UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST
BOARD OF DIRECTORS
THURSDAY 24 OCTOBER 2019

Title:	**CLINICAL QUALITY MONITORING REPORT**
Responsible Director:	Prof. Simon Ball, Medical Director
Contact:	Mariola Smallman, Head of Medical Director's Services, 13768 James Bentley, Medical Director's Services Manager 13693

Purpose:	To present an update to the Board	
Confidentiality Level & Reason:	None	
Strategy Implementation Plan Ref:	#2 Eliminate unwarranted variation in services for patients through aligning and standardising pathways and service delivery #3 Provide the highest quality of care to patients through a comprehensive quality improvement programme #4 Meet regulatory requirements and operational performance standards, in line with agreed trajectories	
Key Issues Summary:	• Latest performance for a range of mortality indicators (CUSUM, SHMI, HSMR). • Learning from Deaths, Quarter 3, 2019/20 update • Summary of Serious Incidents (SIs) meeting Never Event criteria reported between 12/07/19 and 11/09/2019 • Three mortality outlier alerts are currently being reviewed prior to a response to the CQC • The Trust has engaged with the Royal College of Surgeons to scope an invited review of Neurosurgery relating to team-working and professional relationships.	
Recommendations:	To discuss the contents of this report.	
Approved by:	Prof Simon Ball	Date: 14/10/2019

UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST

BOARD OF DIRECTORS
THURSDAY 24 OCTOBER 2019
CLINICAL QUALITY MONITORING REPORT
PRESENTED BY MEDICAL DIRECTOR

1. Introduction

The aim of this paper is to provide a patient safety update to the Board of Directors, based on information presented at the October 2019 Clinical Quality Monitoring Group (CQMG) meeting 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 7 CCS (Clinical Classification System) diagnosis groups with higher than expected numbers of mortalities in June 2019:

- Pneumonia (except that caused by tuberculosis or sexually transmitted disease) – 65 observed deaths, compared to 56.8 expected.
- Aspiration pneumonitis; food/vomitus – 14 observed deaths, compared to 11.4 expected.
- Intestinal obstruction without hernia – 16 observed deaths, compared to 12.1 expected (n.b. April to June 2019 data for this CCS Group).
- Urinary tract infections – 9 observed deaths, compared to 6.2 expected.
- Fracture of neck of femur (hip) – 8 observed deaths, compared to 6.1 expected.
- Complication of device; implant or graft – 3 observed deaths, compared to 1.5 expected.
- Deficiency and other anaemia – 4 observed deaths, compared to 1.8 expected.

One minor CCS group triggered in June: Headache; including migraine – 2 observed deaths, compared to 0.3 expected.

