Paper ref: TB (09/18) 010

Sandwell and West Birmingham Hospitals

NHS Trust

Report Title	Mortality Improvement Plan							
Sponsoring Executive	David Carruthers, Medical Director							
Report Author	Mumtaz Goolam, Clinical Effectiveness Facilitator - Mortality							
	Dr Carol Cobb, Consultant Physician & Gastroenterologist, Mortality Lead							
	David Baker, Director of Partnerships and	Innovat	ion					
	Heather Matthews, Directorate Manager for the Medical Director's Office							
Meeting	Trust Board	Date	6 th September 2018					

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

Detailed discussion of mortality took place at April, May and June's Board meetings.

This update paper cover our analytical analysis, our plan of action, and work to resolve medical examiner deployment which is on par with other Trusts but well behind our aims. More expertise is being brought into our analytics function. Mortality will be a monthly feature of EQC and Q&S.

By December we will have (a) deployed projects in each of the key areas of 'excess mortality'. These have long formed part of the quality plan. And by December we will have materially shifted (b) key indices on sepsis inputs to the care pathway. (c) A weekend plan will have been defined.

The Board is asked to consider whether the problem is sufficiently clearly understood and whether the governance of action to address the issues is robust to deploy our plan until the end of Q3.

2. Alignment to 2020 Vision [indicate with an 'X' which Plan this paper supports]										
Safety Plan	х		People Plan & Education Plan	х						
Quality Plan	х	Research and Development		Estates Plan						
Financial Plan Other [specify in the paper]										

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

Quality plan progress discussed at Quality and Safety Committee in August 2018

4. Recommendation(s)

The Trust Board is asked to:

- NOTE the work done to date on coding and recording and acknowledge intention to bring in more a. expertise
- AGREE to receive a major report in December detailing results of work over the next ten weeks b.
- INVITE the Board's quality and safety committee to review monthly progress on those actions c.
- REQUIRE the executive to reflect these issues within our risk register and BAF

5. Impact [indicate with an 'X' which governance initiatives this matter relates to and where shown elaborate]											
Trust Risk Register		Risk Number(s):									
Board Assurance Framework	Х	Risk Number(s): BAF	Risk Number(s): BAF3								
Equality Impact Assessment	ls	this required?	this required? Y N x If 'Y' date completed								
Quality Impact Assessment	ls	this required?	Υ		Ν	х	If 'Y' date completed				

SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST

Report to the Trust Board: 6 September 2018

Mortality review

1. Introduction

- 1.1 Here we review progress in improving Trust patient mortality. Previously it was proposed that the process of data collection as well as specific diagnostic, location and time based groups be looked at. The report thus focuses on 4 areas and provides an update on progress:
 - a) Review of the impact of the process for data collection on mortality data, particularly depth of coding and palliative care coding.
 - b) Effect of mortality in specific diagnostic groups to target quality improvement work
 - c) Effect of mortality based on day of admission and what that might be telling us
 - d) Developing role of medical examiners and feedback from them to clinical groups

2. Current mortality data

2.1 Current mortality data is shown in the table below with some improvement in RAMI and HSMR this month. **Appendix 1** shows how the 12 month rolling and monthly data has progressed over the last 18 months, with an improved position recently which reflects the reduced mortality in March – May.

	RAMI	
RAMI (12 month Trust – to April 2018)	106	City/Sandwell - 96/114
		Weekend/weekday – 118/102
SHMI (12 month Trust – to Jan 2018)	111	
HSMR (12 month Trust – to Mar 2018)	117	

3. Influences on mortality indices

3.1 Several different parameters are used to calculate mortality data and it is important to note the effect of deprivation index (or lack of effect) and that of palliative care coding and depth of coding on the different indices (appendix 2). This is important when considering the possible degree of effect of changes in these data parameters (their recording and application) on mortality rates as shown in RAMI, SHMI and HSMR data.

