

**Mortality Report: Learning from Deaths Qtr4 2019/20**  
**Prof. Alastair Hutchison, Medical Director**

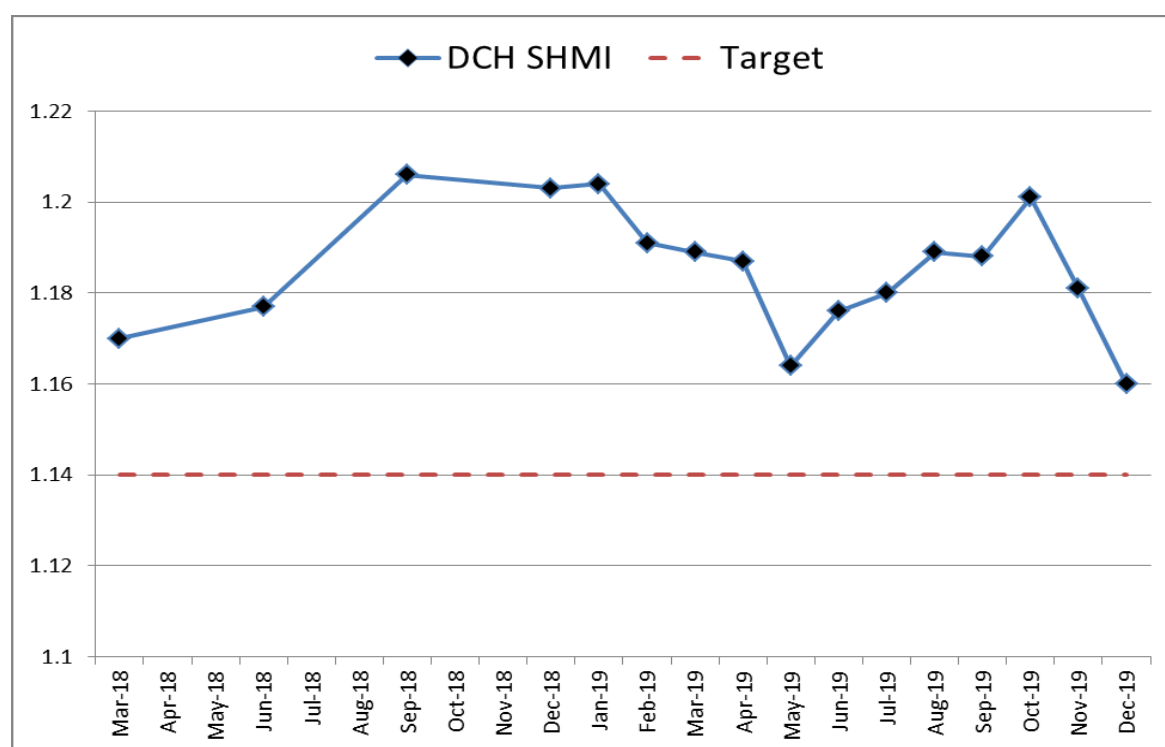
**MORTALITY DATA AND STATISTICS**

**1.1 Data Summary – rolling year to December 2019**

The HSMR is provided by DrFoster for a rolling 12 month period, and usually 4 months in arrears. SHMI is provided by NHS Digital for a 12 month rolling period, and usually 5 months in arrears. In summary:

- The HSMR remains statistically significantly higher than expected, at 117.5 (Dec 2019)
- Compared to 22 small and rural peers, the Trust is one of five with a statistically significantly higher than expected HSMR
- The SHMI for the rolling years to October, November and December 2019 remains statistically significantly higher than expected, but reducing to 116.0 (Dec 2019) which represents its lowest level for the past 20 months. Changes within the coding department

**1.2 Summary Hospital Level Mortality Indicator (SHMI)**



The target range for SHMI is shown above at around 1.14, but this varies according to overall national performance.

