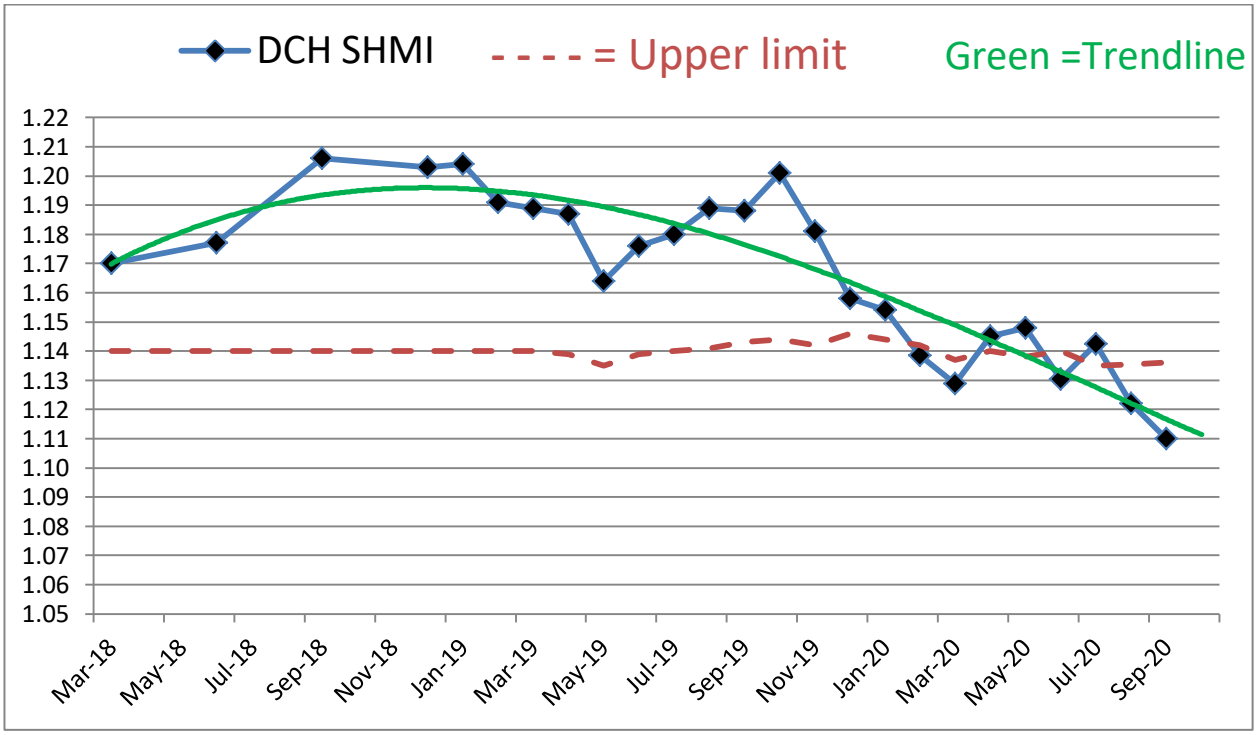
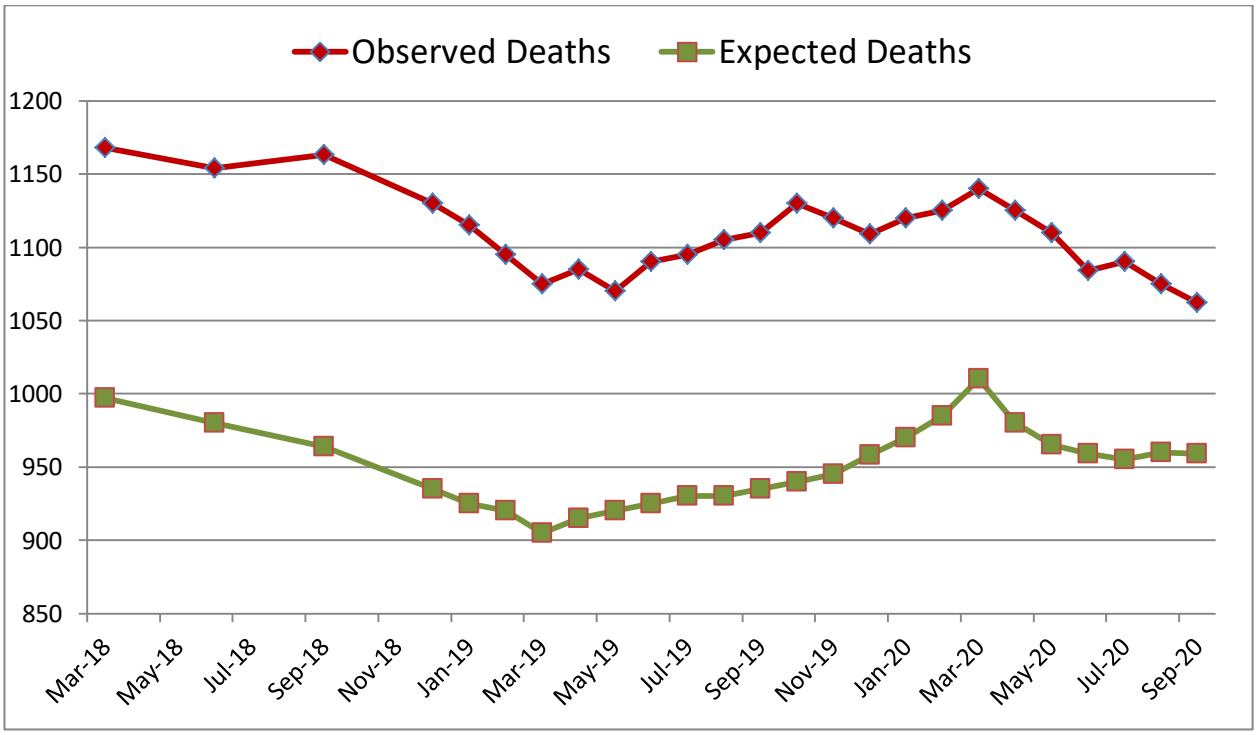
2.0 NATIONAL MORTALITY METRICS