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

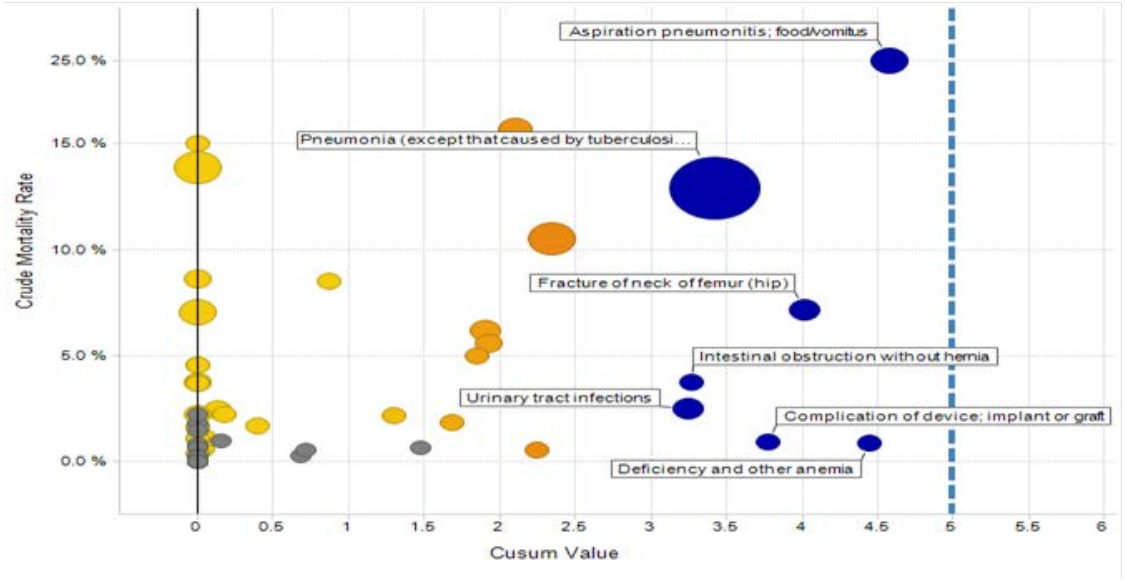


Figure 1: CCS Groups for UHB, June 2019

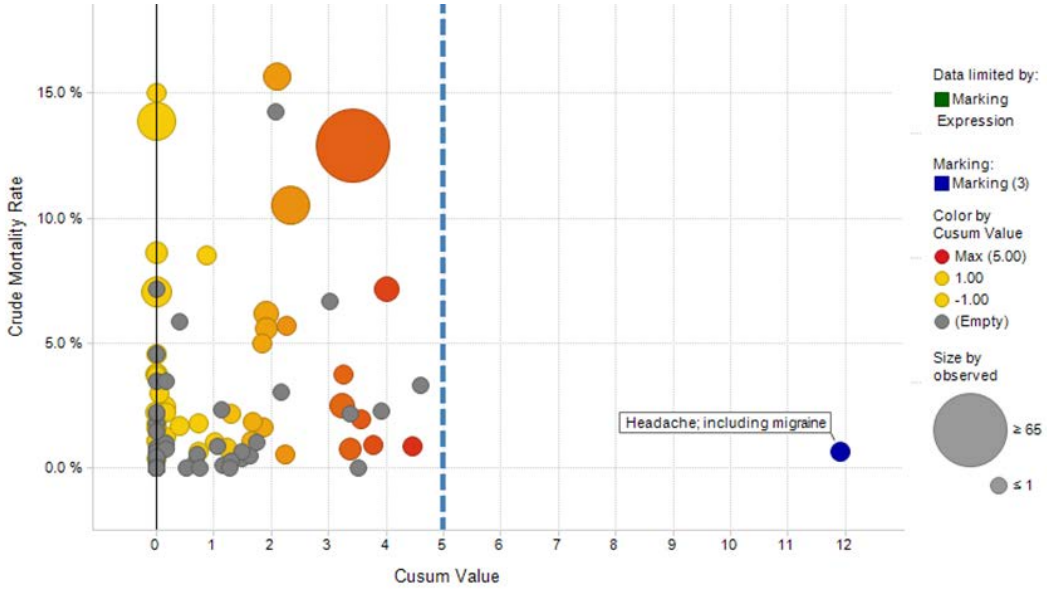


Figure 2: Minor CCS Groups, June 2020

Three previous mortality outlier alerts are currently being reviewed prior to a response to the CQC. These are in diagnosis groups:

- Admitted with 'intracranial injury' *(ref: A1314/LR)*
  Cases have been reviewed and no concerns were identified.
- Admitted with 'complication of device, implant or graft' *(ref: A1304/LR)*
  Cases have been reviewed and no concerns were identified.
- Undergoing 'therapeutic endoscopic procedures on biliary tract' *(ref: A1305/AS)*
  Informatics have not been able to identify these cases as the methodology used by the CQC is proprietary, unpublished and cannot be replicated.

A new methodology for calculating statistical outliers meant that these were not identified by our own systems which reproduce the previous methodology. Admitted with 'intracranial injury' is however a regular alert that is consequent upon

inadequate case mix adjustment for major trauma centres.

The new methodology in use by the CQC is proprietary and unpublished (Dr Foster) and cannot be replicated. The Trust will detail its concerns on the use of a non-replicable data model for the purposes of regulation as part of its response to the CQC.

The overall mortality rates for UHB as measured by the CUSUM is within the acceptable limits (see Figure 3 below).