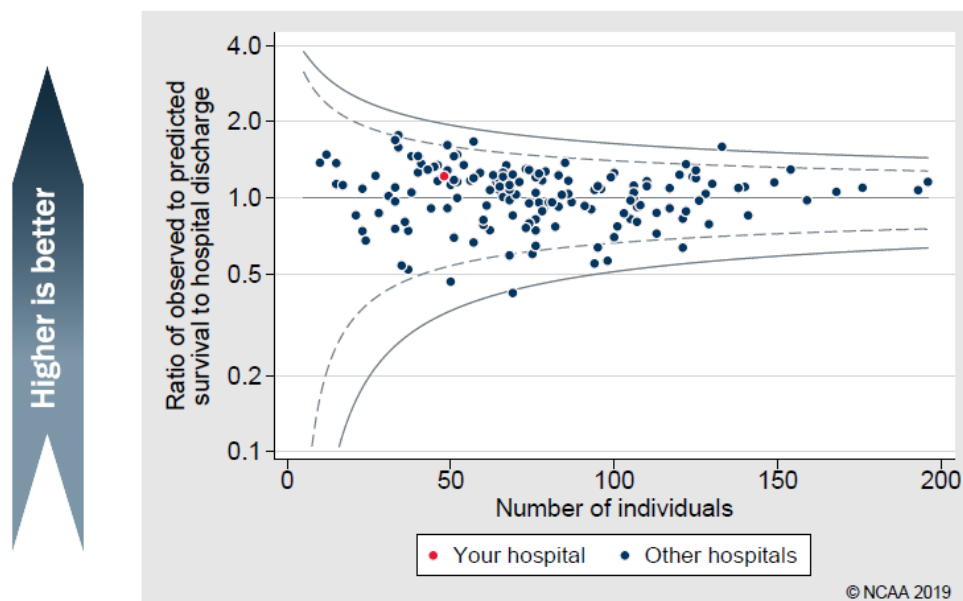
## 2.0 OTHER INDICATORS OF CARE

With SHMI and HSMR both higher than expected, the DCH Hospital Mortality Group regularly examines other data which might relate to standards of care, and has continued to meet on a monthly basis. The following sections report data available from various national bodies who report on individual Trusts' performance. For other metrics of care including complaints responses, sepsis data (on screening and 1 hour for antibiotic administration), AKI, VTE, patient deterioration and DNACPR data, please see the Quality Report presented on a monthly basis to Quality Committee by the Director of Nursing.

### 2.1 NCAA Cardiac Arrest data published June 2019



#### Funnel plot of observed to predicted survival to hospital discharge



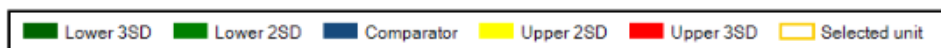
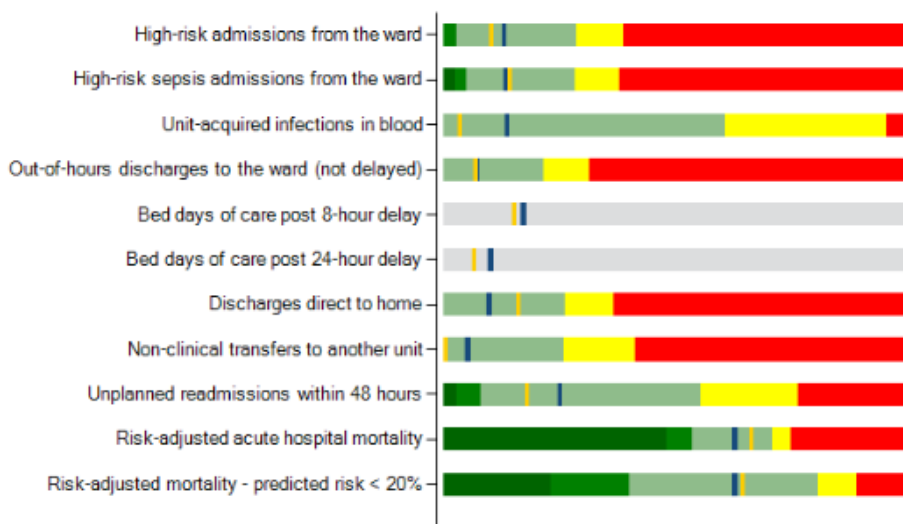
2.2

