Paper ref:	TB (05/21) 012

Sandwell and West Birmingham Hospitals NHS
NHS Trust

Report Title	HSMR review: Approach to improving Trust Mortality Rates		
Sponsoring Executive	David Carruthers, Medical Director		
Report Author	David Carruthers and Chizo Agwu		
Meeting	Public Trust Board	**Date**	6th May 2021

1. Suggested discussion points *[two or three issues you consider the Committee should focus on]*

The Trust has raised mortality rates as shown by HSMR and SHMI. The possible contribution of clinical care to this is closely reviewed through our Medical Examiners and learning from Deaths Committee. Individual disease groups are examined and areas under review of the quality plan and continually reviewed and monitored.

We also carefully review process factors that may influence these data and here an alternative approach to improve issues around documentation is proposed to understand the contribution of this to Trust mortality, while the excellent work of our mortality leads continues to review aspects of clinical care. Changes due to introduction of Unity, ambulatory admission areas and COVID deaths are discussed, though the latter area needs more work for next month's committees.

2. Alignment to 2020 Vision *[indicate with an 'x' which Plan this paper supports]*

Safety Plan	x	Public Health Plan		People Plan & Education Plan	
Quality Plan	x	Research and Development		Estates Plan	
Financial Plan		Digital Plan		Other *[specify in the paper]*	

3. Previous consideration *[where has this paper been previously discussed?]*

CLE and Q+S presentation April 2021

4. Recommendation(s)

The Trust Board is asked to:

a.	**Note** the work done to review clinical care in areas of higher than expected mortality
b.	**Review** the contribution of documentation issues to mortality data
c.	**Discuss** the proposal and role of closer working between coding and clinical teams to improve aspects of documentation.

5. Impact *[indicate with an 'x' which governance initiatives this matter relates to and where shown elaborate]*

Trust Risk Register								
Board Assurance Framework	x	SBAF14						
Equality Impact Assessment	Is this required?	Y		N	x	If 'Y' date completed		
Quality Impact Assessment	Is this required?	Y		N	x	If 'Y' date completed		

SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST

Report to the Public Trust Board: 6th May 2021

Approach to improving Trust mortality rates

1. Introduction or background

1.1 The Trust HSMR is increasing as is SHMi score but not to the same degree (annex 1). It is important to note the differences between the data collection that may contribute to the differences in these mortality indices. SHMi excludes all cases where COVID is included in the death certificate, while HSMR does not and, amongst other things, the HSMR depends on coding of diagnoses noted within the first 2 FCE (consultant episodes). HSMR is also adversely influenced by under coding of palliative care and inclusion of symptoms rather than diagnosis as primary code.

1.2 The main consideration to the rise of the HSMR (SHMI is relatively stable) is the relative contribution to this score of poor patient outcomes or issues secondary to the processes that influence our coding. A priority of work through the learning from deaths committee has been to make sure that the quality of our clinical care is assured.

2. Clinical assurance

2.1 We have an effective medical examiner programme with 90% of all deaths having a first tier review and 15-20% of those deaths requiring a more in-depth systemic judgement review (SJR) to help identify any patterns in care that may lead to poor outcomes and thus be contributing to a high mortality rate in the Trust. A focus needs to be had on achieving completion of all the SJRs identified, a process that will be further facilitated by time allocate within job plans to allow development of a trained faculty of clinicians.

2.2 The output from these SJR reports are reviewed at the LFD committee where clinical reviews from areas/specialties that have alerted as potentially areas of high mortality rates are also presented.

2.3 The areas reviewed last year include lung and colorectal cancer, deaths in PCCT, gastroenterology, critical care, haemato-oncology, trauma and orthopaedics (annex 2). Data and case note analysis contributed to learning in these areas.

2.4 Areas showing potentially high mortality rates via HSMR score are to be reviewed shortly and include leukaemia, GI haemorrhage, fracture neck of femur and liver disease (alcohol related). Sepsis and pneumonia remain as outliers in this group. Additionally, there are conditions within the group that reflect the recording of symptoms (R codes) as opposed to the recording of any underlying diagnosis (abdominal pain, skin and subcutaneous infections for example). These latter 2 diagnostic groups reflect the importance of appropriate documentation within the patient records as will adversely push up the mortality rates (see section 4)

3. Quality Plan

3.1 In addition to the above, there is continual oversight of the areas within the quality plan where potential areas of high mortality had been noted previously. This initial focus was on those areas with high trust mortality as identified through disease specific SHMI scores. These areas are sepsis, pneumonia, myocardial infarction, stroke, VTE and post hip fracture.

3.2 Sepsis management has been a major focus within the Trust with reporting of patients requiring sepsis screening based on high NEWS2 score (90% achieved) and now those patients receiving antibiotics within an hour of recognition that sepsis is possible diagnosis (68% currently). More work is needed in this area to assess the impact of earlier antibiotics, but other factors within the sepsis 6 need a renewed focus and this can be driven through the new ward Safety huddles. This will promote focus on the important area of sepsis management with local ward ownership for QI projects. Data from the 'perfect ward' audit tool will feed into this development work as well, allowing earlier identification and treatment of sepsis.

3.3 Pneumonia is the other cause of high mortality and has been looked at via the work of the pneumonia task force with recommendations and renewed guidelines coming from this. The importance of oral hygiene/mouth care in reducing risk of hospital acquired pneumonia has been shown nationally and by our own pilot work and a wider programme is to be instituted shortly across all ward areas. The effect of this on mortality will be closely monitored.

4. Other influences

4.1 In addition, COVID has undoubtedly had an impact on our mortality, especially for those patients who had COVID that occurred after the first 2 consultant episodes of care. This is currently under review and will be reported next month when outcome from all our COVID patients has been looked at for the Trust.

4.2 In addition to the work highlighted above and shown in annex 2 is another stream of work to understand whether there are process issues in how clinical data is recorded and then coded and how this adversely affects our HSMR scores. For example, having same day emergency care/ambulatory acute patients recorded as out-patient care and not as a full admission reduces the number of inpatient spells and this has been shown previously to adversely affect the denominator for our mortality data sets, thus pushing down the expected number of deaths and hence increasing our mortality rate. This will be reviewed to be in line with neighbouring organisations and in line with any national position.

4.3 We have promoted the issue of 'good documentation' repeatedly to clinical teams to help support the coders in identification of diagnoses within the first 2 episodes of care, have modified some of the pre-filled terminology in Unity and are working repeatedly to improve the recording of the correct consultant specialty and to reduce the number of consultant episodes. This latter issue would be a change to spells based on clinical environment rather than individual consultant spells which can change numerous times within the acute medical units as part of modern working practices.

5. Proposal

5.1 It is clear that we have been trying to improve issues around documentation and thus coding for sometime with little obvious movement and though there have been several factors over the last 2 years that have affected some aspects of coding (switch to ambulatory areas for same day emergency care for as many acute admissions as possible, introduction of Unity with a change in clerking processes and now a change in admission profile with COVID and consequences of hospital acquired COVID). There is still uncertainty around the relative contribution of these documentation issues on the high mortality rates.

5.2 The LfD committee and the work of mortality leads helps provide assurance over quality of care and identifies issues where either work with community and primary care services or change in internal pathways can improve outcomes. Our ambulatory areas are well established and COVID rates are fortunately receding, so we must be clear on our processes to address the other

variable which relates to documentation. Work so far has perhaps not delivered what we had hoped for with R codes (symptoms) unchanged as are rates of specialist palliative care coding. In some areas depth of coding has improved but this may relate to auto-coding rather than improved depth of coding within Unity records.

5.3 We must develop a programme of work with the coding department that providers enhanced links with clinical teams. This will take the form of an individual to work across our acute medical and surgical admission units and with our coding team.