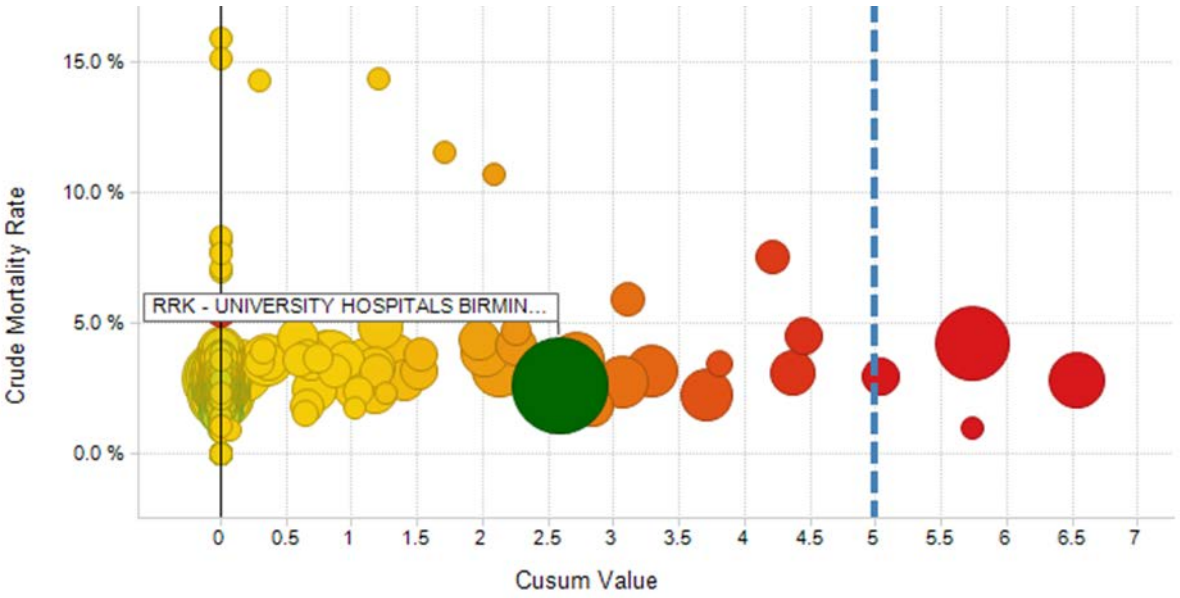


Figure 3: Mortality CUSUM at Trust level, June 2019

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

UHB's SHMI performance for the period April 2018 to March 2019 was 98.8. The expected level is 100. There were 7077 observed deaths, compared with 7166 expected.

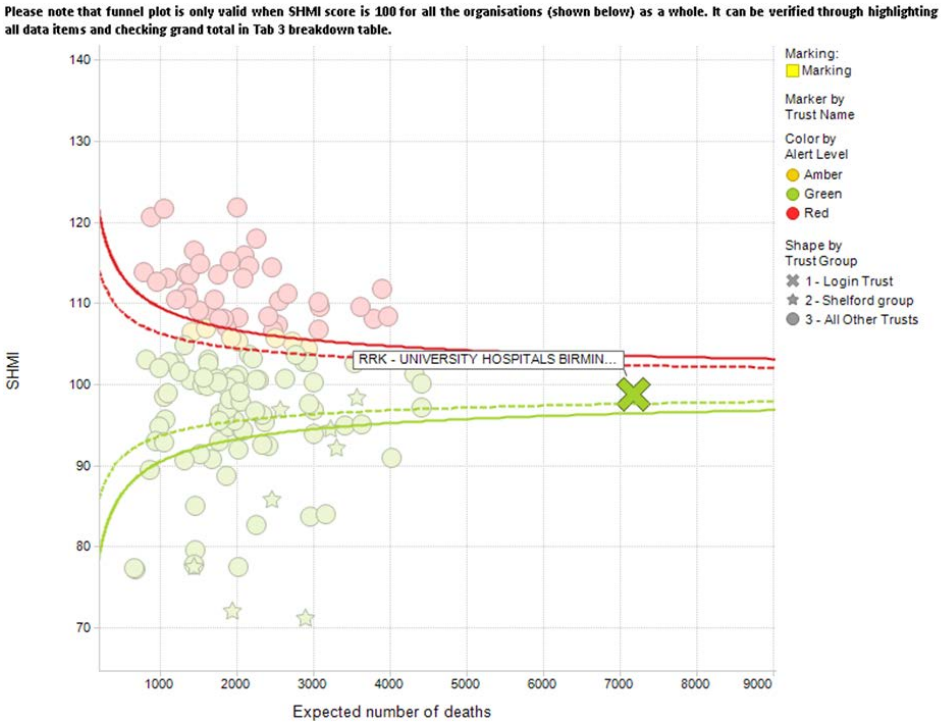


Figure 4: Trust SHMI April 2018 to March 2019

4. Trust HSMR (Hospital Standardised Mortality Ratio)

5.

UHB HSMR; between April 2019 to June 2019 was 104 due to 985 observed deaths, compared to 940 expected.