Pneumonia mortality data published November 2019

Results Summary		Dorset County Hospital	National results
Patient Characteristics and Diagnosis		n = 88	n = 10174
Gender	Male	43%	48%
	Female	57%	52%
Age	Median (IQR)	78 (61-84)	75 (61-85)
Cohort Severity (CURB65 score)	0-1	42%	47%
	2	31%	29%
	3-5	27%	24%
Inpatient mortality	Proportion deceased	7%	10%
Length of stay (discharged patients)	Median in days	3	5
Critical care admission	Yes - proportion	2%	5%
Readmission	Yes - proportion	8%	13%

2.3 ICNARC Intensive Care survival data published 4/12/2019

Quality indicator dashboard

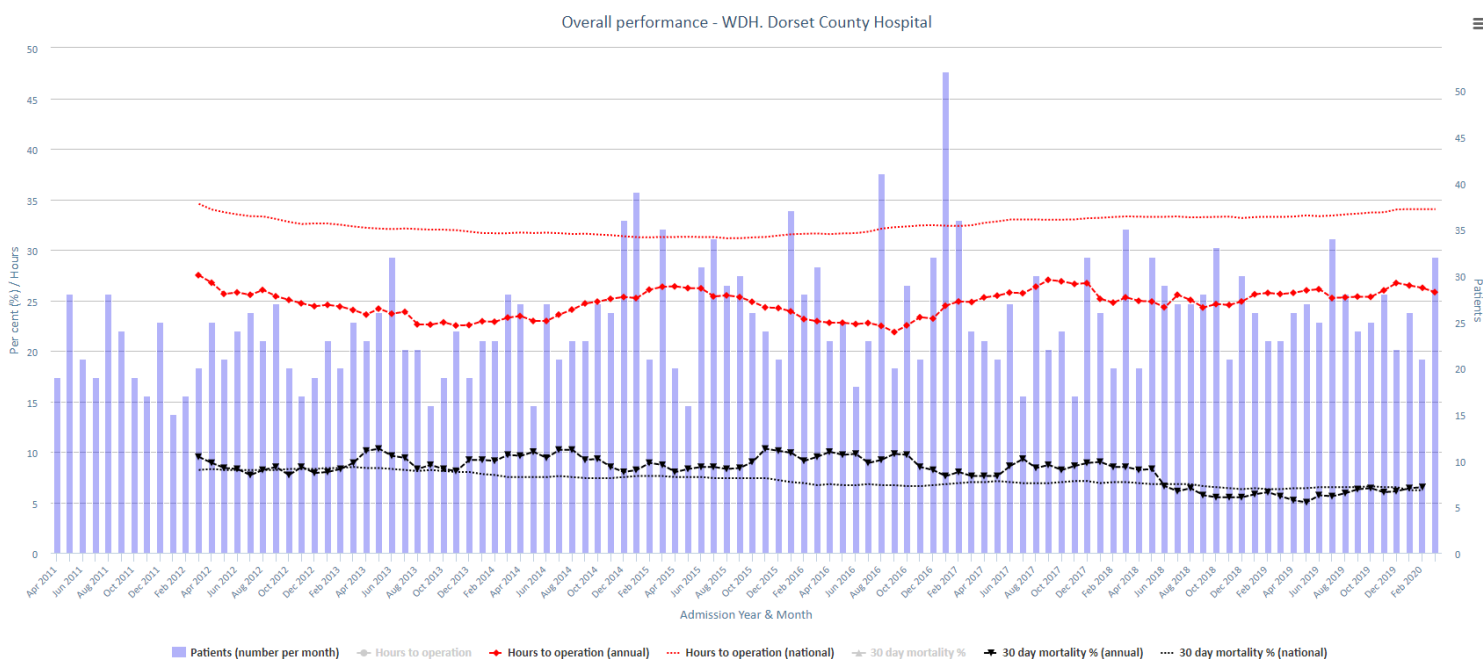


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- The Quality indicator dashboard shows the potential quality indicators (and their agreed thresholds)
- Individual potential quality indicators are also shown as funnel plots (see: Results)

Data shown are based on at least six months data for each unit; available data (by quarter) for each unit can be viewed via the *Active participation* graph.

