25156	714.78	740	103.53	6.13	2.94%	25
RR109 - SOLIHULL HOSPITAL	15994	332.26	267	80.36	6.06	1.67%	-65
RRK15 - QUEEN ELIZABETH HOSPITAL BIRMINGHAM	32496	1020.01	1118	109.61	6.16	3.44%	98
Grand total	106661	2920.42	3054	104.57	5.77	2.86%	134

## 5. Learning from Deaths – Q4 2019/20

The Learning from Deaths, Quarter 4, 2019/20 update is at Appendix A.

Emergency legislation (Coronavirus Act 2020), effective from 26th March 2020, includes changes to death certification, registration and cremation paperwork, which has resulted in temporary changes to the Trust's Medical Examiner Scrutiny Service. Whilst individual cases are not being scrutinised as previously, measures are in place to ensure oversight of Medical Certificates of Cause of Death (MCCDs) completion, including appropriate referral to the Coroner.

## 6. Child Death Review Process

A summary of the child death reviews, for the period 1<sup>st</sup> October to 31<sup>st</sup> December 2019, is at Appendix B. The Trust introduced the Child Death Review Process, following the transfer of this responsibility from the Department of Education to the Department of Health and Social Care.

## 7. Never Events

The Trust has reported one Never Event between 7<sup>th</sup> February and 8<sup>th</sup> April 2020. A patient had a swab retained during the final stages of surgery which required removal of the outer stitches and the wound to be reclosed. Two other Never Event investigations previously reported are in progress.

## 8. Recommendations

The Board of Directors is asked to:

Discuss the contents of this report.

Prof Simon Ball  
Chief Medical Officer



**Appendix A**

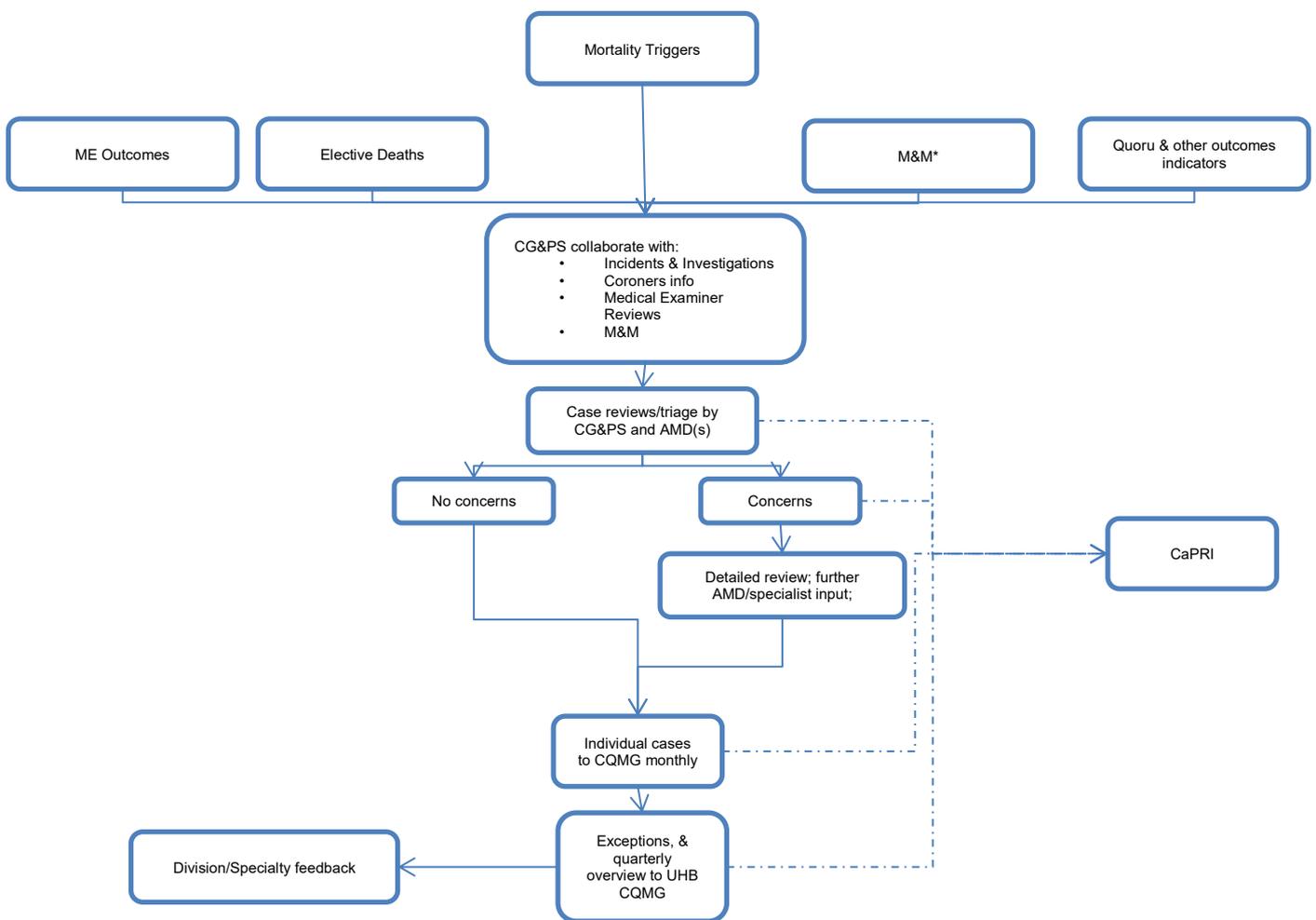
**Learning from Deaths**  
**Quarter 4 2019/20**