2.1 Summary Hospital-level Mortality Indicator (SHMI)

SHMI is published by NHS Digital for a 12 month rolling period, and 5 months in arrears. It takes into account all diagnostic groups, in-hospital deaths, and occurring within 30 days of discharge. The SHMI for the rolling years from October 2019 to date shows a clear trend to improvement. The latest SHMI is at its lowest since December 2014.



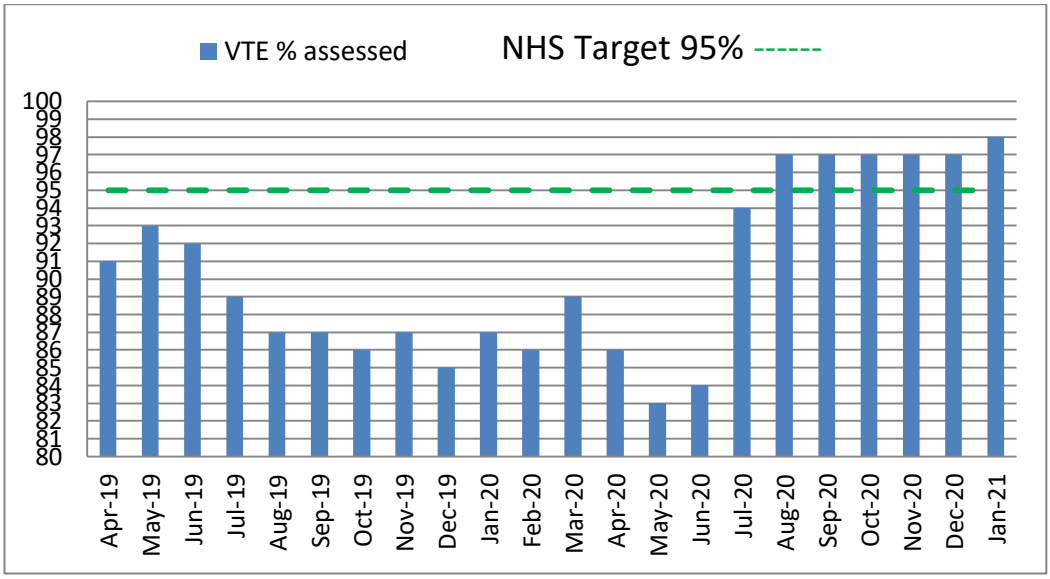
SHMI is calculated by comparing the number of observed (actual) deaths in a rolling 12 month period to the expected deaths (predicted from coding data). The chart below shows observed and expected deaths (predicted based on DCH coding) over the past 2 years (rolling years from March 18 to April 20).