5.3.1 The aim will be to identify in the admission units where current documentation doesn't meet standards for coding, where depth of comorbidity reporting is lacking, where symptoms are used instead of primary diagnosis, where any prefix used is incorrect, where admitting specialty is clearly wrong, where FCE (consultant episode) changes too rapidly within the same clinical environment and where specialist palliative care may be an unrecorded aspect of an individuals care.

5.3.2 The regular presence of this individual within admitting areas will allow real time training of staff in correct documentation and use of Unity for this purpose.

5.3.3 Close working with the coding team will facilitate conversations with clinical teams where clearly incorrect administrative information can be altered and clinical records amended where incorrect terminology is used.

5.4 In the meantime there has been a request to the clinical Groups to re-focus on correct documentation, for the operational teams to work with administration staff to make sure that admitting specialty and consultant name is correct and support for the wards in use of perfect ward audit tool and safety huddles to allow quality improvement work to develop from the data provided by the dashboards for each tool.

6. Recommendations

6.1 The Public Trust Board is asked to:

a. **Note** the work done to review clinical care in areas of higher than expected mortality
b. **Review** the contribution of documentation issues to mortality data
c. **Discuss** the proposal and role of a dedicated individual to improve aspects of documentation.

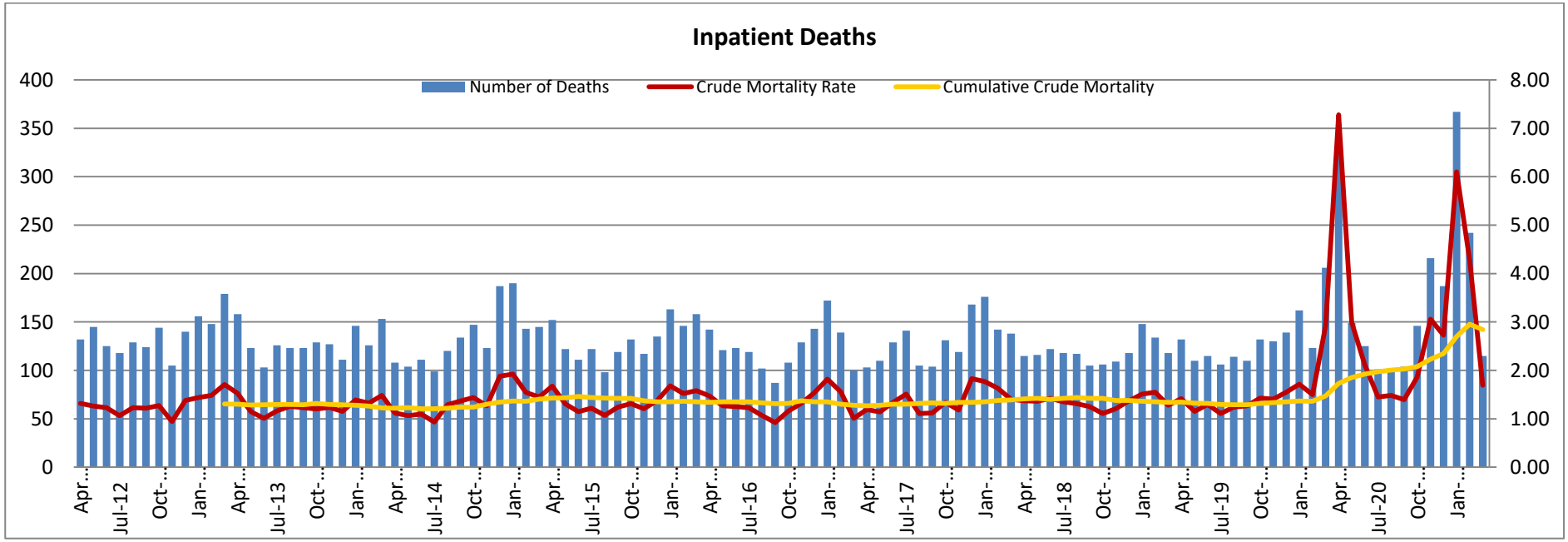
David Carruthers
Medical Director
21/04/2021

Sandwell and West Birmingham Hospitals NHS
NHS Trust

Annex 1

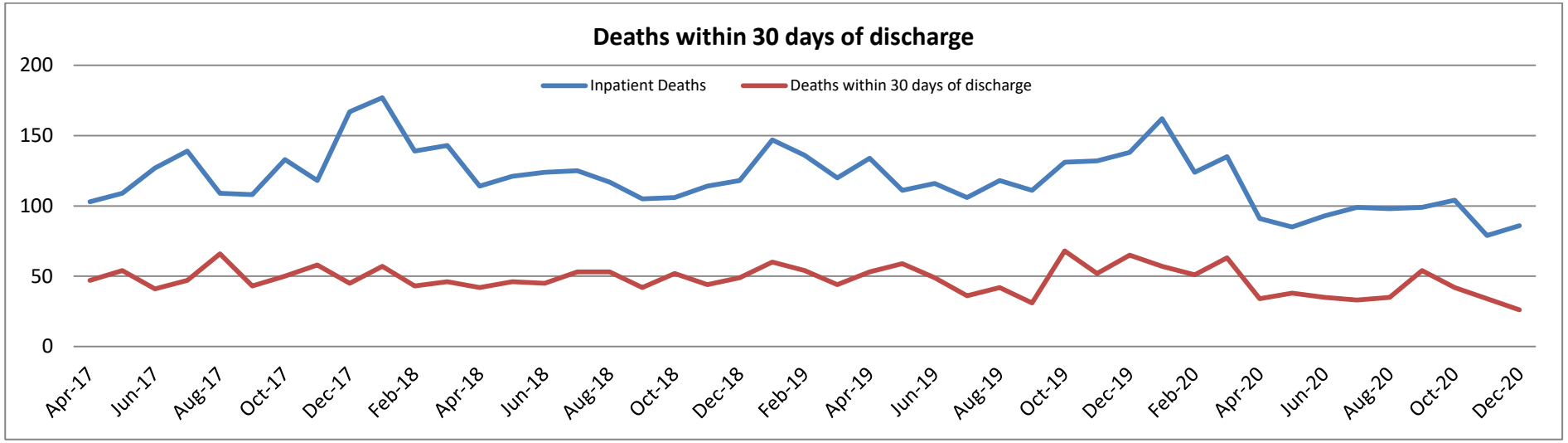
Mortality Dashboard March 2021

1. Deaths in SWBH



NHS digital releases our data for review every 3 months. The below shows our rolling 12 month mortalities. We expect the figures to increase when the next quarter is released.

Crude Mortality Overview	Trust Performance		
Indicator	**Current**	**Previous**	**Change**
Total Number of mortalities (12 mth rolling)	**1972 (Oct 2019 – Sep 2020)**	**1960 (Sep 2019 – Aug 2020)**	**12**
Number of mortalities occurring in-hospital (12 mth rolling)	**1387 (Oct 2019 – Sep 2020)**	**1399 (Sep 2019 – Aug 2020)**	**-12**
Number of mortalities occurring 30 days post-discharge (12 mth rolling)	**585 (Oct 2019 – Sep 2020)**	**561 (Sep 2019 – Aug 2020)**	**24**