4. Deprivation, palliative care and depth of coding

- 4.1 Before looking at the effect of changes in depth of coding and palliative care, here we look at how these indices have changed over the last 3 years and how they differ across organisations.
- 4.2 Serial Data analysis of the SHMI indicator were conducted to understand trends in the SWBH NHS Trust data for the 12-month cumulative periods: 2015; 2016 and 2017.
- 4.3 The complete dataset was not available for 2015.

SHMI Overview

Indicator	2015	2016	2017
SHMI	0.9927	1.036	1.13
Banding	2 ('as expected')	2 ('as expected')	1 ('higher than
			expected')
Spells	71846	69614	67697
Observed deaths	2185	2138	2137
Expected deaths	2201	2064	1898
Excess deaths	16	74	239

- 4.4 Comparison of data between 2015 2017 sees no change in the number of observed deaths, but a fall in the number of expected deaths leads to a progressive rise in excess deaths and thus SHMI score.
- 4.5 Sandwell and West Birmingham Hospitals NHS Trust (RXK) SHMI value for the data period January 2017- December 2017 is 1.13. This places us in SHMI banding 1, indicating higher than expected number of deaths. In 67697 provider spells, there were 2137 deaths when 1898 deaths were expected. There were 239 excess deaths. (NHS Digital, 2018)



- 4.6 To analyse this further for an understanding of the changing trends in mortality, the following **SHMI contextual indicators** were reviewed:
 - a) Deaths split by deprivation quintile
 - b) Mean depth of coding for provider spells with an elective admission method and a nonelective admission method

- c) Percentage of provider spells with a primary diagnosis which is a symptom or sign
- d) Percentage of deaths with palliative care coding

5. Deprivation Index classification

5.1 The Deprivation Index indicator is designed to accompany the Summary Hospital-level Mortality Indicator (SHMI). The SHMI makes no adjustments for social deprivation. This is because adjusting for deprivation might create the impression that a higher death rate for those who are more deprived is acceptable, and has the potential to remove from the SHMI some of the differences that it is designed to measure. Using the same spell level data as the SHMI, this indicator presents crude percentage rates of deaths reported in the SHMI which fall under each deprivation quintile. The deprivation quintile is defined using the Index of Multiple Deprivation (IMD) Overall Rank field in the Hospital Episode Statistics (HES) dataset. Deprivation quintile 1 is the most deprived group and deprivation quintile 5 is the least deprived group. The number and percentage of deaths where the IMD Overall Rank is missing (e.g. because the patient's postcode is unknown) are also shown.

Year	Observed Deaths	Number and Percentage of deaths in deprivation quintile 1 (most deprived)	Number and Percentag e of deaths in deprivatio n quintile 2	Number and Percentage of deaths in deprivation quintile 3	Number and Percentage of deaths in deprivation quintile 4	Number and Percentage of deaths in deprivation quintile 5 (least deprived)	Number and Percentage of deaths where the deprivation quintile unknown
2017	2137	1351 (63.2%)	431 (20.2%)	257 (12.0%)	48 (2.2%)	No data	No data
2016	2138	1386 (64.8%)	447 (20.9%)	242 (11.3%)	40 (1.9%)	10 (0.5%)	13 (0.6%)
2015	2185	1361 (62.3%)	487 (22.3%)	264 (12.1%)	57 (2.6%)	No data	No data

5.2 The data illustrates a high proportion of Trust deaths in the most deprived quintile, reflecting our local population, but this does not change over this time interval.

<u>2017</u>



5.3 63.2% of SWBH deaths were in Quintile 1 (most deprived) and above the England average of 20.4%, again reflecting the deprived nature of our local population.

6. Depth of Coding - Mean depth of coding for provider spells with an elective admission method

6.1 This is an indicator designed to accompany the Summary Hospital-level Mortality Indicator (SHMI). As well as the primary diagnosis, the Hospital Episode Statistics (HES) data used in the calculation of the SHMI contain up to 19 secondary diagnosis codes. Due to limitations in their Patient Administration Systems (PAS) some providers are only able to enter a smaller number of secondary diagnosis codes. Using the same spell level data as the SHMI, this indicator presents the mean number of secondary diagnosis codes per finished provider spell and maximum number of secondary diagnosis codes in a finished provider spell for elective admissions.