3.0 OTHER NATIONAL AUDITS/INDICATORS OF CARE

The DCH Learning from Deaths Mortality Group regularly examines any other data which might relate to standards of care and has continued to meet on a monthly basis throughout the COVID-19 crisis. The following sections report data available from various national bodies who report on individual Trust performance.

For other metrics of care including complaints responses, sepsis data (on screening and 1 hour for antibiotic administration), AKI, patient deterioration and DNACPR data, please see the Quality Report presented on a monthly basis to Quality Committee by the Director of Nursing. DCH VTE risk assessments reached 97% in August with the introduction of a more accurate reporting system, and have exceeded the 95% target for every month since then.



3.1 NCAA Cardiac Arrest data

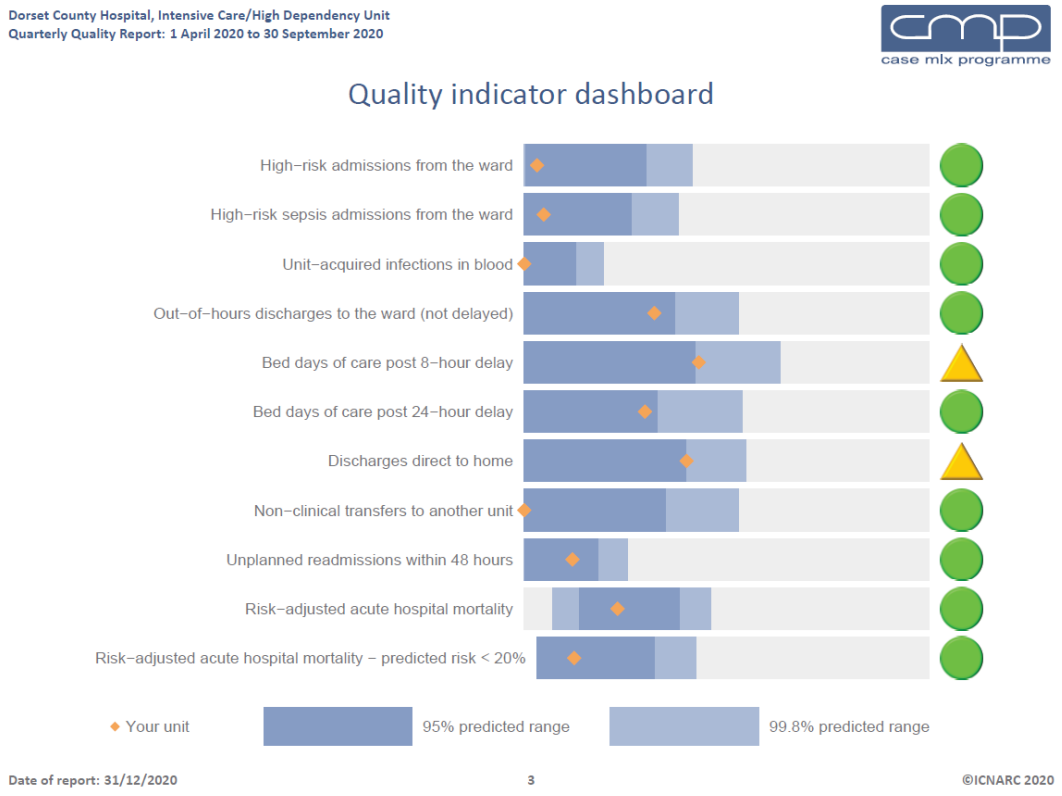
12 month Cardiac Arrest data for April 2019 to March 2020 was published in June 2020, and included in the previous Q1 report. The next data was expected in Nov 2020, but has not yet been published.