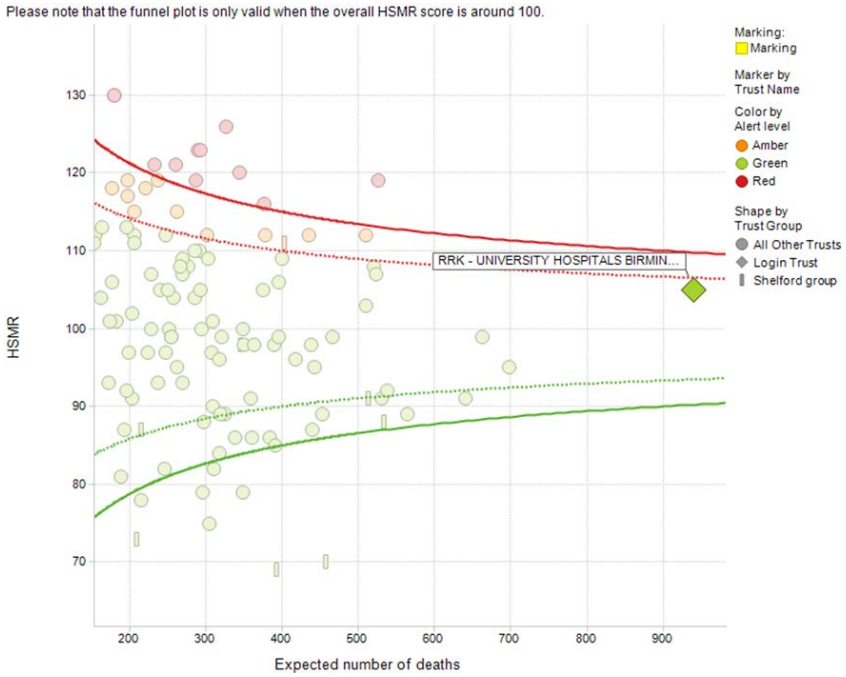


Figure 5: Trust HSMR April 2019 to June 2019

Apr-19 to June-19 HSMR

Treatment Site	Number of discharges	Expected number of deaths	Number of deaths	HSMR	Average comorbidities per spell	Crude mortality rate	Obs. - Exp.
RR101 - HEARTLANDS HOSPITAL	9856	269.55	306	113.52	5.05	3.10%	36
RR105 - GOOD HOPE HOSPITAL	8155	228.29	228	99.87	5.98	2.80%	0
RR109 - SOLIHULL HOSPITAL	5128	113.69	107	94.12	6.06	2.09%	-7
RRK15 - QUEEN ELIZABETH HOSPITAL BIRMINGHAM	10793	325.70	342	105.01	5.86	3.17%	16
Grand total	34943	940.18	985	104.77	5.63	2.82%	45

6. Learning from Deaths, Quarter 2, 2019/20

The Learning from Deaths, Quarter 2, 2019/20 update is at Appendix A.

7. Never Events

The Trust has not reported any serious incidents that met Never Event criteria between 12th September and 11th October 2019. Four previously reported Never Event investigations are in progress.

8. Other Key Issues

The Trust has engaged with the Royal College of Surgeons to scope an invited review of Neurosurgery relating to team-working and professional relationships.

9. Recommendations

The Board of Directors is asked to:

Discuss the contents of this report.

Prof Simon Ball
Medical Director

Appendix A

Learning from Deaths
Quarter 2, 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 1st July and 30th September 2019.

2. The Trust's process for reviewing inpatient deaths

The Trust's process for escalating reviews of inpatient deaths and outcomes of Medical Examiner/M&M reviews is shown below.