Year	Mean coding depth for elective admissions	Maximum number of secondary diagnosis codes for elective admissions
2017	4.1	14
2016	4.1	14
2015	4.0	13

6.2 SWBH mean depth of coding for elective admissions in 2017 was 4.1 and same as the England average of 4.1



Year	Mean coding depth for non- elective admissions	Maximum number of secondary diagnosis codes for non-elective admissions
2017	4.3	19
2016	4.2	19
2015	4.0	13

Mean depth of coding for provider spells with a non-elective admission method

6.3 SWBH mean depth of coding for non-elective admissions in 2017 was 4.3 and similar to the England average of 4.4



6.4 For SHMI, the coding level is at a national average but the level of deprivation suggests a higher number of comorbidities should be recorded.

Percentage of provider spells with a primary diagnosis which is a symptom or sign

6.5 SWBH percentage of provider spells with a primary diagnosis which is a symptom or sign in 2017 was 13.2 and above the England average of 12.2

Percentage of deaths with Palliative care coding

6.6 The SHMI makes no adjustments for palliative care. This is because there is considerable variation between trusts in the coding of palliative care. Using the same spell level data as the SHMI, this indicator presents crude percentage rates of deaths reported in the SHMI with palliative care coding at either diagnosis or specialty level.

Year	Observed Deaths	Number of deaths with palliative care specialty coding	Number of deaths with palliative care diagnosis coding	Number of deaths with either palliative care specialty or diagnosis coding	Percentage of deaths with palliative care specialty coding	Percentage of deaths with palliative care diagnosis coding	Percentage of deaths with either palliative care specialty or diagnosis coding
2017	2137	0	574	574	0.0	26.9	26.9
2016	2138	0	464	464	0.0	21.7	21.7
2015	2185	0	390	390	0.0	17.8	17.8

6.7 The England average for deaths reported in the SHMI with Palliative care coding is 32.2 and the SWBH value is below at 26.9 suggesting a lower level of recording of this data than expected.

Conclusion

6.8 Coding issues around palliative care and depth of coding appear low for what was expected in a Trust such as SWBH with a high deprivation index.

7. Effect of palliative care coding and depth of coding on mortality indices at SWBHT

- 7.1 While examining the high mortality rates at SWBH we considered several factors, one of which was the effect of the data collection process and in particular that of recording of palliative care and the depth of coding (number of comorbidities recorded). The paper in **appendix 3** reflects on how these data will affect the different indices and here we show that there is an under recording of patients under the care of the palliative care team and also an under recording of co-morbidities in the coding. The latter will have a larger effect than the former. Data shows that our mean number of commodities recorded is less than the national average and lower than one might expect for the high levels of social deprivation in the area.
- 7.2 Effects are seen in RAMI data where inclusion of all patients under palliative care leads to a fall in RAMI of 2 points. The effect of coding changes will probably be greater in SHMI and HSMR but this is less easy to see due to the method of data analysis meaning changes take over 12 months to become apparent. However this does give some indication of the scale of the change possible and more importantly how to make changes prospectively to how data is collected:
 - Improved recording and notification of palliative care
 - Improved lists for coding of comorbidities (education package for doctors)
 - Possible automation of adding of comorbidities that may be missed in clerking but are confirmed as chronic disease in patients.