3.2 National Adult Community Acquired Pneumonia Audit latest data – last published Nov 2019

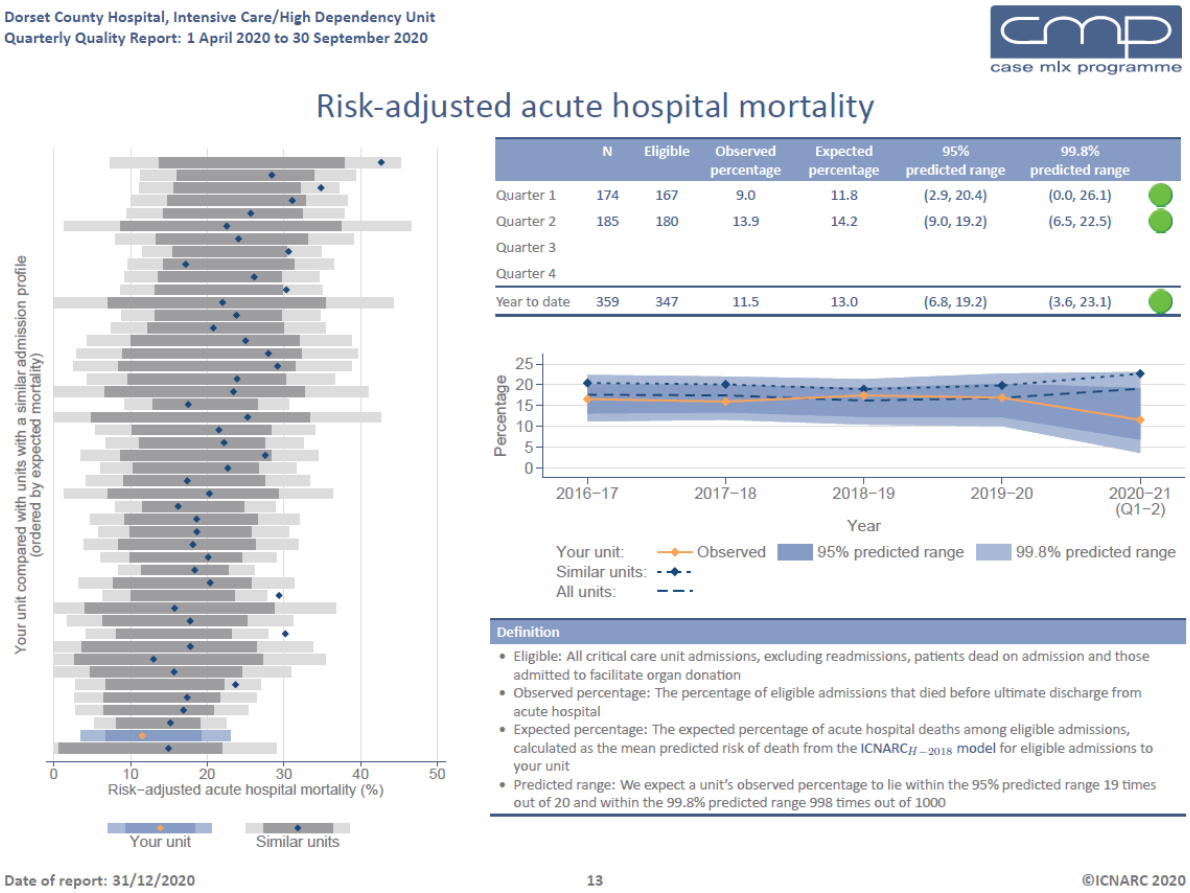
Results Summary		Dorset County Hospital	National results
Patient Characteristics and Diagnosis		**n = 88**	**n = 10174**
Gender	Male Female	43% 57%	48% 52%
Age	Median (IQR)	78 (61-84)	75 (61-85)
Cohort Severity (CURB65 score)	0-1 2 3-5	42% 31% 27%	47% 29% 24%
Inpatient mortality	Proportion deceased	7%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

The results suggest that patients admitted to DCH 2018/19 tended to be more ill than the national average, but had a lower death rate and shorter length of stay, with fewer readmissions.