2. Trust Mortality Compliance data

	Total Number of deaths	Number of elective and non-elective inpatient spells	% of deaths that had 1st Tier Mortality Reviews	% Tier 1 reviewed deaths escalated for SJR	Number of Deaths Reviewed at CAPROM	Number with Avoidability score of 3 or less suggesting a more than 50:50 likelihood of Avoidability (by month of death)
January 19	148	9793	81%		4	**0**
February 19	134	8698	84%		5	**0**
March 19	118	9448	81%		2	**0**
April 19	132	9333	84%		7	**0**
May 19	110	9549	87%		1	**0**
June 19	115	8859	76%		1	**1**
July19	106	9561	85%	20.9%	4	**1**
August 19	114	9194	78%	17.8%	0	**0**
Sept 19	110	8672	84%	17.2%	2	**1**
October 19	132	9241	80%	18.9%	3	**1**
Nov 19	130	9248	79%	17.3%	2	**0**
Dec 19	139	8985	83%	21.6%	3	**1**
January 20	162	9381	75%	19.0%	0	**1**
February 20	123	8147	71%	17.0%	0	**1**

March 20	205	7050	72%	20.3%	0	**0**
April 20	330	4521	77%	13.8%	1	**0**
May 20	147	4978	74%	20.2%	2	**0**
June 20	125	5905	92%	13.4%	2	**0**
July 20	101	6889	90%	20.5%	2	**1**
August 20	102	6946	93%	22.3%	2	**1**
September 20	104	7458	95%	16.2%	2	**0**
October 20	146	7839	93%	12.6%	3	**0**
November 20	216	7060	92%	9.2%	3	**2**
Dec 20	187	6860	82%	9.7%	3	**0**
January 21	367	6015	81%	12.9%	5	**1**
February 21	242	5653	83%	6.6%	3	**0**
March 21	115	6785	88%	11.8%	2	**1**

3. Mortality data broken down to Group and Demographic details

	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb
Medicine & Emergency Care Deaths	106	82	145	207	88	81	68	69	63	94	154	120	270	171
Medicine & Emergency Care Deaths - % Reviewed at tier 1	84%	80%	81%	85%	86%	98%	90%	97%	98%	97%	96%	90%	89%	84
Surgery, Anaesthetics & Critical Care	30	29	34	42	24	19	17	21	29	32	51	34	52	41
Surgery, Anaesthetics & Critical Care - % Reviewed at tier 1	86%	79%	79%	100%	100%	94%	100%	100%	96%	90%	88%	82%	92%	100%
Surgery B	2	2	0	0	0	0	2	1	1	0	0	2	2	2
Surgery B - % Reviewed at tier 1	100%	100%	N/A	N/A	N/A	N/A	100%	100%	100%	N/A	N/A	100%	50%	100%
Women & Child Health	0	0	2	0	0	0	0	0	1	0	0	2	1	0
Women & Child Health - % Reviewed at tier 1	N/A	N/A	100%	N/A	N/A	N/A	N/A	N/A	100%	N/A	N/A	100%	100%	na
Unknown	23	10	23	80	35	25	16	11	9	20	11	9	42	28
Unknown - %	8%	0%	4%	45%	25%	72%	75%	54%	66%	75%	18%	24%	19%	17%

Inpatient Deaths by Age Group	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan 21	Feb 21
0-5 years	0	0	1	0	0	0	0	0	0	0	0	0		
5-17 years	0	0	0	0	0	0	0	0	0	0	0	0		
18-64 years	31	21	31	55	30	28	17	11	12	33	36	27		
65-84 years	71	57	114	170	72	49	46	61	50	57	104	97		
85+ years	60	45	60	105	45	48	38	30	42	56	76	63		

	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan 21	Feb 21
Maternal Death	0	0	0	0	0	0	1	0	0	0	0	1		
Stillbirths	2	0	0	1	4	5	3	2	2	4	1	4	3	3
Stillbirth rate (corrected) per 1000 babies	5.1	0	2.68	2.7	9.43	11.9	6.44	4.35	4.94	8.75	2.33			
Neonatal Deaths	2	0	1	1	2	1	2	0	0	0		1	1	1
Neonatal Death Rate (corrected) per 1000 babies	2.55	0	2.68	5.39	2.36	4.76	6.44	0.00	0.00	0.00	2.33			

	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan 21	Feb 21
ED Deaths	17	11	17	12	11	5	11	9	9	13	19	22	19	
Learning Disability Deaths	2	2	3	4	4	1	2	1	0	4	5	3		
Learning Disability reviews returned	1	2	3	3	4	1	2	1	N/A	2	0	0		

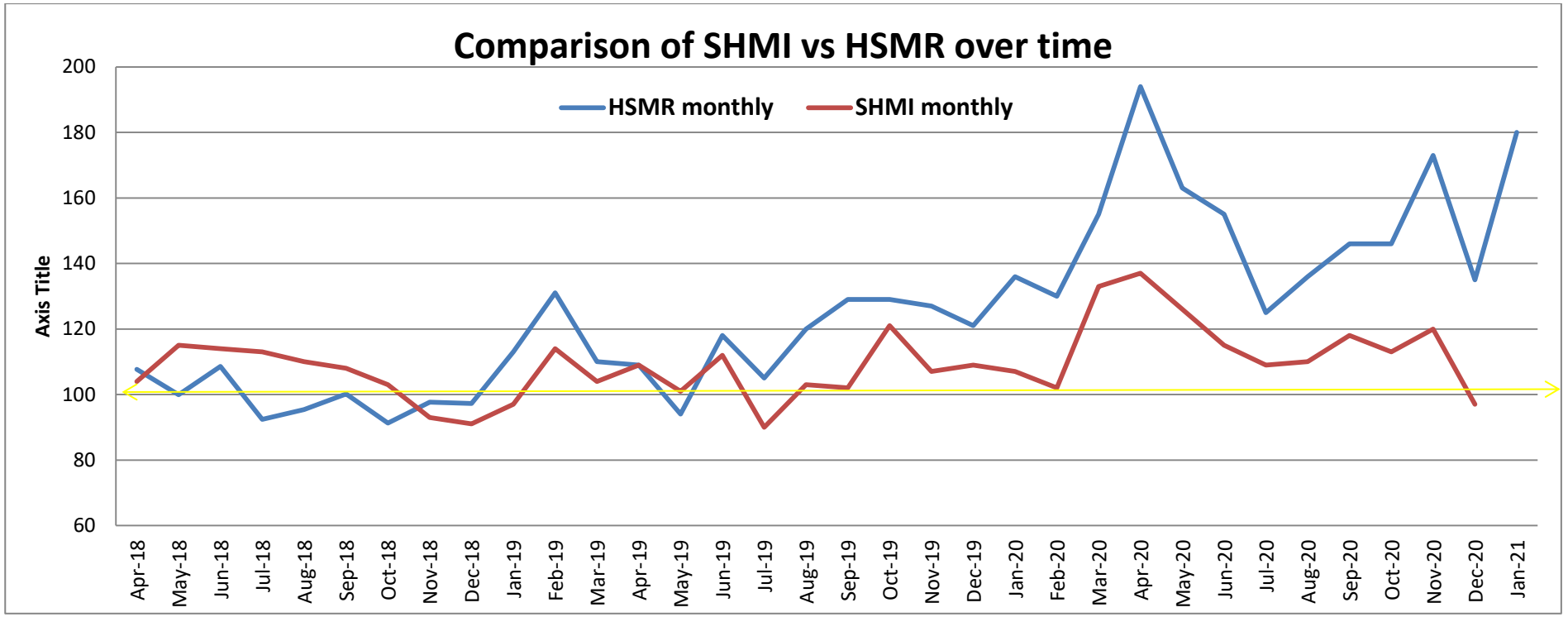
4. Mortality Statistics - Comparative Data

The Trust uses HED to review our performance with mortality ratios. This is an external information and benchmarking system for the provision of various mortality data. The mortality data derived from HED is primarily SHMI (Summary Hospital-level Mortality Indicator) but also provides data on HSMR (Hospital Standardised Mortality Ratio). The Department of Health supports SHMI as the main mortality indicator however it is also useful to look at HSMR as it is a month in front of SHMI data.