- 8. Top 10 causes of mortality for both in hospital and out of hospital deaths and comparison of City v Sandwell and weekend v weekday deaths.
- 8.1 Having looked at the process factors and their possible effect on mortality data, here we analyse of cause of death by comparison between data sets. This will help direct and establish those disease areas that need greater focus:
 - 2 consecutive years
 - sites for top 10 causes death at each site
 - weekend v weekday admission
 - Trust wide and effect of reduction of number deaths from actual to expected on SHMI

SHMI 2017 and 2016 Top 10 Diagnoses Group by highest number of observed deaths:

No.	Diagnosis Group	Count of provider spells	Observed	Expected	No. of deaths occurring in hospital	No. of deaths occurring outside hospital within 30 days of discharge	Excess deaths
2017	Pneumonia (except that caused by Tb or STD)	1919	369	323	302	67	46
2016		2169	405	393	328	77	12
2017	Acute CVA	652	109	97	100	9	12
2016		605	83	92	78	5	-9
2017	Septicaemia	537	102	96	85	17	6
2016		371	72	72	53	19	0
2017	Urinary Tract Infections	1341	75	63	49	26	12
2016		1484	99	84	64	35	15
2017	Congestive Heart Failure	738	70	95	54	16	-25
2016		713	68	99	52	16	31
2017	COPD and Bronchiectasis	1207	67	74	47	20	-7
2016		713	68	99	52	16	31
2017	Aspiration Pneumonitis	196	65	66	47	18	-1
2016		247	75	93	58	17	-18
2017	Acute Renal Failure	357	60	54	40	20	6
2016		325	48	51	33	15	-3
2017	Cancer of Bronchus, Lung	124	56	49	34	22	7
2016		N/A					
2017	Acute bronchitis	1405	51	44	29	22	7
2016		1584	50	51	31	19	-1

8.2 Illustrates some variation on year to year basis for excess deaths for each diagnostic group, with pneumonia being highest group

	Cit	у	Sandwell			
	Number	RAMI	Number	RAMI		
Total	568	95	983	113		
Pneumonia	116	87	162	108		
CVA	-	-	86	107		
Septicaemia	30	103	85	111		
Aspiration pneumonia	19	106	36	132		
COPD	-	-	35	106		
MI	34	122	-	-		
CCF	30	76	27	97		
Acute renal failure	-	-	32	123		
Cardiac arrest	27	115	-	-		
Urine infection	26	135	-	-		
Acute bronchitis	-	-	26	140		
Other CTDx	-	-	25	400		
#NOF	-	-	25	98		
Pleurisy	17	181	-	-		

Comparison of total deaths and RAMI for top 10 diagnoses for each site (Apr 17–Mar 18)

8.3 Those areas with highest RAMI are included within the Quality Plan (sepsis, MI, CVA, hip fracture) while other areas that also deserve looking at are included here. The differences in outcome between sites for the same diagnosis also merits further analysis (e.g. pneumonia).

Analy	vsis of		of death	differences	(tor	ר א) for	weekend		vehy	using	сни	and	RΔΜΙ	data
Allaly	ysis Ui	cause	ueath	unierences	linh	ן כי נ	, 101	weekenu	v weer	luay	usilig	SHIVII	anu	NAIVII	uala

Cause	Weekend	Weekend peer	Weekday	Weekday peer
SHMI	124	104	104	95
MI (% mortality)	6.6%	3.6%	3.1%	3.1%
Stroke (% mortality)	15.8%	13.4%	15%	12.2%
Hip fracture (% mortality)	10.2%	5.2%	6.2%	5.0%
Το	p 3 causes death v	weekend v weekda	ay (RAMI data)	
Pneumonia (RAMI)	113		112	
Hip fracture (RAMI)	199		-	
CVA (RAMI)	122		118	
Aspiration (RAMI)	-		135	

8.4 This data illustrates that there is no difference in weekday/weekend mortality in pneumonia but hip fracture, stroke and MI appear to have mortality rate after weekend admission

Gender and age influences

8.5 Previous data has shown no difference in age of deceased pts with weekend v weekday admission (75 years) or gender (50:50) and stable admission ratio of patients for City/Sandwell through weekend/weekday (37% to City for both time periods)

Effect of mortality reduction from actual to expected on SHMI

8.6 By looking at individual diagnoses as well as grouping together infection deaths we can see the effect of a reduction in excess deaths to expected deaths on SHMI