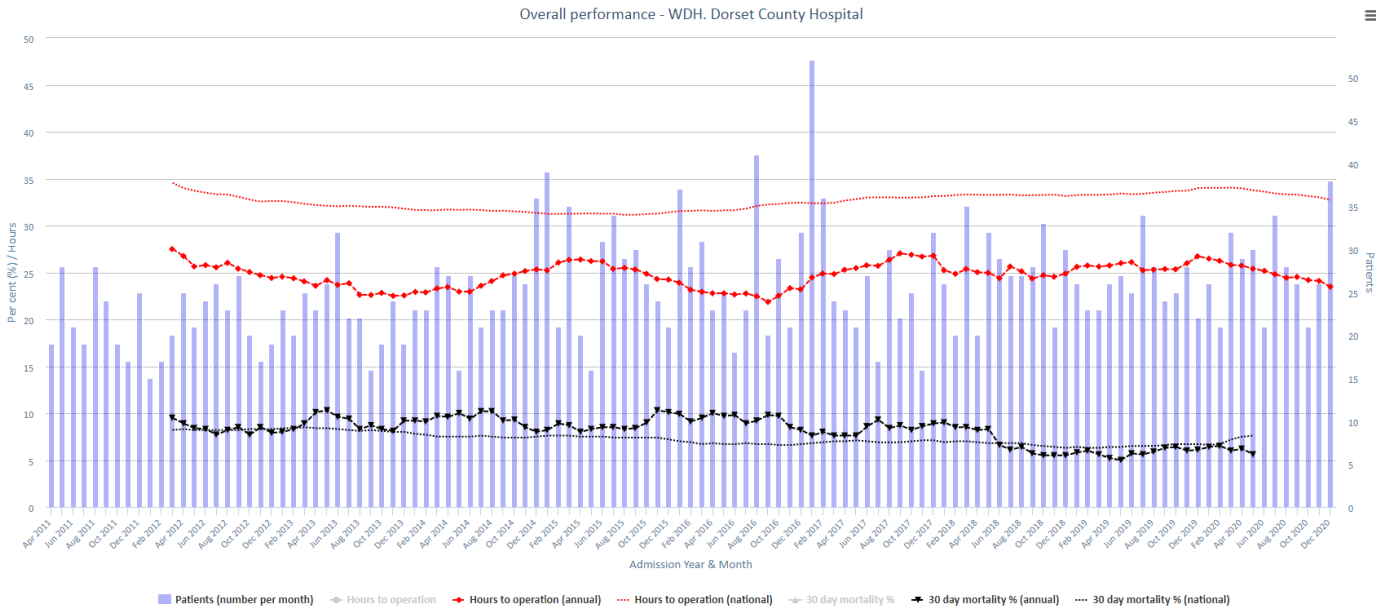
3.3 ICNARC Intensive Care survival latest data published 31 Dec 2020



The chart below shows the "risk adjusted acute hospital mortality" following admission to the critical care unit. It compares observed and expected death rates in a similar fashion to SHMI.



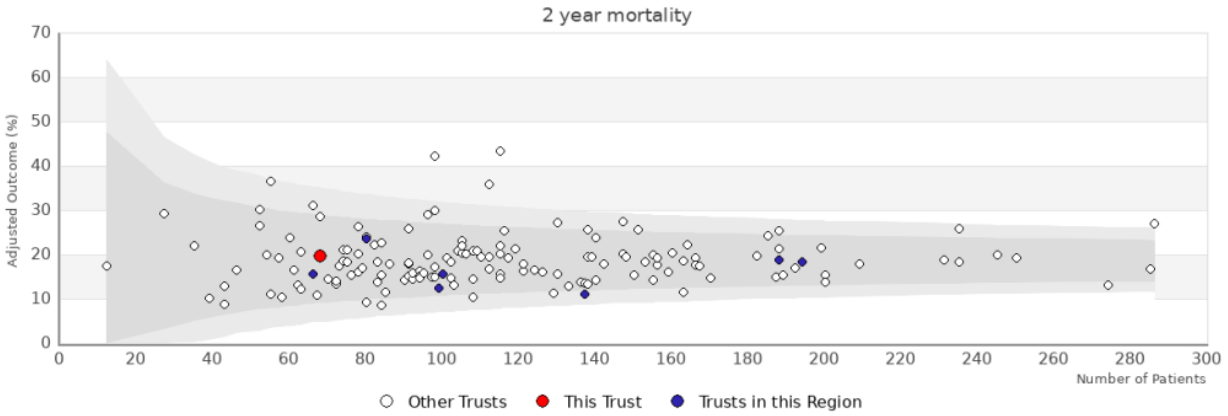
3.5 National Hip Fracture database to June 2020



Time from admission to operation remains significantly better than the national average (23.5 vs 32.7 hours), with 30 day mortality at 5.6% versus the national average of 7.6%.