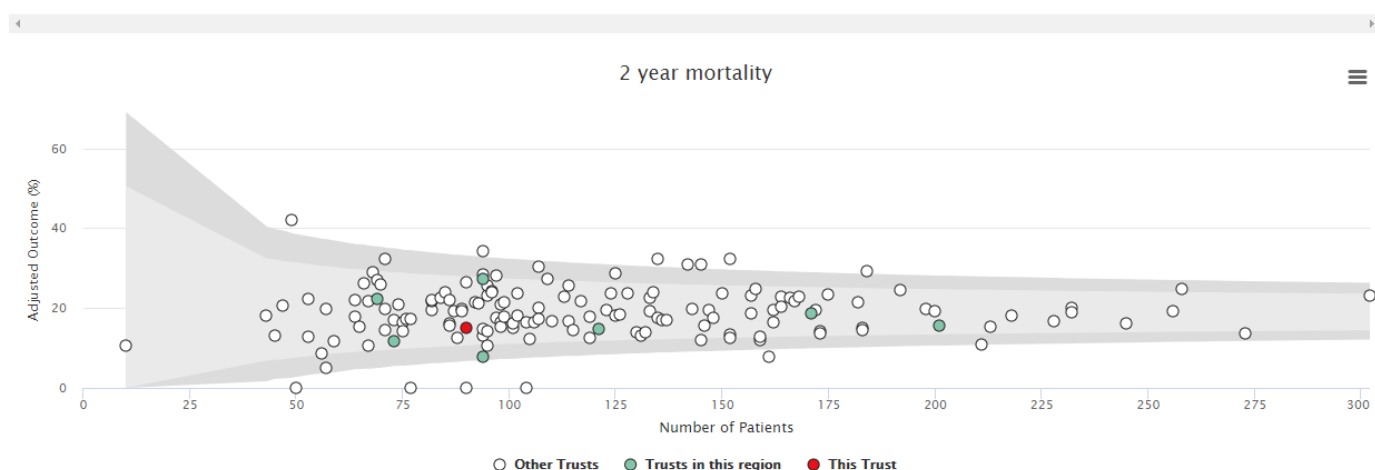
## 2.5 National Hip Fracture database to February 2020



Time from admission to operation remains significantly better than the national average, with 30 day mortality just above the national average at 6.5%.

## 2.6 National Bowel Cancer Annual audit

No new data as yet this year - graph below shows latest available data for 2017/18 – 2 year survival compared to all other NHS Trusts.



Trust	Number	Adjusted <sup>?</sup>	Observed <sup>?</sup>
Dorset County Hospital NHS Foundation Trust	90	15.1%	15.6%

## 2.8 Getting it Right First-Time reviews in Q3

GIRFT reviews undertaken at DCH during this quarter are as follows;

### 4th November – **Breast Surgery**

Good points highlighted:

- Trust service highly recommended
- High day case rates for excisions. Impressive for older population

Improvements – Oncoplastic MDT

- Improving timely access to immediate free flap services
- Consideration of more oncoplastic WLE to extend role of breast conservation
- Review and reduce implant removal rates at 1 year

### 22<sup>nd</sup> November - **Anaesthetics and POM**

Good points highlighted:

- High rates of Day case surgery / Readmissions below national average
- Elective inpatient pathway
  - diabetes LOS below national average.
  - Robust anaemia pathways
- Emergency surgery
  - Trust green for all NELA measures aside from care of the elderly

Improvements:

- ENT, Urology and some Orthopaedic have low day surgery rates
- Coding
- Participation in PQIP

Full reports from GIRFT visits will be available, but feedback from each review has been very positive. Action plans have been developed and are being worked through at present.

## 2.7 Readmission to hospital within 30 days – lower is better

Diagnoses | Readmission (30 days) | Nov 2018 - Oct 2019 | ALL (acute, non-specialist)