Diagnosis	Actual	expected	excess	Effect on SHMI
Trust total	2137	1898	238	113
Aspiration	65	66	-1	
Influenza	22	10	12	
GI infection	19	17	2	
Pneumonia	369	322	47	
Sepsis	102	95	7	
Urine infection	75	63	12	
Total 'sepsis'	652	573	79	108
CVA	109	97	12	
MI	47	41	6	
Cardiac arrest	24	19	5	
Fracture NOF	37	26	11	
Total (Quality plan)			34	106.6
Pleurisy	40	28	12	
Joint disorders	19	10	9	
Other CT disease	33	14	21	
CCF	70	95	-25	

8.7 By focus on sepsis and reduction in deaths from actual to expected there should be a fall in SHMI of 5 points. Other improvements in areas in the quality plan will result in smaller improvement (to 106.6), while other areas require exploring (joint and connective tissue disorders).

Conclusion

8.8 The data here supports the focus for the quality plan with a site specific focus needed for some disease groups and an interrogation of the patient pathway for weekend admissions (Sunday particularly) for other groups. The effect of improvement in outcomes can be seen here and can be taken in conjunction with the plans for changes in coding and palliative care recording.

9. Progress in the Quality Plan

9.1 The above data continues to support the importance of the areas already identified in the Quality Plan as appropriate for improving patient outcomes. There is a focus on sepsis and VTE, while developing smaller projects and Group involvement in these projects (appendix 4). Invites for medical and nursing staff and structure for improvement projects are nearing completion, while baseline data collection progresses on all in patient wards for the sepsis pathway triggers.

9.2 The aim is that by December the plan will be well under way with a focus on sepsis and VTE. Progress will be made in the disease specific areas of MI, CVA and fracture femur also. These areas will form the discussion with the Groups in the Private Board meeting.

10. Medical examiner and Learning from Death progress

10.1 As well as improving the process of data collection and implementing the quality plan around identified mortality, the role of the medical examiner as part of the LfD programme is important. This allows real time identification of cases where issues in care are identified, improvements in death certification completion and links with the coroner and importantly family are made. Progress in the role of the ME at Sandwell, the proposed reporting structure and how learning from the case reviews can be disseminated is shown here. Recruitment of MEs is to be commenced again now there is greater understanding of the role but long term funding proposals from NHSE and place of employment of MEs is unclear. This shown in **appendix 5**

11. Conclusion

11.1 The project on amenable mortality has progressed to provide a better understanding of the influences on mortality data and how we can influence that. This will lead to some improvement in mortality data but focus is still needed d on some clinical areas and in particular some time and place based management processes. These will form part of the quality plan and will progress over the next 3 months so that a change in management of these conditions is noted, in both medical and nursing staff actions. The developing role of the ME will provide additional learning opportunities for junior staff and teams over patient's management. This work will also be in place across both sites by December.