Definition: The (Summary Hospital-level Mortality Indicator) SHMI is the ratio between the actual number of patients who die following hospitalisation at the trust and the number that would be expected to die on the basis of average England figures, given the characteristics of the patients treated there. It includes death up to 30 days post discharge and does not adjust for palliative care. SHMI above 1 is higher than benchmark

5. NHS DIGITAL QUATERLY DATA

	Oct-17 – Sep-18	Jan-18 – Dec-18	Apr-18 – Mar-19	Jul-18 – Jun-19	Oct-19 – Sep-19	Jan-19 – Dec-19	Apr-19 – Mar-20	Jul-19 – Jun-20	Oct 19 – Sep 20
SHMI (Trust wide)	1.14	1.07	1.06	1.05	1.03	1.08	1.09	1.11	1.14
City		0.97	0.95	0.99	0.99	1.06	1.08	1.07	1.11
Sandwell		1.14	1.11	1.07	1.04	1.07	1.09	1.13	1.15
Rowley		1.71	1.81	1.63	1.74	1.70	1.00	-	-
Leasowes								3.29	3.08
Palliative Care coding	21.5%	22.1%	22.9%	22.43%	21.47%	20.63%	20.06%	20.26%	19.55%
Deaths within 30 days of elective procedure	0.6%	0.58%	0.77%	0.71%	0.69%	0.64%	0.47%	0.59%	0.78%
% of deaths in most deprived	63.8%	61.4%	61.1%	58.4%	59.53%	63.82%	63.53%	63.69%	63.11%
% of deaths where coding is a symptom	13.8%	13.9%	14.3%	14.24%	14.08%	13.79%	13.26%	13.41%	13.59%
Mean depth of coding for elective	4.3%	4.9%	5.2%	5.37%	5.5%	5.3%	5.1%	5.0%	4.95%
Mean depth of coding for Non elective	4.3%	4.7%	4.9%	5.1%	5.2%	5.2%	5.2%	5.4%	5.66


Comparison of SHMI vs HSMR over time
HSMR monthly
SHMI monthly
Axis Title
200
180
160
140
120
100
80
60
Apr-18
May-18
Jun-18
Jul-18
Aug-18
Sep-18
Oct-18
Nov-18
Dec-18
Jan-19
Feb-19
Mar-19
Apr-19
May-19
Jun-19
Jul-19
Aug-19
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Nov-19
Dec-19
Jan-20
Feb-20
Mar-20
Apr-20
May-20
Jun-20
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Jan-21

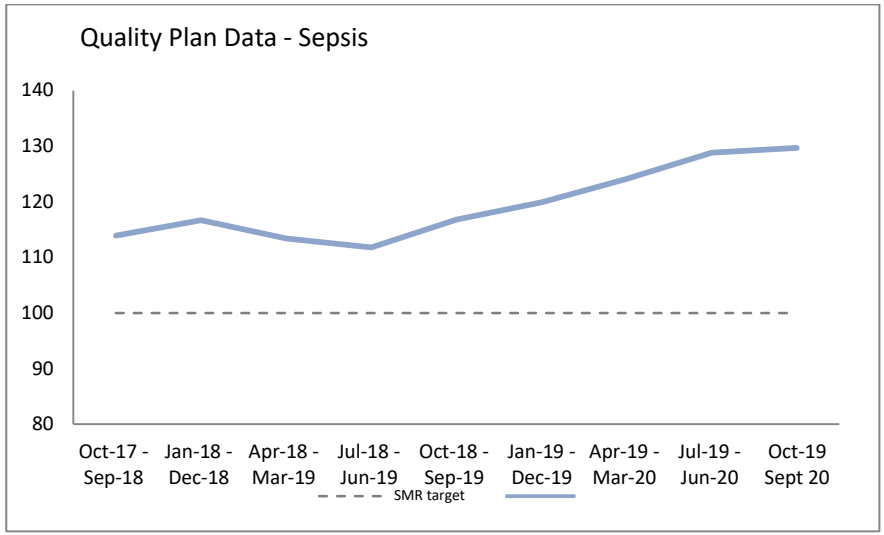
SMHI

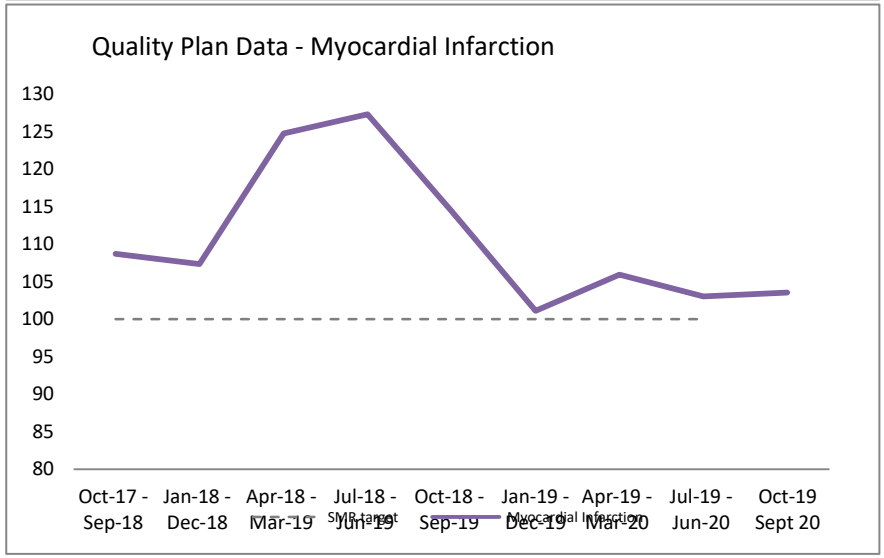
	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec 20
SHMI - Monthly	109	107	102	133	137	126	115	109	110	115	113	120	97
SHMI - 12 month cumulative	107	108	107	109	110	113	111	113	114	115	114	115	114
SHMI – weekday monthly	105	107	100	127	127	122	105	109	112	116	115	117	89
SHMI – weekday 12 month cumulative	106	106	105	106	107	109	107	108	110	111	111	112	111
SHMI – weekend monthly	121	110	107	147	170	137	147	110	106	111	107	129	117
SHMI – weekend 12 month cumulative	113	114	113	117	122	122	123	126	125	124	121	123	123