**1. Introduction**

The purpose of this report is to provide the Board of Directors with a summary of the all inpatient deaths between 1<sup>st</sup> January and 31st March 2020.

**2. The Trust’s process for reviewing inpatient deaths**

The Trust has agreed a final process for escalating reviews of inpatient deaths and outcomes of Medical Examiner/M&M reviews.



**Figure 1: Trust Mortality Review Process**

**3. External Measures**

In accordance with the National Quality Board’s Learning from Deaths guidance The Trust is required to include the following information in a public board paper on a quarterly basis:

- The total number of inpatient deaths in the Trust

None

- The total number of deaths receiving a front line review
- The number identified to be more likely than not due to problems in care

University Hospitals Birmingham's (UHB) definition of more likely than not due to problems in care is based on the Royal College of Physician's (RCP) Avoidability of Death scoring system. Any case that scores as a 3 or less is considered to be possibly due to problems in care and so a possibly avoidable death.

The RCP Avoidability scoring system is defined as follows:

- Score 1: Definitely avoidable
- Score 2: Strong evidence of avoidability
- Score 3: Probably avoidable
- Score 4: Possibly avoidable but not very likely
- Score 5: Slight evidence of avoidability
- Score 6: Definitely not avoidable

Medical Examiners (MEs) will not have had any input into the care of the patient they are reviewing and are not specialists in the clinical specialty of the deceased patient. This is intended to provide an independent opinion into the case. MEs are expected to be overly critical and cautious to prompt further review into cases where there is the suggestion of shortfalls in care. Any cases which are identified by the Medical Examiners as having potential shortfalls in care are escalated for further review as per usual Trust processes.

#### 4. UHB Quarter 4, 2019/20, Summary

The graph below shows: the total number of deaths within the Trust during the last quarter; the total number of deaths reviewed by the Medical Examiners; and the number considered potentially avoidable.