	Mortality Report - Overview																			
									2017	/2018							2	018/201	19	
All Specialties		15/1	5 16/17	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug
Internal Data:										1						1			1	
	Trust	1,57	7 1,485	105	113	129	142	109	109	133	119	169	178	142	143	120	123	127		
Hospital Deaths (internal data)	City	654	652	39	45	55	68	34	36	45	42	63	66	45	58	42	50	52		
	Sandwell	923	833	66	68	74	74	75	73	88	77	106	112	97	85	78	73	75		
Crude Mortality Rate	Month			1.20	1.15	1.35	1.51	1.11	1.12	1.34	1.18	1.83	1.77	1.63	1.40	1.37	1.36	1.42		
(Deaths / Spells (%))	12-month cumulative	1.36	1.30	1.28	3 1.27	1.28	1.30	1.30	1.32	1.33	1.32	1.34	1.34	1.35	1.38	1.39	1.41	1.42		
	· · · · · ·						1	1	1		1				1		1	1	1	
	Trust			97	99	85	99	91	104	114	96	125	120	113	103	94				
RAMI (Month)	City			60	78	65	99	64	83	102	82	108	113	100	103	90				
	Sandwell			129	118	102	99	110	119	121	106	138	125	121	103	95				
	Trust	103	101	99	100	98	97	108	109	109	108	109	108	108	109	106				
RAMI (12 Month Cumulativo)	City	93	93	90	90	86	85	100	99	99	100	98	98	98	98	96				
	Sandwell	110	108	107	108	108	107	114	116	117	115	117	116	114	117	114				
	National HES Peer	87	91	90	89	88	87	90	90	90	89	89	88	88	88	88				
SHMI (12-Month Cumulative)	Trust	102.	0 101.0	100.	0 101.9	101.8	102.6	105.5	106.0	108.0	110.0	110.0	111.0							
HSMR (12-Month Cumulative)	Trust	103.	2 107.5	107.	5 109.2	109.8	112.0	112.5	115.0	118.5	118.8	122.0	124.0	123.0	117.0					
			Mo	rtalitv	Rep	ort	- W	eek	dav	/We	eke	end								
RAML Weekend /	1								201	7/18								2018/19)	
Weekday - All Diagnoses (by month)				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Weekend	Trust			117	99	81	89	111	171	133	100	138	128	135	102	103				
Weekday	Trust			91	100	86	102	86	83	108	95	121	118	106	103	90				
		1																		
Weekend Weekday	City			74	80	52 75	90	77 61	119 71	97 103	69 86	116	114	105 99	73 115	116 82				
Weekday	Oity			00	00	10	100	01	11	100	00	100	110	00	110	02				
Weekend	Sandwell			161	123	1	89	135	208	153	122	152	137	148	119	97				
Weekday	Sandwell			121	116	104	102	104	90	110	102	133	121	111	96	94				
RAML-Weekend / Weekday-	1								201	7/18								2018/19	9	
All Diagnoses (by 12-month cumulative period)		15/1	6 16/17	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug
Weekend	Trust	99	109	109	109	106	101	124	128_	130_	130	128_	126_	124_	124_	119				
Weekday	Trust	104	98	96	97	95	95	103	103	103	102	103	103	102	104	102				
Weekend	City	101	102	100	102	94	103	110	109	108	110	108	107	106	103	98				
теекаау	City	91	90	87	109	-110	83	-112	- 115	95	96	95	95	96	- 117	96				
Weekend				115	117	117	440	100	1.10		140	1.10	100	407	400	100				
	Sandwell	97	114	115	117	117	113	136	143	145	142	142	139	137	139	133				