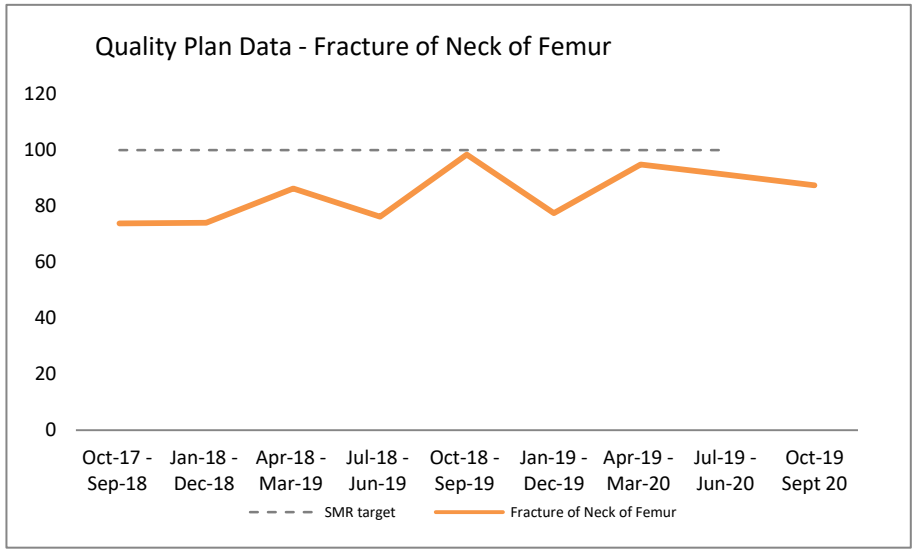
HSMR Data

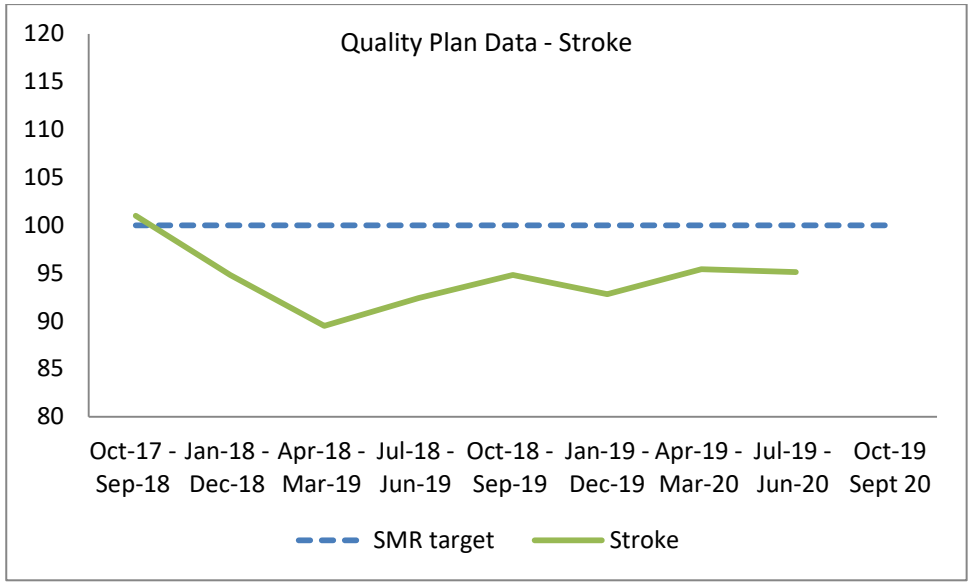
	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov 20	Dec	Jan 21
20HSMR monthly	121	136	130	155	194	163	155	125	136	146	146	175	135	180
HSMR - 12 month cumulative	117	120	120	122	128	134	136	138	139	141	142	146	144	149
HSMR - weekday monthly	116	137	130	148	186	158	142	126	135	145	152	176	119	166
HSMR - weekday 12 month cumulative	117	119	118	120	125	131	132	133	134	137	140	143	141	163
HSMR - weekend monthly	136	135	131	173	223	180	201	122	138	147	130	172	176	221
HSMR - weekend 12 month cumulative	118	123	124	128	138	143	150	153	155	152	150	154	154	143

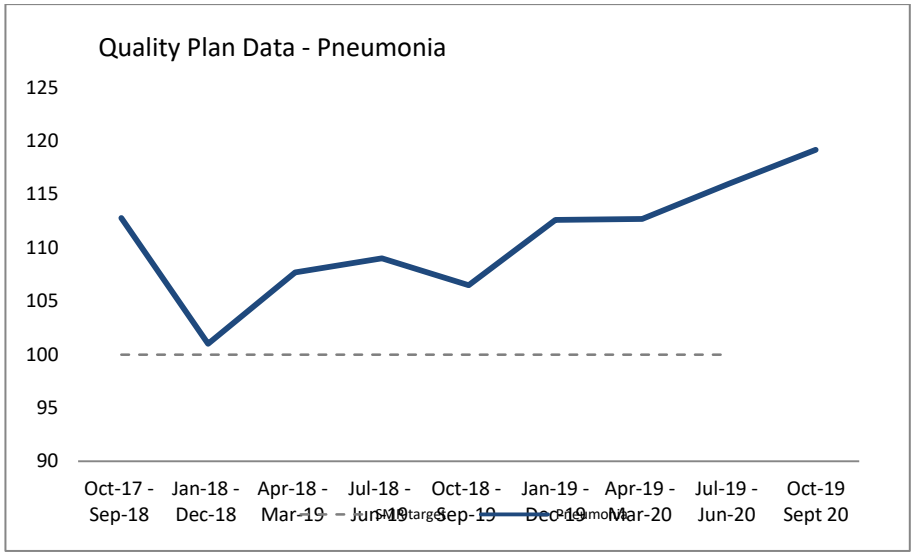
6. Quality Plan data:








Quality Plan Data - Stroke
120
115
110
105
100
95
90
85
80
Oct-17 - Sep-18
Jan-18 - Dec-18
Apr-18 - Mar-19
Jul-18 - Jun-19
Oct-18 - Sep-19
Jan-19 - Dec-19
Apr-19 - Mar-20
Jul-19 - Jun-20
Oct-19 Sept 20
SMR target
Stroke


Quality Plan Data - Pneumonia
125
120
115
110
105
100
95
90
Oct-17 - Sep-18
Jan-18 - Dec-18
Apr-18 - Mar-19
Jul-18 - Jun-19
Oct-18 - Sep-19
Jan-19 - Dec-19
Apr-19 - Mar-20
Jul-19 - Jun-20
Oct-19 Sept 20

7. Alerts

7.1 Formal Alerts from the CQC

0 received in March 2021

7.2 Early warning Alerts – provided by HED, our information provider for Please find below your latest alert details.

- *HSMR aggregate CUSUM alerts exceeding the trigger point of 5.48 for 56 CCS groups in the HSMR, excluding groups with 5 or fewer expected deaths in the latest 12-months*
- *HSMR aggregate CUSUM warnings exceeding values 3 and above (the actual trigger point is 5.48) for 56 CCS groups in the HSMR, excluding groups with 5 or fewer expected deaths in the latest 12-months*
- *HSMR alerts for red outliers (upper 99.8% limit) for 56 CCS groups only*
- *SHMI alerts for red outliers (upper 95% over dispersed limit) for ALL SHMI CCS groups, excluding groups with 5 or fewer observed deaths in the latest 12-months*

Alert	Alert Period	CCS Diagnostic Group	Expected Death	Observed Death	Number of Discharges	Score	Alert Level
HSMR	Feb 2020 - Jan 2021	251 - Abdominal pain	1.36	5	1149	367.15	Red
	Feb 2020 - Jan 2021	39 - Leukemias	4.49	11	426	245.06	Red
	Feb 2020 - Jan 2021	42 - Secondary malignancies	8.46	18	142	212.83	Red
	Feb 2020 - Jan 2021	197 - Skin and subcutaneous tissue infections	12.7	26	1133	204.76	Red
	Feb 2020 - Jan 2021	224 - Other perinatal conditions	18.74	35	1188	186.72	Red
	Feb 2020 - Jan 2021	153 - Gastrointestinal hemorrhage	19.48	36	455	184.84	Red
	Feb 2020 - Jan 2021	226 - Fracture of neck of femur (hip)	20.76	35	322	168.59	Red
	Feb 2020 - Jan 2021	150 - Liver disease; alcohol-related	28.62	46	169	160.73	Red
	Feb 2020 - Jan 2021	2 - Septicemia (except in labor)	78.02	124	471	158.93	Red
	Feb 2020 - Jan 2021	122 - Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	162.42	243	1304	149.61	Red
	Feb 2020 - Jan 2021	109 - Acute cerebrovascular disease	72.48	103	626	142.1	Red
SHMI	Jan 2020 - Dec 2020	219 - Short gestation; low birth weight; and fetal growth retardation	7.02	20	798	284.92	Red