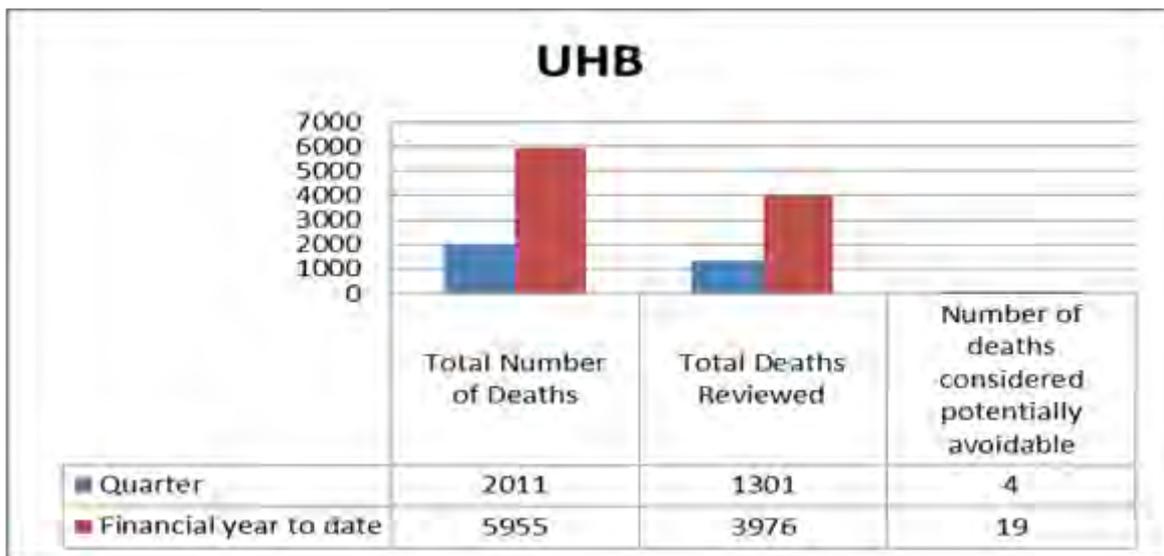


Figure 2: Number of front line reviews of deaths and those considered avoidable (a score of 3 or less on the RCP Avoidability of Death scoring system) based on front line Medical Examiner reviews.

Four deaths received a score of 3 or less which is the criteria for being classified as potentially avoidable. Of these, 1 was identified prior to the ME review.

## None

- The first case was that of a patient who died following complications of elective vascular surgery. This case was only identified by the ME. Review of this case identified no significant concerns, as the patient died of known complications from necessary surgery which were appropriately managed.
- The second case was that of a patient who died following an admission with an aortic dissection. This was otherwise identified as an incident, and a Serious Incident investigation is in progress to investigate the circumstances surrounding a previous admission and potential delay in diagnosis.
- The third case was that of a patient who died following a liver resection for suspected cancer, with significant subsequent complications requiring transplantation. The concerns raised by the ME in this case were that the initial operation was done for cancer, but the post-operative findings showed no cancer present. Pre-operative imaging and biopsies were highly suggestive of cancer and the case was discussed at multiple MDTs. Subsequent complications were known risks of complex, high risk surgery, which were appropriately managed. There were no issues identified and this was a rare and highly unfortunate case.
- The fourth case was that of a patient who died following a GI bleed, while they were on warfarin. The concerns from the ME were regarding the lack of clarity regarding the management plan for the patient's anticoagulation. This was escalated and discussed and no issues were identified other than poor documentation, which was followed up. Not identified prior to ME review.

The graphs below show the breakdown of scoring against the avoidability measure across the 4 sites.