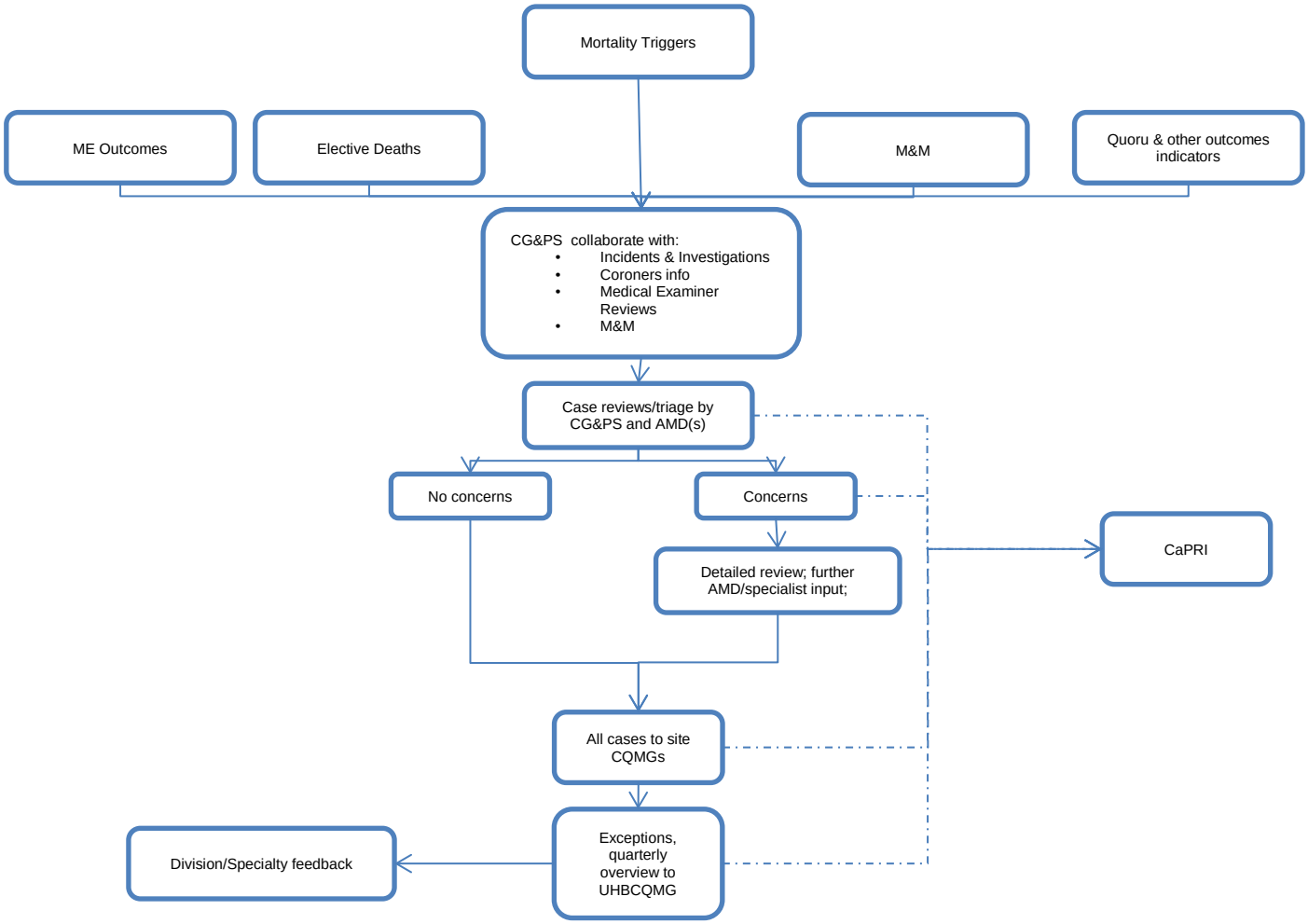


Figure 1: Trust Mortality Review Process

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
- 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 2, 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.

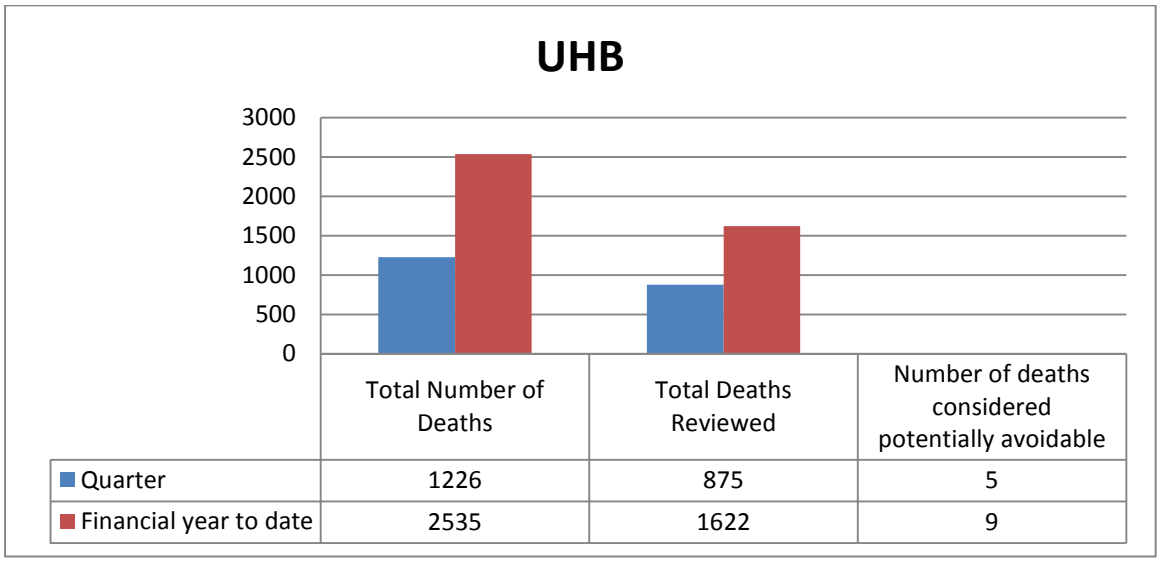


Figure 2: Number of front line reviews of deaths and those considered avoidable (a score of 3 or less on the RCP Avoidability of Death scoring system) based on front line Medical Examiner reviews.