	Jan 2020 - Dec 2020	197 - Skin and subcutaneous tissue infections	16.42	27	971	164.4	Red
	Jan 2020 - Dec 2020	42 - Secondary malignancies	20.11	32	102	159.13	Red
	Jan 2020 - Dec 2020	2 - Septicemia (except in labor)	96.53	132	472	136.74	Red
	Jan 2020 - Dec 2020	122 - Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	249.48	302	1485	121.05	Red
CUSUM	Jan 2021	100 - Acute myocardial infarction	3.37	11	59	10.12	Red
	Nov 2020	109 - Acute cerebrovascular disease	4.98	10	51	8.01	Red
	Jan 2021	122 - Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	11.38	22	76	5.74	Red
	Dec 2020	122 - Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	12.09	16	99	5.53	Red
	Jan 2021	150 - Liver disease; alcohol-related	4.33	10	17	9.27	Red
	Jan 2021	197 - Skin and subcutaneous tissue infections	1.43	3	72	5.76	Red
	Jan 2021	2 - Septicemia (except in labor)	8.21	14	42	8.74	Red
	Jan 2021	226 - Fracture of neck of femur (hip)	1.97	7	25	7.07	Red
	Nov 2020	55 - Fluid and electrolyte disorders	1.55	5	27	5.93	Red
CUSUM	Nov 2020	100 - Acute myocardial infarction	3.13	4	47	3.13	Amber
	Nov 2020	122 - Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	10.36	17	74	4.7	Amber
	Nov 2020	130 - Pleurisy; pneumothorax; pulmonary collapse	0.99	4	15	3.35	Amber
	Dec 2020	150 - Liver disease; alcohol-related	2.62	7	14	4.46	Amber
	Jan 2021	155 - Other gastrointestinal disorders	0.8	3	50	4.62	Amber
	Jan 2021	157 - Acute and unspecified renal failure	4.87	6	37	3.01	Amber
	Dec 2020	157 - Acute and unspecified renal failure	3.9	8	40	3.6	Amber
	Nov 2020	159 - Urinary tract infections	1.92	6	85	4.97	Amber
	Dec 2020	197 - Skin and subcutaneous tissue infections	1.3	4	101	5.13	Amber
	Dec 2020	199 - Chronic ulcer of skin	1.28	2	7	3.23	Amber
	Nov 2020	199 - Chronic ulcer of skin	0.67	3	11	3.7	Amber
	Dec 2020	2 - Septicemia (except in labor)	8.46	11	38	5.4	Amber
	Nov 2020	2 - Septicemia (except in labor)	6.73	14	42	5.11	Amber
	Jan 2021	224 - Other perinatal conditions	1.19	3	87	4.02	Amber

Please exercise caution when investigating alerts that are based on a small number of cases.

8. Learning Disability Deaths - Quarterly Summary Learning:

- In terms of causes of death the above correlates with the LeDeR annual report identifying 6 common conditions: Pneumonia, Aspiration Pneumonia, Sepsis, Dementia, Ischaemic Heart Disease and Epilepsy. These identify key clinical pathways as targets for more intensive work.
- The reviews highlight the significance of a timely and robust Treatment Escalation Plan as a framework which should be completed within the first 24 hours establishing ceiling of care and patient's mental capacity.
- Further dissemination of training around Mental Capacity and DoLS and Best Interests decision making. With referral to IMCA and interpreter services where appropriate.
- Training around reasonable adjustments
- Promotion of Learning Disability Liaison Nurse referral for specialist input
- Promotion of early escalation to specialist clinical teams and SpR review.
- Promotion of effective tissue care
- Promotion of effective assessment of issues around eating and drinking and early referral to SLT and Nutrition teams.
- Further work around personalised care planning.
- Promotion of incident reporting

9. Key Learning Points highlighted from discussions at Learning from Death Committee

1. The evaluation of adult patients with anemia must also consider unexpected diagnoses including occult malignancy.
2. Sepsis: Ensure patients get antibiotics within the golden hour
3. Adults presenting with abdominal pain should be referred to Surgeons rather than Physicians in the first instance to avoid delay in cases of acute surgical abdomen
4. Importance of early recognition of End of Life and instituting ceiling of care was highlighted by a number of reviews
5. Missed VTE prophylaxis: This raises the importance of scrutinising drug charts on ward rounds to ensure prescribed drugs are being administered

6. Importance of recognising the difference between hospital acquired pneumonia (HAP) and community acquired pneumonia (CAP) and ensuring that the appropriate antibiotics is prescribed
7. Transport issues for dying patients (Lessons from complaints)
    a. Ensure that Transport is planned and confirmed so that there are no delays.
    b. Specifically indicate to Ambulance Service that stretcher transfer is required in order to preserve the patient's dignity and to avoid unnecessary discomfort and stress for the patient and their loved ones.
8. In children with life limiting conditions with advanced care plans (ACP) we need to ensure these are correctly distributed across Ambulance Services, Police, Child Death (CDOP) Nurse and are made visible on patient medical notes to ensure “wished” requirements are met. Therefore, the patient will not receive inappropriate treatment
9. Learning Difficulty should never be put as a reason for DNACPR
10. All clinicians should be familiar with the New Notification of Deaths Regulations which stipulates when deaths should be reported to Coroners
11. Phenytoin is not effective in treating cocaine induced seizures
12. Importance of escalating care appropriately in deteriorating patients.
13. As we are getting used to ‘Electronic Record’, it is imperative that the list of active diagnosis and problem list is thorough and updated during clerking and subsequent reviews.
14. Re-enforce importance of following and implementing the major haemorrhage protocol
15. Unopposed Warfarin loading doses may paradoxically result in a hypercoagulable state and potential clot formation because of significant reductions in protein C and protein S. Consequently, because of the potential risk of thromboembolism during the initiation of warfarin therapy, the use of concurrent heparin is extremely important
16. Consultants need to ensure accuracy of MCCD.
17. All Clinicians to familiarise themselves of how to prescribe and review medication on Unity

Annex 2

Improving HSMR

HSMR score takes into account palliative care and is also based on diagnosis in the 1st and 2nd Finished consultant episode. This is why there is a big discrepancy between our SHMI and HSMR with the SHMI being lower.

There are 2 strategies to improve the HSMI and SHMI. One is to focus on clinical care. To this end we have set up alerts so that we can investigate when we have more than expected deaths and 2nd strategy is to improve process/coding and documentation issues that are artificially increasing our HSMR

QI Projects and Clinical Assurance Reports in response to alerts

UTI Project:

- NICE guideline will be available on connect.
- Training package and assessment tool developed for use in care homes for UTI prevention and management.
- Quiz developed for staff to test and measure their knowledge.
- Comms package includes development of preventing dehydration leaflets, learning on the loo posters, a video regarding testing and management as part of the wider strategy to change practice and raise awareness.
- Presentations planned at QIHD.
- Reintroduction and update of the catheter passport.

Sepsis Project:

- The sepsis project has demonstrated an improvement in the number of patients receiving antibiotics within the golden hour.
- The transformation team have made some adjustments to the data capture to ensure all appropriate antibiotics are counted for.
- Performance will be monitored at the weekly safety huddles dashboard once implemented.
- In community beds, broad spectrum antibiotics are now in use to meet targets.

Pneumonia Task Force:

- QI project re. Mouth Care, data shows 50% reduction in incidence of HAP across the 4 pilot wards, in addition to a reduction in the use of antibiotics (29%) and 34% reduction in the use of Nystatin. The project is planned for roll out across the Trust, but has been delayed due to COVID. Business case being worked on

- Other Actions which have been completed include updating guidelines and raising awareness on difference between HAP / CAP, updating microguide app.

Structured Judgement Reviews are analysed for themes and lessons learnt are which are shared with all teams

All Specialties are timetabled to present at Learning from Death committee, highlighting cases reviewed, any lessons learnt and actions completed.

Audit / Review of groups of patients where we have been alerted that we have higher than expected deaths are done for assurance and identify any learning.