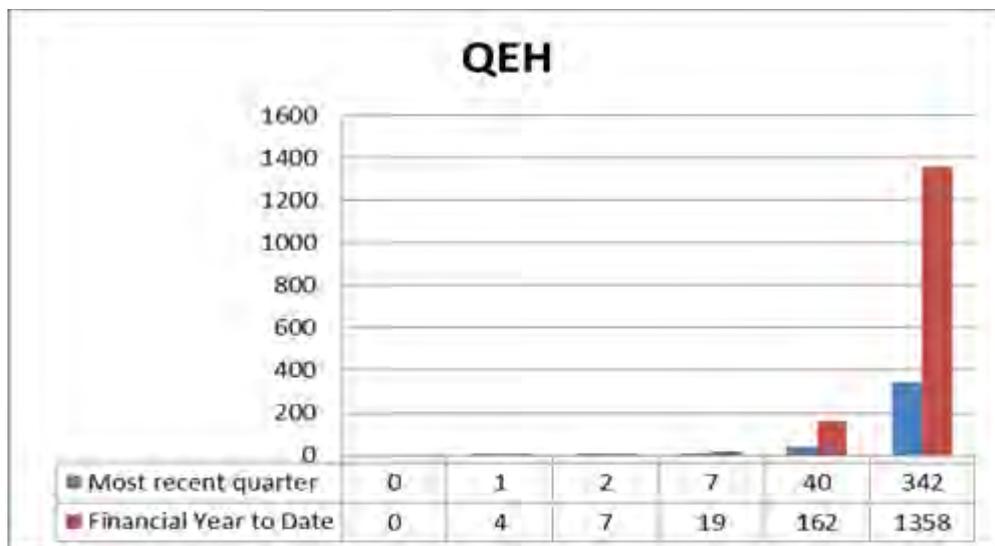


Figure 3: Avoidability scoring at QEH

None

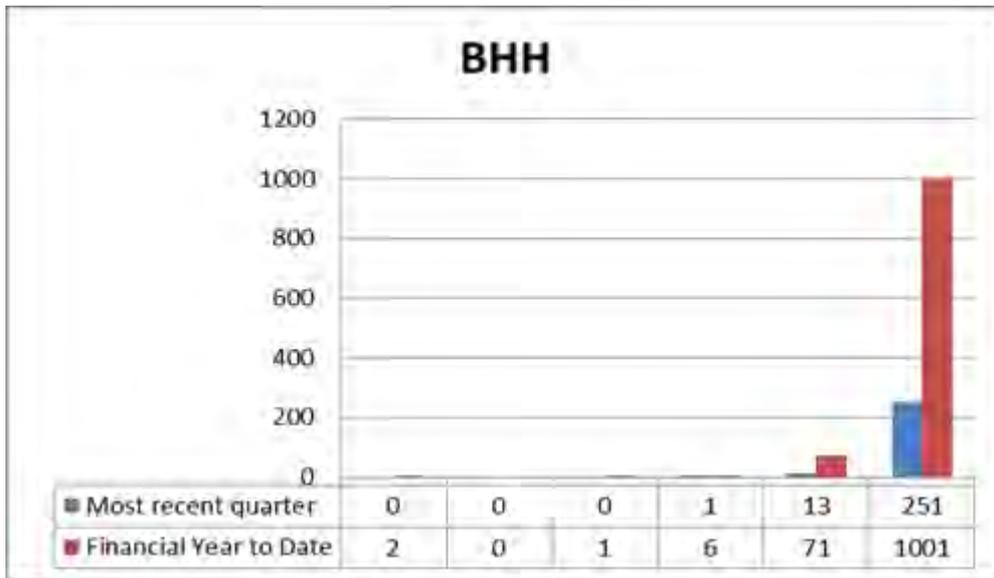


Figure 4: Avoidability scoring at BHH

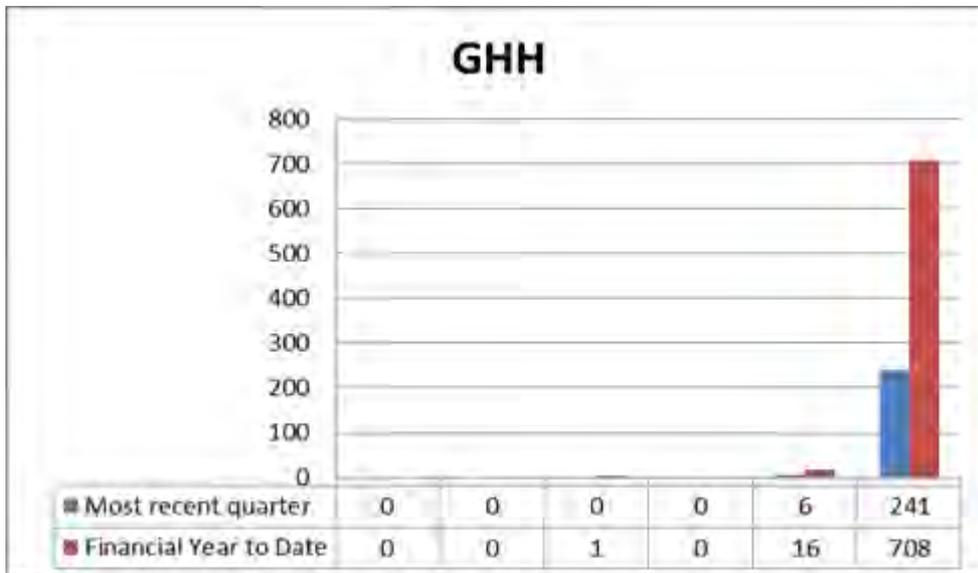


Figure 5: Avoidability scoring at GHH

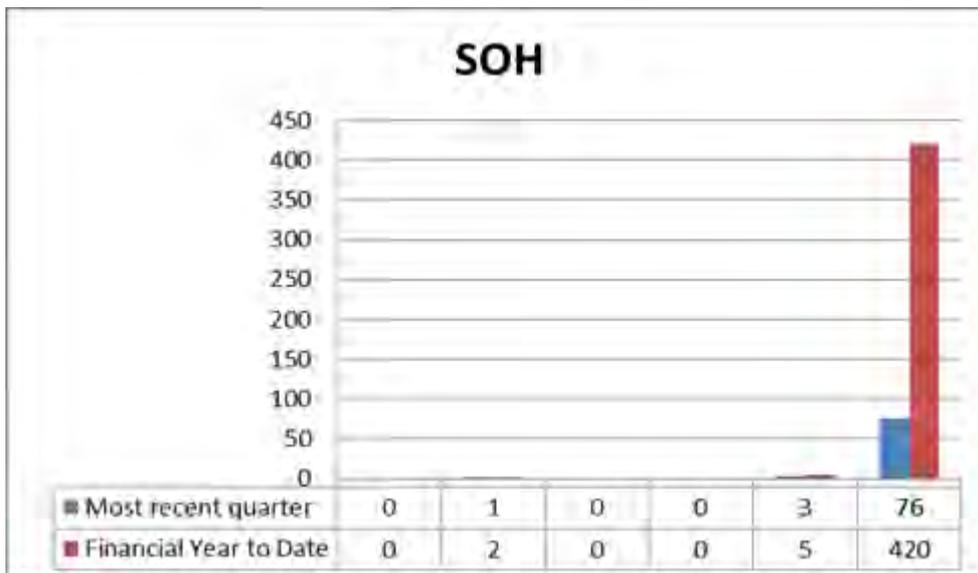


Figure 6: Avoidability scoring at SH

## 5. Medical Examiner Scoring of Care

This section summarises Medical Examiner overall scoring of care, which is based on the RCP Summary Category of Care scoring system. This scoring system is only monitored and reported internally. Internal scoring of care focuses mainly on the quality of care provided, regardless of the effect on the patient's outcome, whereas the external avoidability measure is focused on outcomes.