Peers  Group by



## 2.8 Dr Foster Safety Dashboard

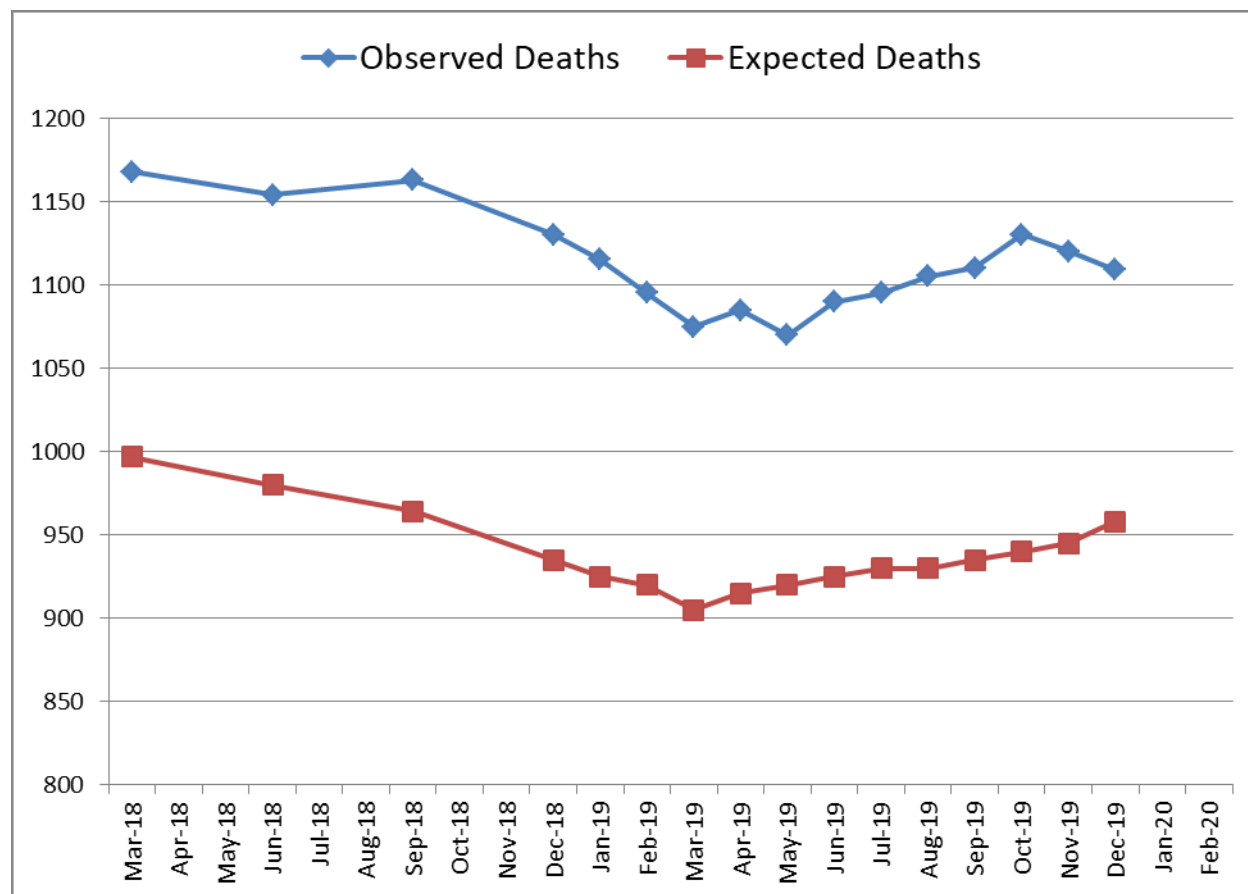
Indicator	Volume	Observed	Expected	Obs rate/k	Exp rate/k	Relative risk	Compare
Accidental puncture or laceration	41119	66	64.8	1.6	1.6	101.8	
Deaths after surgery	227	22	14.3	96.9	63.1	153.6	
Deaths in low-risk diagnosis groups	21764	13	9.8	0.6	0.4	133.0	
Decubitus ulcer	4803	185	259.6	38.5	54.0	71.3	
Infections associated with central line	7744	0	0.5	0	0.1	0.0	
Obstetric trauma - caesarean delivery	428	7	1.8	16.4	4.3	379.1	
Obstetric trauma - vaginal delivery with instrument	131	10	8.8	76.3	67.3	113.4	
Obstetric trauma - vaginal delivery without instrument	792	19	22.6	24.0	28.5	84.2	
Postoperative haemorrhage or haematoma	16354	5	5.8	0.3	0.4	85.7	
Postoperative hip fracture	21788	3	1.2	0.1	0.1	241.6	
Postoperative physiologic and metabolic derangement	14329	3	1.9	0.2	0.1	158.6	
Postoperative pulmonary embolism or deep vein thrombosis	16484	34	37.0	2.1	2.2	91.9	
Postoperative respiratory failure	13248	9	10.3	0.7	0.8	87.6	
Postoperative sepsis	284	0	3.9	0	13.8	0.0	
Postoperative wound dehiscence	426	0	0.3	0	0.8	0.0	