3.6 National Bowel Cancer Annual audit

No new data as yet this year - graph below shows latest available 2 year survival data for 2018/19 admissions, compared to all other NHS Trusts, with other Wessex Trusts in dark blue.



Trust	Number	Adjusted	Observed
Dorset County Hospital NHS Foundation Trust	68	19.7%	19.3%

3.7 Getting it Right First Time; reviews in Q3

Two shortened virtual GIRFT reviews were undertaken at DCH during this quarter – Respiratory Medicine and South 6 Pathology. Full reports will be available in due course. From March 2020 most visits were suspended because of COVID-19. As a result of COVID wave 2, most visits have also been postponed for Q4.

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

3.8 Trauma Audit and Research Network

DCH is a designated Trauma Unit (TU) providing care for most injured patients, and has an active, effective trauma Quality Improvement programme. It submits data on a regular basis to TARN which then enables comparison with other TUs. A summary of the latest published data (totals for 2018/19 and 2019/20) is shown below. Data for 2020/21 is as yet incomplete:

Rate of Survival at this Hospital: Yearly Figures

Note: Data for the following years is not shown due to missing or incomplete data: 20/21

Rate of Survival Breakdown at this Hospital

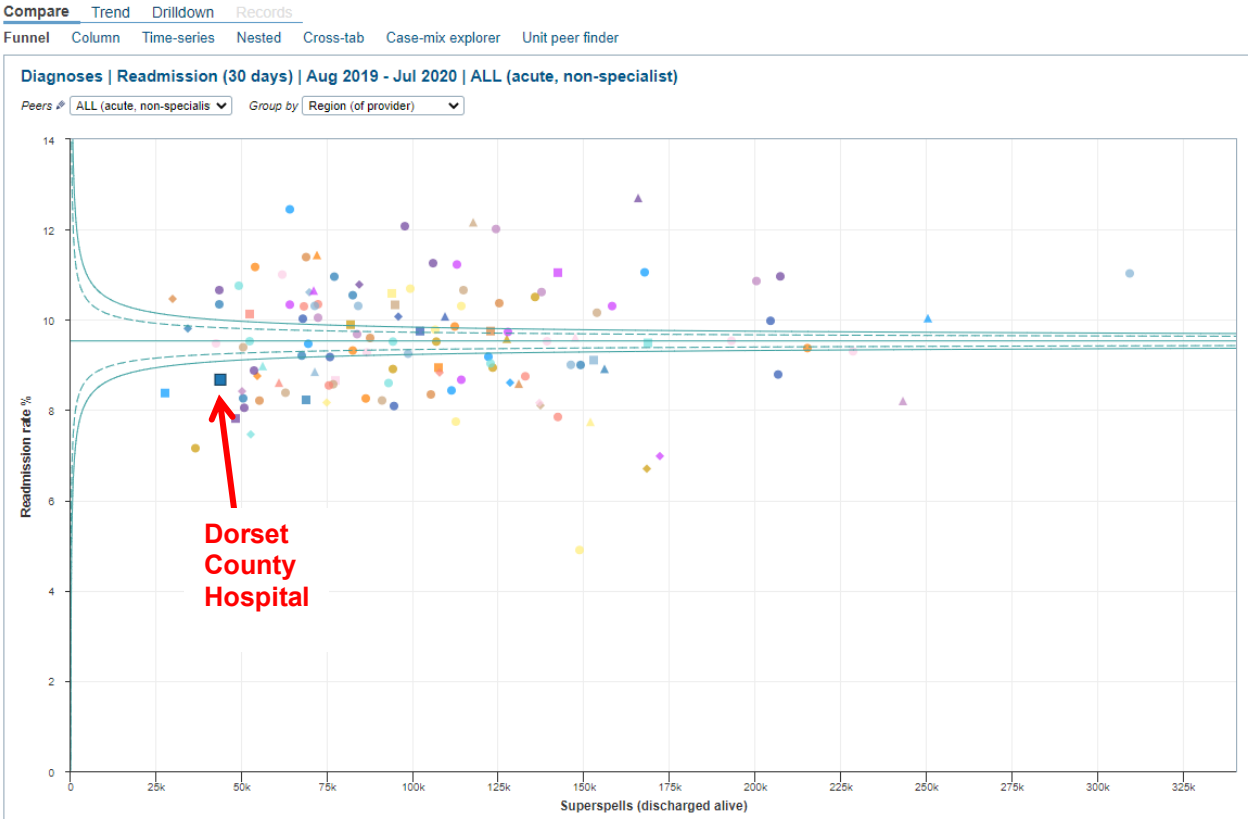
Survival band %	Number in group	Expected survivors	Actual survivors	Difference*	Adjusted difference**
95 - 100	465	456	463	1.3	0.9
90 - 95	150	139	140	0.5	0.1
80 - 90	81	69	71	2.2	0.2
65 - 80	38	28	25	-8.0	-0.3
45 - 65	10	5	7	13.4	0.3
25 - 45	5	2	3	18.7	0.3
0 - 25	5	0	0	-13.5	-0.2
Total	**754**	**701**	**709**	**1.0**	**1.2**