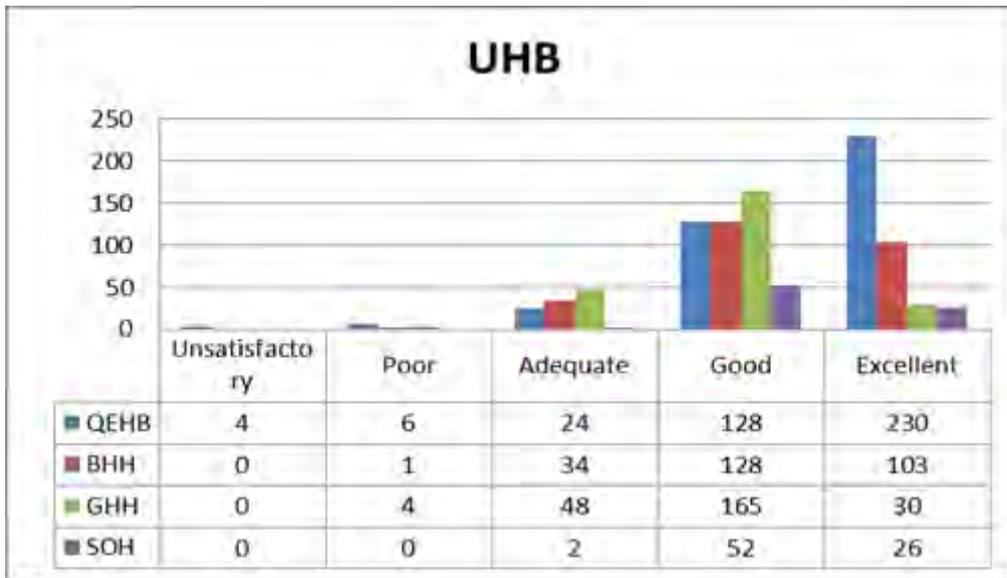


Figure 7: UHB Scoring of Care by Hospital Site for the quarter

The RCP Summary Category of Care scoring system is defined as follows:

- Excellent care: This was excellent care with no areas of concern.
- Good care: This was good care with only one or two minor areas of concern and no potential for harm to the patient
- Adequate care: This was satisfactory care with two or more minor areas of concern, but no potential for harm to the patient
- Poor Care: Care was suboptimal with one or more significant areas of concern, but there was no potential for harm to the patient
- Unsatisfactory care: Care was suboptimal in one or more significant areas resulting in the potential for, or actual, adverse impact on the patient.

Based on the cases that were escalated by MEs this quarter, the key theme identified from quality of care scoring was communication with family members.

## 6. Deaths in Patients with Learning Disabilities

There were 20 deaths in patients with Learning Disabilities reviewed by the Medical Examiners within Quarter 3, 2019/20, at UHB. One of these cases is subject to further follow-up regarding general care provision at GHH.

None

## **Appendix B**

### **Child Death Review Process** **Quarter 3, 2019/20**

#### **1. Introduction**

The purpose of this report is to provide the Board of Directors with a summary of the child death reviews for the period 1<sup>st</sup> October to 31<sup>st</sup> December 2019.

#### **2. Background**

The Trust introduced the Child Death Review Process, following the transfer of this responsibility from the Department of Education to the Department of Health and Social Care. The aim of the Child Death Review Process is to identify learning to prevent future child deaths.

Output from the Trust's Child Death Review Process will inform the statutory independent multi-agency panel arranged by Child Death Review (CDR) partners at the Child Death Overview Panels (via both Birmingham and Solihull partners based on the patient's geographical area of residence).

The Trust's Child Death Reviews are complementary to other existing governance processes as appropriate such as: Sudden and Unexpected Deaths in Infancy /Childhood (SUDI/C) multi agency reviews; Learning from Deaths (adult cases until the statutory Medical Examiner system is introduced); safeguarding; and learning disabilities (LeDeR), etc. Where appropriate child deaths are also subject to internal incident investigation processes and referral to HM Coroner.

#### **3. UHB Child Death Review Process**

The Child Death Review meeting is chaired by a Deputy Medical Director and includes consultants (paediatrics, neonatology, obstetrics, clinical governance and emergency medicine) and senior nursing and midwifery leads. Other attendees include clinicians who were directly involved in the care of the child during his or her life, the Clinical Service Lead and any professionals involved in the investigation into the death.

Child Death Review meetings take place on a bi-monthly basis and aim to review deaths within a recommended period of three months. Child Death Review meetings include:

- A review of the background history, treatment, and outcomes of investigations, to determine, as far as is possible, the likely cause of death;
- Ascertaining contributory and modifiable factors across domains specific to the child, the social and physical environment, and service delivery;
- A review of support provided to the family;
- Identification of any learning arising from the death and, where appropriate, to identify actions to improve the safety or welfare of children.

None

#### 4. UHB Quarter 3, 2019/20, Summary

There were nine child deaths during quarter 3, 2019/20.