Recent reviews include:

Report on lung cancer deaths
Sept 2019 – Aug 2020. Presented march 2021

20 deaths (10.84 deaths expected)

- 7/20 had stage 3 lung cancer at presentation
- 13/20 had stage 4 lung cancer at presentation

- 10/13 were too frail for either Ix or Rx
- 2/13 had rapid deterioration and poor response to palliative chemo
- 1/13 had safeguarding issues

- 4 patients didn't have palliative input

- 1x Safeguarding issues
- 2 x Quite quick deterioration in hospital
- 1 x awaiting further palliative chemo

Themes

- Patients presenting with late stage disease
- Patients presenting too frail for further Ix/ Rx
- Early input of palliative care
- Nil to suggest investigations/ treatment delayed by pandemic
- Nil to suggest any clinically significant systemic delays in triage, diagnostic or treatment pathway

Key Action to be discussed :

Public campaign to encourage early recognition of symptoms

Colorectal cancer deaths Feb 19-Mar 20

Presented: March 2021

HES identified 26 deaths with the colorectal cancer diagnostic code

Notes were investigated electronically

1 elective death (1/135=0.7% mortality) (national rate=2%)

The rest were admitted as emergency(bar 1 who died while waiting to see oncology)

2 of these appear to have had opportunities for earlier diagnosis missed

- Mean age 72- median 76 (range 46-88)
- 11M:15F
- Ethnicity 15 White, 3 Caribbean, 2 Indian, 1 African, 4 unknown
- In comparison with Sandwell census data Black pts over represented (approx double expected) but 4 unknowns make it difficult to say
- Mean LOS 11 days Median 10 (range 0-39)
- 11 coded as palliative (but actually they probably all should have been)
- 11 cared for by surgeons 15 by medicine
- All had appropriate dnacpr and scp notation
- All surgical patients were discuss at M+M
- Almost all presented with advanced cancers in obstruction or with perforation
- 5 had emergency operations (NELA targets hit in all cases)

Elective Death:

65m, multi comorbid. P possum risk of death 18.3%. Pt and family were aware of the risk and even wrote the surgeon a thank you card for his care

Emergency operations

- 5 patients
    - Mean age 82 (mean los 15 days- range 4-38)
    - All had high NELA risk of death
    - All were discussed at M+M and no problems with care identified (there is no hard futility point- these operations were often carried out to treat pain)
    - No on table deaths

Issues identified in review:

- 2 potential missed cases: BSG guidance (2011) for investigation of anaemia was not followed in both cases

Action: Gastroenterology team reviewing cases

Conclusion

- The overwhelmingly common story was of late presentation with advanced disease
- Both med and surgical teams acted appropriately to palliate
- Late presentation is associated with deprivation- 15 pts in quintile 1(worst), 5 in 2
- 4 patients in quintile 6! (how can you have a 6th quintile-does that mean no data??)

Key Action :

Public campaign to encourage early recognition of symptoms

PCCT

Reporting Period: Dec-feb 2021

Number of deceased patients in the last 3 months 76 (+20 from previous Q) 94% of these at Leasowes typically (Covid deterioration)

This makes up 16% of deaths across the trust

Within PCCT 2 patients put forward for tier two review in this period

Issues:

- Recognising and acting on deterioration
- Need for discharge plan from acute to GP needs to be explicit
- Depart letters – medicine safety
- Need for greater oversight at community and primary care level re frequent ED attendances

QI and Actions

- Team level learning with GP/Leasowes re TEP and reacting to deterioration
- DN review in to community input with actions re recognising and responding to both husband and wife deterioration
- Learning event in community **–**
- Strengthened the communication with in community beds
- Identified the need to roll out work undertaken with Sheldon team to Leasowes re recognising and managing deterioration
- DN and AA activity re safe prescribing

Name of Specialty: Gastroenterology

Reporting Period: Jan 2020 to Dec 2020 (12m)

Date of Report: 20th January 2021.

Number of Deceased patients discussed in the last 12 months: 150

Number of Deceased patients referred to Specialty for 2nd Tier Review: 13

Key Themes

- Management of End of life for admitted patients.
- pecialty Gastroenterology management of outlier patients.
- Management of advanced liver disease patients.
- Patient safety for interventional endoscopic procedures.
- Ward Communication with families and relatives.
- Palliative care patient achieving preferred place of care/death in a timely way.
- lack of SJR trained staff

Areas of good practise

- Established weekly Cirrhosis MDT accessible to all in patient and out patient liver disease management teams. Assessment, clinical guidance, access to tertiary referral and in patient and community palliative care for advanced and complex chronic liver disease patients. Unity referral access
- Ambulatory/Day case therapeutic paracentesis ward based service.
- Specialty patient management of EoL care.

Learning points to be addressed

- Prevent delay in interventional endoscopic procedures.
- Interventional procedure management omissions.
- Early specialist gastroenterology involvement in in patients.
- Communication with relatives and carers
- Specialty SJR training
- Promoting learning into QIP and actions

QI projects implemented

- **Liver Disease:**
    - Cirrhosis Weekly MDT
    - New IBD Patient referral seem by specialist within 4 weeks
    - Elective paracentesis service
- **In patient Gastro**
    - Gastroenterology In patient outlier monitoring shared lists.
- **Endoscopy**
    - Specialty customised WHO checklists eg ERCP
- **IBD**
    - New IBD patient referral 4w to specialist review.
    - IBD Biologic Annual safety check
    - Complex IBD nutrition management

CRITICAL CARE MEDICINE

Reporting Period: 2020

Date of Report: 13th Dec 2020

Number of Deceased patients discussed in the last 12 months: 7

Number of Deceased patients referred to Specialty for 2nd Tier Review: 18

Key Themes and Learning

- Unexplained tachycardia in a background of Covid may represent pulmonary embolism.
- Severe acidosis which is not responding to initial treatment needs consideration for renal replacement therapy.
- If there is a delay in ICU review of a referred patient, the reason must be documented in patient records.
- Rare presentations discussed – NG tube perforation of stomach, Cold agglutinin haemolysis.

Name of Specialty: Gynaecological Oncology

Mortality Lead: Mr Janos Balega

Reporting Period: 1st January 2020 till 31st October 2020

Date of Report: November 2020

Number of Deceased patients discussed in the last 12 months: 2

Number of Deceased patients referred to Specialty for 2nd Tier Review: 0

Key theme: 1 case of post op COVID and I case unresectable bowel cancer

Areas of Good Practise

Standard of care provided with multidisciplinary input and continuous contact with family

Learning points to be addressed

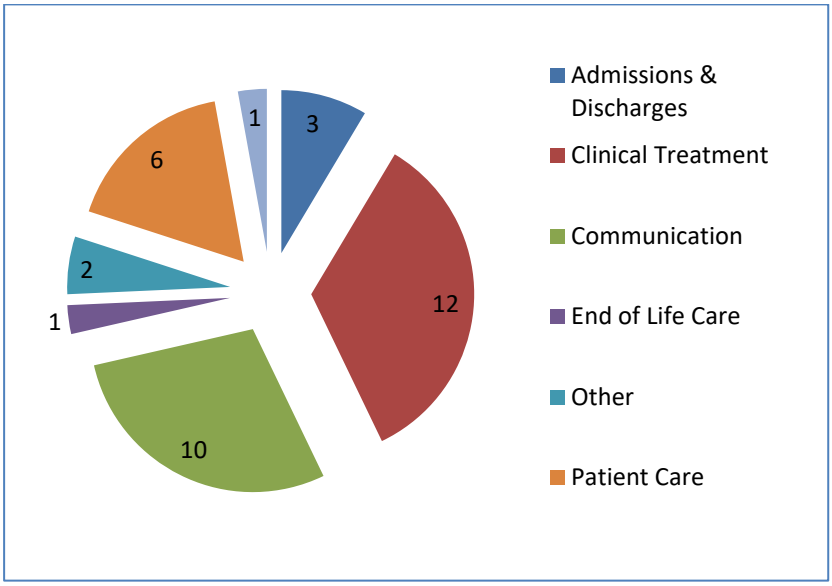
- Unfortunately, there is no possible way to distinguish between ovarian or bowel cancer on imaging in similar circumstances. The suspected diagnosis was ovarian cancer until the biopsy prove bowel origin.
- This operation was done during the initial phase of the first wave of coronavirus pandemic. At that time, no preventive measures (isolation, swabbing) were in place in the NHS

QI and actions Taken since

- Robust preventive measures have been in place since, to prevent postoperative COVID19. We performed nearly 200 major cancer surgeries since April 2020 with zero COVID19 developing postoperatively.