Unexpected deaths in minor/moderate injury
Usually due to poor management of co-morbidity and/or complications

Unexpected survivors with more serious injury
Usually indicates good initial resusitation and the treatment of head injury in Neurological Centres

The first column categorises patients by percentage likelihood of survival, followed by the total number of patients seen at DCH, the calculated likely number of survivors and then the actual number of survivors.

3.9 Readmission to hospital within 30 days, latest available data (Dr Foster) – lower is better



3.10 Dr Foster Safety Dashboard

This 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 statistical difference from the national average. DCH has a higher caesarean section rate than expected (4 versus 1.9; insignificant difference), a lower number of decubitus (pressure) ulcers (225 versus 230; insignificant difference),and fewer deaths in low-risk diagnosis groups (21 versus 44; significant difference).

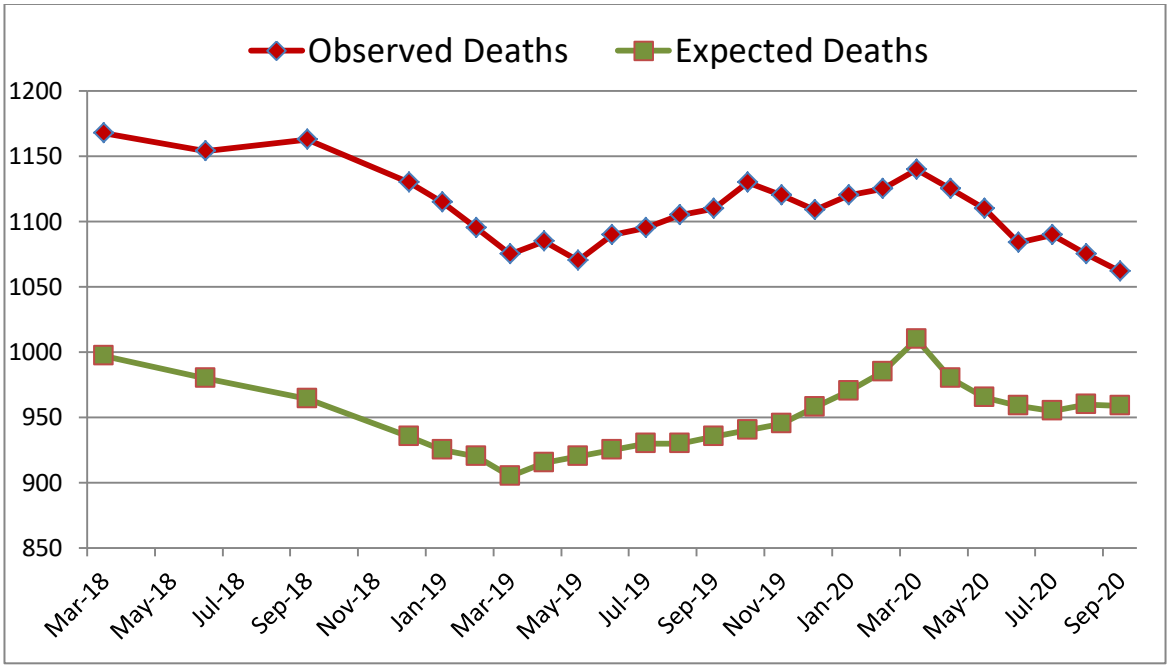
Period: History (Apr 2017 to most recent)