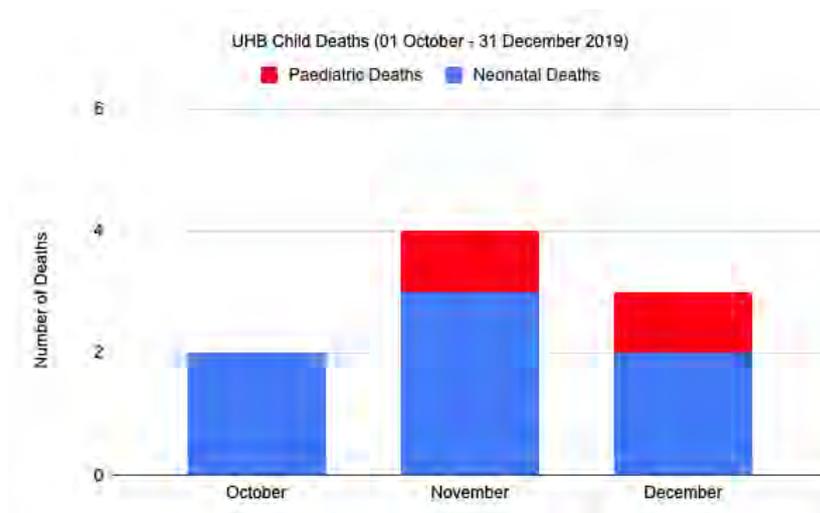


Figure 1: Paediatric and Neonatal Deaths reported by month

##### 4.1. Neonatal deaths

There were seven neonatal deaths reviewed during Quarter 3, 2019/20. These were reviewed by the local team using the Perinatal Mortality Review Tool (PMRT), which is a national standardised tool used across all NHS maternity and neonatal units. PMRT reviews apply to perinatal deaths from 22 weeks gestation until 28 days after birth. PMRT multi-disciplinary reviews are submitted to the Child Death Review panel to provide independent oversight of the each case.

PMRT reviews include a grading system to apply a quality of care level:

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

A quality of care grade is identified based on the following:

- The care provided to the mother and baby up to the point of the birth of the baby;
- The care provided to the baby from birth up to the death of the baby;
- The care provided to the mother following the birth of her baby.

Of the seven neonatal PMRT reviews, four were Grade A and three were Grade B. The three Grade B key issues related to:

- Lack of communication from another hospital involving a baby that was born elsewhere and was transferred to Heartlands. (This has been raised as an incident report.)
- In one instance, the parents did not feel that they were listened to; this has been fed back to the team.

None

- Difficulty in accessing interpreter services when communicating with a family whose first language is not English.

Six of the seven neonatal deaths were babies who were born prematurely (gestation range from 22+6 to 30 weeks. Their birth weight ranged from 445 grams (0.98lb) to 1580 grams (3.5lbs). The age range was from 2 hours 20 minutes to 15 days. Care of these babies was re-orientated after intensive support and end of life care provided.

The seventh neonatal death was a baby born full term who was transferred from another hospital. The baby was ventilated from birth and remained critically ill but, after re-orientation of care later on, he sadly died after 26 days.

## **4.2. Paediatric deaths**

The first child had a diagnosis of arthrogryposis, suspected congenital myopathy, developmental delay and failure to thrive. The parents previously had two children born with reportedly, strikingly similar phenotype and who passed away at 3 and 6 months, respectively. A RESPECT form was in place following conversations with parents at the time of admission and contact had been made with the palliative care team. Although there was a slight delay in altering the feeding regime, when the baby developed re-feeding syndrome, the Child Death Review meeting concluded that this made no difference to the child's outcome. Following the incident the clinical team has liaised with the Dietetics department to raise awareness of this rare condition. Issues with accessing interpreter services were also identified and the department are arranging a video interpreter service trial.

The second child presented to the Emergency Department at Good Hope Hospital (GHH) 02/12/2019 with pyrexia. She was discharged home with a diagnosis of Bronchiolitis. She was brought back to GHH on the following day during which she was diagnosed with Lower Respiratory Tract Infection and was discharged home with oral antibiotics. The child was brought back again to GHH on 06/12/2019. On arrival, the child was very unwell with significant breathing problems which needed immediate medical attention. Despite attempts at resuscitation the child did not survive. In line with statutory requirements the child's death was referred to the Coroner. The Coroner's investigation outcome is awaited.

## **4.3. Child Death Review Themes**

Based on the cases that were reviewed by the Child Death Review Panel during this reporting period, a key theme involves language as a barrier to good communication where the parents' first language was not English. Challenges with obtaining the correct interpreter has been raised with the management team.

None