Complaints – relating to deceased
patients received during - Quarter 2 2020/2021

During quarter 2 2020/21 the Trust received 35 complaints in relation to the care of a deceased patient, compared to 37 received during Q1 2020/21



Categories of Complaints raised during Quarter 2 2020/21

Outcome of complaints:

- Cases with outcomes of Upheld (0) or Partially Upheld (3) should have actions allocated for service improvement or to ensure such events do not happen again. An example of an action that has arisen during Quarter 2 is detailed below:
- C20/0207 A far reaching complaint was raised by the family of a poorly patient into their care and treatment prior to death. An action arising was that a discussion into the issues raised by the family has taken place by the clinicians and wards involved in the patient's care with a view to heightening awareness of how the patient's care was perceived by the family.

Name of Specialty: Elderly care

Reporting Period: 12 months October 2019-October 2020

Date of Report: 19th October 2020

Number of Deceased patients discussed in the last 12 months: 25

Number of Deceased patients referred to Specialty for 2nd Tier Review: 25

Areas of good Practise

- excellent end of life care
- holistic/pragmatic decision making in complex cases
- good communication when encountering unrealistic family expectations

Issues identified

- Early recognition of dying phase and switching to palliative approach
- Need to review records in complex cases – full medical history, previous admissions, previous DNACPR/treatment limitations discussions
- Missed opportunities to consider SCP and advance care plans in our frailest patients with re-admissions
- Early DNACPR decisions in frail and multi-morbid patients
- TEP forms are sometimes unrealistic – e.g. DNACPR but left 'still for NIV and dialysis' when frail and abundantly would not be appropriate
- Better communication with families in deteriorating patients

Name of Specialty: PCCT

Reporting Period: Q2 July to September 2020

Date of Report: October 2020

Number of Deceased patients in the last 3 months 56 (53 Leasowes 3 Rowley)

Number of Tier one reviews within 28 days 80%

Number no Tier one review – 5%

Number still in timeframe for 28 day completion – 15%

Number of Deceased patients referred to Specialty for 2nd Tier Review: 8

Areas of good Practise:

- Partnership working between bed teams YHP and Palliative care
- Some excellent examples of tenacious GPS navigating complex pathways internal and external to trust
- Plenty examples of positive end of life care within Leasowes

Learning points to be addressed

- The need to increase the consistency within nursing workforce in relation to recognising and managing deterioration

Contributing factors (identification and prioritisation of system wide issues)

- The dependency and acuity of patients appears to have increased, an audit of admission and transfers to be undertaken in group to pull out specific themes (audit Q2 this year and compare with previous years) to feedback Dec quality and Safety committee

QI implemented as a result

- First dose antibiotic launched October 2020
- SCP training and audit of KPIS- ongoing
- MDT with palliative care at Leasowes
- Enhanced training on Eliza Tinsley on Managing the deteriorating patient to be rolled out to all units
- Enhanced training planned for Macarthy Nurses in relation o management of diabetes
- All band 7 and 6 nurses completed level three safeguarding training (previously was 8a level)
- Discussion point re ensuring in nurse led services there is a b6 leading every shift/site

Haematology/Oncology DEATHS 4/19-7/20: 38 deaths reviewed.

Presented Sept 2020

Key themes

- Late presentations of lymphomas noted in the Covid era which has led to deaths
- There were 4 deaths due to late presentations of a lymphoma that arguably could have been prevented had patient presented a good month at least prior –
- Relapse numbers seem higher – again patients not coming forward – virtual clinics – are we missing information ?
- Covid possibly hastened 3 deaths due to known disease , with 7 in total thought to have been caused solely by Covid BUT a patient with relapse hgnhl did survive covid (died later due to nhl)

Examples of good practise:

Early referrals for palliative care and scp, weekly discussions as a team on all haem onc inpatients to discuss resusc

Key Learnings:

- Review drug cards daily especially for outliers
- Avoidance of moving acutely ill patients at night
- Ensure ues checked regularly for patients going on pca
- Chase biopsy requests on outliers

- Ensure correct shielding information given to patients review of all deaths, myeloma, Poisons / Toxicology, post-surgery. Deaths due myocardial infarction, intestinal obstruction, COVID deaths.

Action plans

- Have discussed with team over last few months due to IRs to ensure drug cards reviewed daily- complex meds especially require daily reviews by senior clinicians

QI projects implemented as a result

- Chemocare plan onto unity to help prescribing ancillary meds
- Common haematology referrals document uploaded onto intranet

Trauma &Orthopaedic deaths

Reporting Period: 11/2019 – 09/2020

Date of Report: Sept 2020

Number of Deceased patients discussed in the last 12 months: 23

Number of Deceased patients referred to Specialty for 2nd Tier Review: 20

Issues identified:

- Post elective THR intestinal obstruction
- VTE prophylaxis in spinal injury
- Key Learnings to be addressed
- Education of the Juniors
- Early identification of critically ill patients
- ROTA changes
- VTE override in UNITY
- Early decision making with VTE prophylaxis in spinal injury

Action points

- Early escalation
- Role of AccP established and recruitment formula and number to be worked out
- Electronic + Physical VTE white board

QI project implemented as a result

- Bowel preparation pathway worked out by Mr Gulati and Elective ward team

Cardiac Arrest Reviews from APRIL 2019-March 2020

Presented Oct 2020

- The DP&RT found 121 patients had a Cardiac Arrest (CA), 98 of who died.
- This continues to be a lower than average national CA number. Survival rates are above national average at 25% with the NCAA data set.

Challenges

- System changes altering data collection methods.
- Data collection has altered significantly from a nurse led audit form to an EMRT document on Unity. The Compliance was at over 90% and is now below 50%.
- Data collection around DNACPR/TEP has changed due to Unity and relies on the correct forms being completed.

2nd Strategy to improve HSMR is to improve processes, coding and documentation issues

Numerous non clinical factors having been identified as contributing to the rising HSMR score, and the improving HSMR task and finish group was initiated in November 2020 to address the various factors. The actions include:

- Regular review of COVID deaths to ensure coding can be applied to the correct episode and position. Weekly reports are sent to the clinical leads.
- Primary diagnosis: getting it right first time. A campaign was launched to raise awareness of the need to use correct terminology; this is due to the strict criteria enforced by the national clinical coding standards. New practices are to also be incorporated into junior doctor induction.
- Work in progress with Unity to find a technical solution to the issue of terminology.
- Virtual palliative care consultations are now coded in additional to the in person reviews.
- GP palliative code now in effect. Previously end of life patients in a community bed were under the intermediate care specialty code which was having a detrimental impact on the HSMR score. The new code will allow patients to be recorded under a specialty code for palliative care whilst under a GP.
- Promotion of SCP e-learning.
- Discussion in progress with Unity to raise the visibility of the SCP on Unity.
- Reviewing documentation to increase number of deceased patients with CCI scores of more than 6
- Reducing number of finished consultant Episode/spell

The plan is to work towards embedding this into group operational meetings so they can be monitored as KPI.