The Dr Foster safety dashboard compares DCH with other England and Wales Trusts for a variety of complications that might occur during their in-patient stay. Where the confidence intervals include the national mean there is no difference from the national average). DCH has a higher caesarean section rate than expected (7 versus 2) and a lower number of decubitus (pressure) ulcers (185 versus 260).

### 3.0 CODING

#### 3.1 Depth of coding

The DCH depth of coding for Charlson Co-morbidities remains around the lowest in the country. However the Trust’s expected death rate has been rising over the past 9 months suggesting that coding accuracy overall is probably improving. The graph below plots Observed (actual) deaths and Expected deaths against rolling 12 month time points.



#### 3.2 PWC Artificial Intelligence

PWC have produced an AI model to assist Trusts in understanding issues underlying elevated HSMR and SHMI figures. Initial discussions with PWC were halted on grounds of cost in 2019, but during Q4 these were restarted after a reduced price offer and discussions between the Medical Directors of DCH and The Royal Wolverhampton Trust (a current client of PWC). RWT were very complimentary about PWC’s assistance which they feel is largely responsible for their SHMI improvement over the past 12 months from the highest in the country to well within the expected range for the past 3 published months of data.

Discussions within the Executive Team have led to a request for PWC to submit an options paper for future collaboration and pricing over a 6 month initial period. This paper is expected within the current month.

### 4.0 LEARNING FROM DEATHS

#### 4.1 Structured Judgement Reviews

Although the Hospital mortality Group has continued to meet (virtually) over the past 2 months all work on SJRs has been temporarily suspended (as in all Trusts), and so it has not been possible to collate accurate data for this report. The next Quarterly Report will include this omitted data.

#### **4.2 Working with Families**

The End of Life team have co-designed improved information leaflets to bereaved families. All bereaved relatives now have the opportunity to discuss their relative's death with a Medical Examiner. Currently during the CoVID-19 crisis the Medical Examiner numbers are reduced to 2 but they continue to provide a full 5 days service between them.

#### **5.0 QUALITY IMPROVEMENT ARISING FROM SJRs**

No new QI projects have yet been initiated as a result of the recent CoVID-19 pandemic.

#### **6.0 MORBIDITY and MORTALITY MEETINGS**

All departmental Clinical Leads have been asked to ensure that M&M meetings are continuing on a regular basis during the CoVID-19 pandemic (depending on the number deaths within each department), using the Royal College of Surgeons M&M meeting Best Practice document as their template.

#### **7.0 LEARNING FROM CORONER'S INQUESTS**

DCH has been notified of 11 new Coroner's inquests being opened in the period 01.01.20 – 31.03.20. During Quarter 4, the Trust had 24 inquests listed from previous quarters to be heard. Of these 24, 7 were heard as documentary inquests, with staff having to attend to give evidence in 12 cases, two cases were Pre-Inquest review hearings and 3 were adjourned. None has resulted in adverse criticism of standards of care and the Trust has not received any Regulation 28 letters.



## 8.0 SUMMARY

SHMI and HSMR remain higher than expected, with no clear trend towards deterioration or improvement over the recent 6 months. No other metrics of in-patient care suggest that excess mortality is occurring at DCH.

Nevertheless the Hospital Mortality Group remains vigilant and will continue to scrutinise and interrogate all available data to confirm or refute this statement on a month by month basis. At the same time internal processes around the completion of SJRs and Learning from Deaths are being improved and this will be facilitated by the appointment of a new Family Services and Surgical Divisional Director – Mr Richard Sim - who takes up his post from 01/02/2020.

The Trust is currently undertaking a full review of its Quality Improvement processes, led by the Executive team.