Five deaths received a score of 3 or less which is the criteria for being classified as potentially avoidable. Of these five, two were identified prior to the ME review.

- The first case relates to a potentially missed raised troponin. This case was escalated to CaPRI, where the decision was made to investigate as a serious incident. This case was identified by the ME.

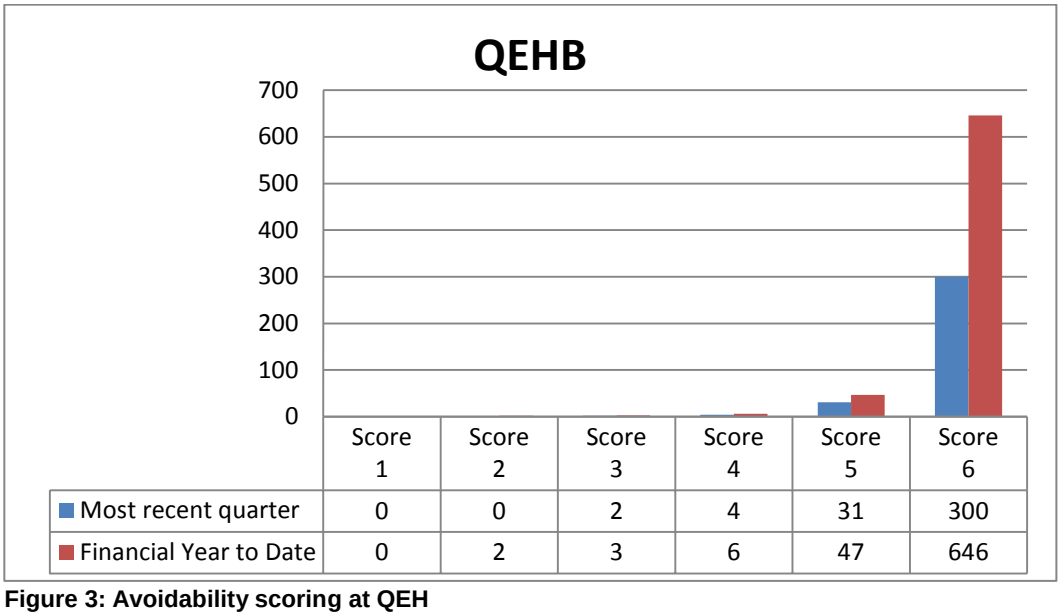
- The second case relates to the potential over-transfusion of a patient who subsequently died. This was appropriately raised by the ME, but further enquiries by specialist teams confirmed that the patient was not over-transfused and no further action was required. There was an incident raised prior to the ME review.

- The third case relates to the management of anticoagulation in a patient who was a tertiary transfer from another hospital and subsequently developed a significant pulmonary embolism. It was escalated to CaPRI where the decision was made to investigate as a Divisional RCA. This was identified by the ME. This patient also had a documented learning disability, whose care will also be subject to a LeDeR review.

- The fourth case relates to a potentially delayed diagnosis and management of pneumonia. As at writing this case is scheduled for review at CaPRI in October. This was identified by the ME.