Indicator	Volume	Observed	Expected	Obs rate/k	Exp rate/k	Relative risk
Accidental puncture or laceration	31068	41	49.0	1.3	1.6	83.7
Deaths after surgery	204	9	14.7	44.1	72.2	61.1
Deaths in low-risk diagnosis groups	14705	21	43.5	1.4	3.0	48.3
Decubitus ulcer	3922	230	224.8	58.6	57.3	102.3
Infections associated with central line	5882	0	0.4	0	0.1	0.0
Obstetric trauma - caesarean delivery	395	4	1.9	10.1	4.7	215.9
Obstetric trauma - vaginal delivery with instrument	115	10	7.8	87.0	67.5	128.9
Obstetric trauma - vaginal delivery without instrument	706	20	20.5	28.3	29.1	97.4
Postoperative haemorrhage or haematoma	11789	2	4.3	0.2	0.4	46.3
Postoperative physiologic and metabolic derangement	10188	2	1.7	0.2	0.2	115.5
Postoperative pulmonary embolism or deep vein thrombosis	11879	39	30.5	3.3	2.6	127.7
Postoperative respiratory failure	9326	8	8.5	0.9	0.9	94.1
Postoperative sepsis	141	1	2.1	7.1	15.1	47.0
Postoperative wound dehiscence	369	0	0.3	0	0.8	0.0

4.0 CODING

4.1 Depth of coding

The DCH depth of patient coding for Charlson Co-morbidities has improved from one of the lowest four in the UK and is now around the mean value of all UK Trusts. As a result the Trust's expected death rate had been rising, although COVID has upset the data from March 2020 since COVID +ve patients are excluded from national SHMI data and overall admission fell significantly. The graph below plots Observed (actual) deaths and Expected (calculated from coding) deaths against rolling 12 month time points. Were the two lines to meet, then SHMI = 1.00



5.0 QUALITY IMPROVEMENT ARISING FROM SJRs

The following themes have been previously identified from SJRs and are being translated into quality improvement projects:
1. Recognition and management of AKI
2. Poor quality of some admission clerking notes, particularly in surgery
3. Morbidity and Mortality meetings - standardization and governance (see 6.0 below)

6.0 MORBIDITY and MORTALITY MEETINGS

Morbidity and mortality meetings are continuing across the Trust, with minutes collated by Divisional Quality Managers.

7.0 LEARNING FROM CORONER'S INQUESTS

DCH has been notified of 18 new Coroner's inquests being opened in the period October 2020 – December 2020. All Inquests that were listed in this quarter were adjourned by the Coroner due to CoVID-19 restrictions.

12 other inquests were held during Quarter 3. Five inquests were heard as Documentary hearings, not requiring DCH attendance. One was attended at Court as this was the clinician's preference. Six required attendance remotely from the DCH 'virtual courtroom' (in THQ) using Microsoft Teams.

We currently have 50 open Inquests. The Coroner has reviewed all outstanding cases to decide whether any can be heard as documentary hearings. Five pre-inquest reviews were listed during this period.

We continue to work with the Coroner's office, and will continue to support staff at these hearings, an increasing number of which will be attended virtually. The virtual court room set up within Trust Headquarters appears to be working well, and Ms Mandy Ford (DCH) liaises with the coroner's officer to improve the technology and its use.

8.0 LEARNING FROM CLAIMS

No new data this quarter. See appendix 3 in previous Q2 report

9.0 SUMMARY

SHMI has fallen into the expected range, with evidence of a clear trend to improvement over the past 12 months. No other metrics of in-patient care suggest that excess mortality is occurring at DCH, and much of the national data suggests better than average mortality.

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 and recording of SJRs, M&M meetings and Learning from Deaths continue to improve.