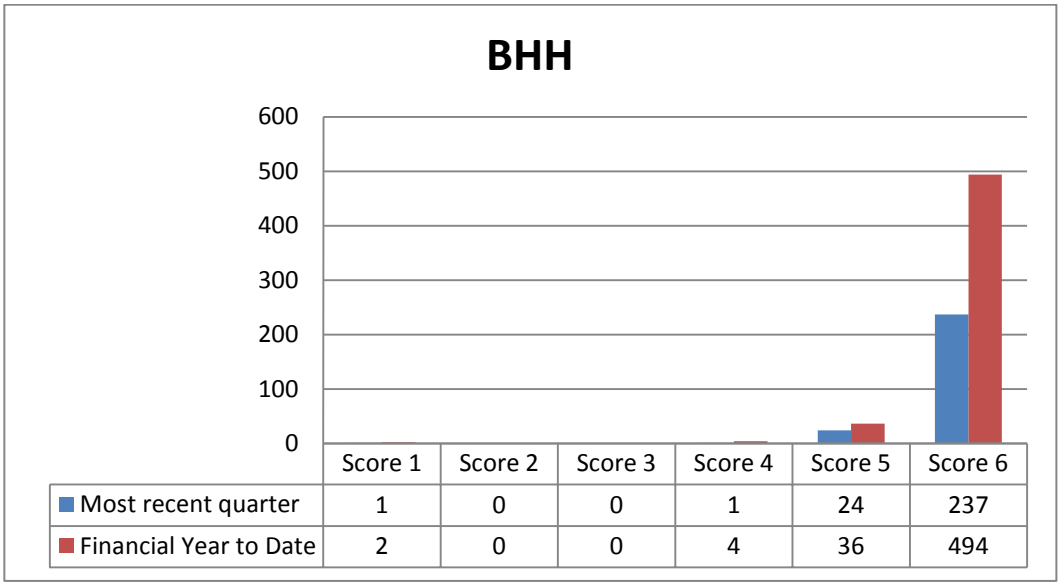
- The fifth case relates to the care of a patient who died after having a total knee replacement. This case was referred to the Coroner, in line with Notification of Deaths Regulations and was therefore not subject to Medical Examiner scrutiny at the time. The patient's family submitted a complaint and upon further review was escalated to CaPRI and the decision was made to investigate as a serious incident. The ME review in this case was retrospective after the incident was escalated to CaPRI.

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



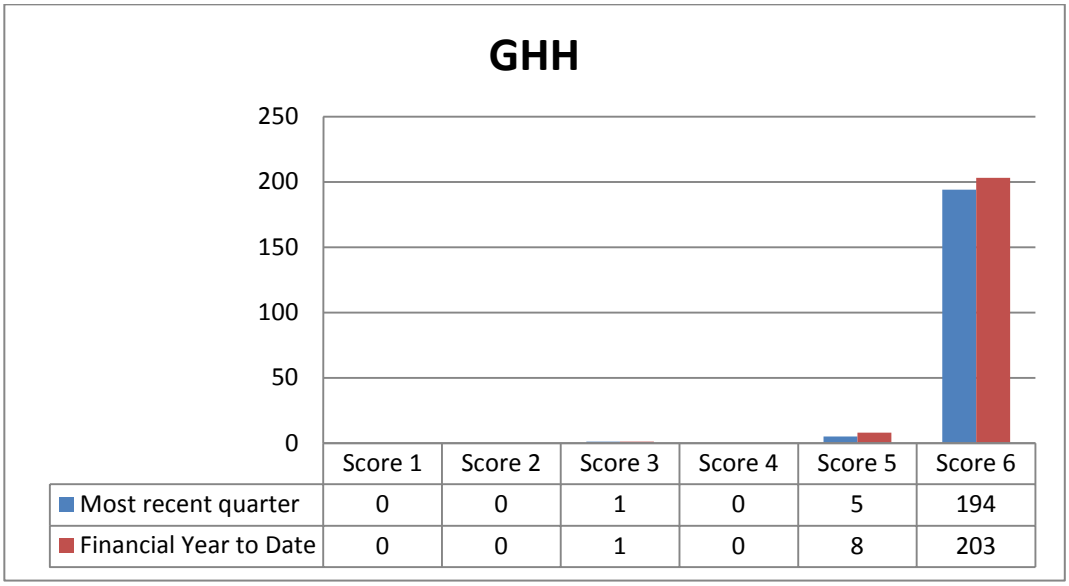
	Score 1	Score 2	Score 3	Score 4	Score 5	Score 6
Most recent quarter	0	0	2	4	31	300
Financial Year to Date	0	2	3	6	47	646

Figure 3: Avoidability scoring at QEH



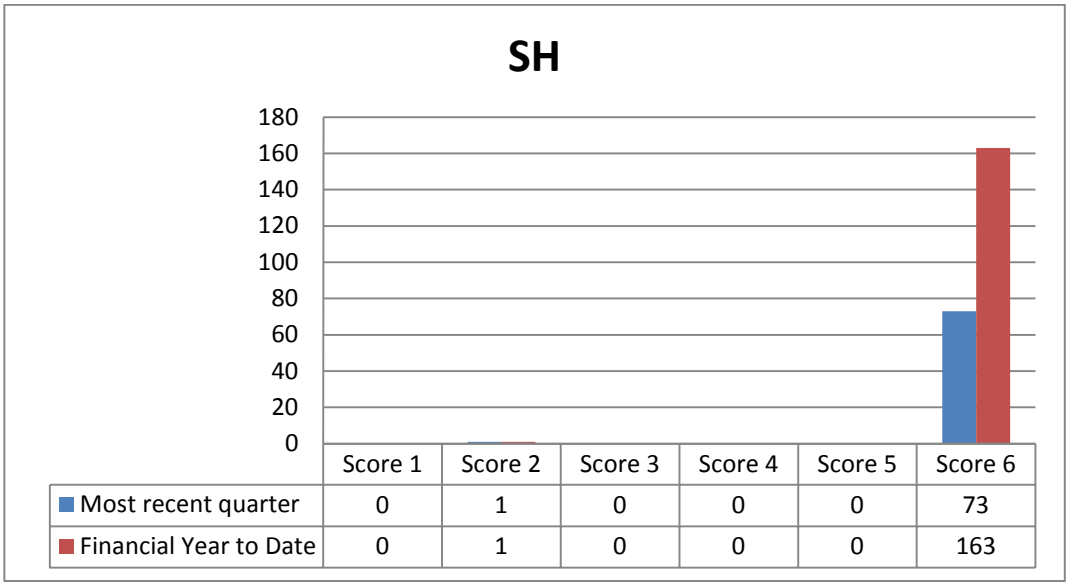
	Score 1	Score 2	Score 3	Score 4	Score 5	Score 6
Most recent quarter	1	0	0	1	24	237
Financial Year to Date	2	0	0	4	36	494

Figure 4: Avoidability scoring at BHH



	Score 1	Score 2	Score 3	Score 4	Score 5	Score 6
Most recent quarter	0	0	1	0	5	194
Financial Year to Date	0	0	1	0	8	203

Figure 5: Avoidability scoring at GHH

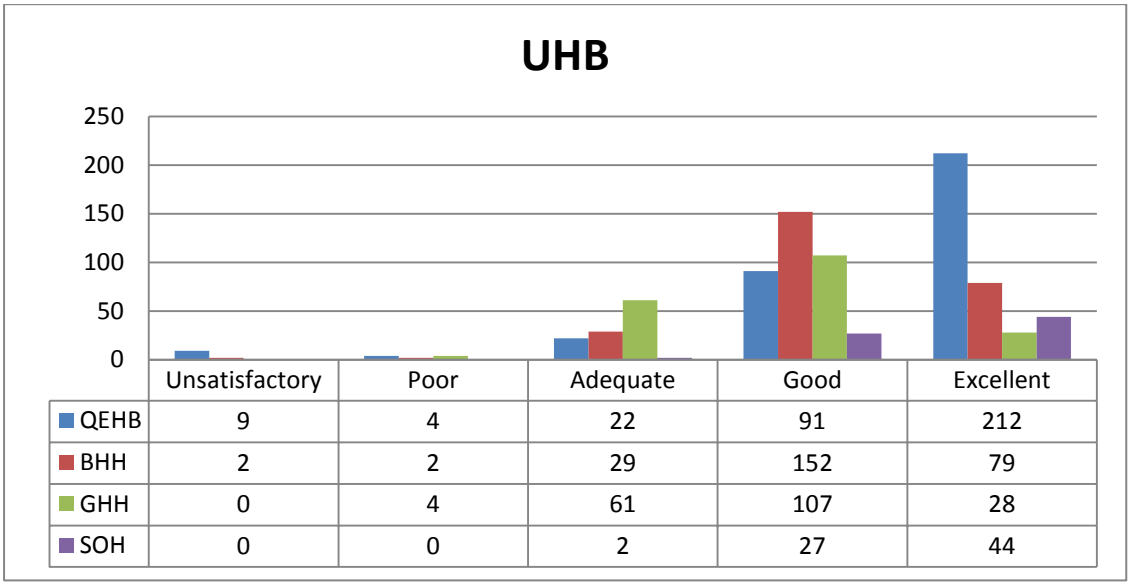


	Score 1	Score 2	Score 3	Score 4	Score 5	Score 6
Most recent quarter	0	1	0	0	0	73
Financial Year to Date	0	1	0	0	0	163

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.



	Unsatisfactory	Poor	Adequate	Good	Excellent
QEHB	9	4	22	91	212
BHH	2	2	29	152	79
GHH	0	4	61	107	28
SOH	0	0	2	27	44

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, key themes identified from quality of care scoring are communication with family and potentially missed anticoagulation.

6. Deaths in Patients with Learning Disabilities

There were 16 deaths in patients with Learning Disabilities reviewed by the Medical Examiners within Quarter 2, 2019/20 at UHB. One case, referenced in section 4 above, is currently being investigated as a serious incident.