	RAMI - Risk Adjusted Mortality Index	HSMR - Hospital Standardised Mortality	SHMI - Summary Hospital Level		
		Ratio	Mortality Index	In Hospital SHMI	
No exclusions – all inpatients and deaths are included. Includes occupied bed days as a currency in addition to the number of spells, to take account of length of stay for chronic conditions. Measures risks directly from the proportion of patients who died in the reference group. Uses forward step wise modelling so that most important and consistently known factors are considered before anything else. Uses reference data from Wales and Northern Ireland in addition to England. Has a selective approach to comorbidity. Individual secondary diagnoses are scanned for the most significant. Palliative care and other secondary diagnoses which may indicate caus of death rather than condition on admission, are ignored.		Includes more starting variables than the other models. It is the only model to take account of: diagnosis sub- group; patient deprivation (Carstairs method); whether the patient received a palliative care code during their stay; which month of the year the patient was admitted in; how many times during the previous 12 months the patient had been admitted; the patient's source of admission; Covers fewer deaths than the other two models. The method covers 56 major CCS groups out of 260, and consequently includes 83% of all hospital deaths .; Aggregates provider spells into a single super- spell if patients are transferred to other providers before calculating risks. If death occurs, it is counted against each provider	Counts more deaths than other models. Deaths are counted even when they occur up to 30 days after the patient has been discharged from hospital. The official measure. Developed and maintained by the Government for the English NHS. Results published by English NHS trust every quarter counting deaths from the previous 12 months Uses a shorter reference period (3 years) than the other models so based on fewer observations. Coefficients therefore slightly more up-to date.	As per SHMI but with deaths after leaving hospital removed	
Sensitivity to Palliative Care Coding	Low	High	Very low	Very low	
Sensitivity to Complexities and Comorbidities	Medium as selective approach to comorbidity	Medium	Medium	Medium	
Source	Local Data	HES Data	NHS Digital	Local Data	
Time Lag	1 month	2-3 months on top of a full year to work through 12 month rolling changes	6-9 months on top of a full year to work through 12 month rolling changes	1 month	
Volume of Deaths included (% hospital inpatients)	100%	83%	100% + 30 days after discharge	100% (excludes deaths after discharge)	
Deaths and activity excluded		Smaller CCS groups and daycases	Daycases, Regular attenders, Still Births	Daycases, Regular attenders, Still Births	
Currency	Spells and Bed days	Super-spells	Spells	As per SHMI	
Reference data	5 Yrs, England Wales NI and specialists	10 years + England	3 Years England		
Factors included	Age, Admission, Diagnosis (All 260CCS), Sex, Comorbidity (most significant ICD), Length of Stay (chronic conditions)	Age, Admission, Diagnosis (56CCS); Diagnosis sub group, Sex, Cormorbidity (Charleston Index), Deprivation Carstairs, Palliative Care flag, Previous admissions, Year, Month, Admission source	Age, Admission, Diagnosis (All 150 combined CCS), Sex, Comorbidity (Charleston 3 Cat), Year	As per SHMI	
Factors ignored	Palliative Care flag, Deprivation, Month, Year	Length of Stay	Length of Stay, Palliative Care flag, Deprivation, Month	As per SHMI	
Re-based	Annually	Annnually - may now be quarterly	Quarterly	Annually	

Appendix 3

Report Title	Docu	imentation Impact on Mort	ality							
Sponsoring Executive	Dave	Baker, Director of Partners	ships	and Innovation						
Report Author	Mat	hew Maguire, Head of Info	rmat	ion						
Meeting	Exec	utive Team		Date 20 August 2018						
1. Suggested discussion	1. Suggested discussion points [two or three issues you consider the Committee should focus on]									
The process used to calculate the revised baseline:										
The impact on the var	rious	mortality metrics:								
What this now means	for t	he Quality plan;								
Next actions including	g the	proposed forward approach	n and	stakeholder management						
including: sign off by a	- all Tru	ist Consultants, the Medica	l Dire	ector and the Clinical Governance						
and Information Gove	ernan	ce leads (National Guidance	e) alc	ong with the auditors; the CCGs						
and NHS Digital/NHSE	;	·	-							
Alignment to 2020 Vi	ision	[indicate with an 'X' which Plan this _[paper .	supports]						
Safety Plan		Public Health Plan		People Plan & Education Plan						
Quality Plan	Υ	Research and Development	:	Estates Plan						
Financial Plan	Υ	Digital Plan		Other [specify in the paper]						
1. Previous consideration	on [wł	ere has this paper been previously d	iscusse	ed?]						
None										
2. Recommendation(s)										
The Committee is asked t	0:									
a. Acknowledge and ma	ke a	decision as to whether char	iges	will be made: 1) From an ongoing						
perspective; 2) Retro	spect	ively to the beginning of 20	18/1	9;						
Agree to the changes	bein	g made from a retrospective	e and	a forward perspective						
b. Agree how the Medic	al Dir	ector will agree sign off wit	h the	e whole of the Consultant body in						
advance of submissio	n									
c. Agree how each of th	e key	stakeholders including the	CCG	will be communicated with						
3. Impact [indicate with an '	X' whic	h governance initiatives this matter i	relates	s to and where shown elaborate]						
Trust Risk Register		Risk Number(s):								
Board Assurance Framework Risk Number(s):										
Equality Impact Assessment Is this required? Y N X If 'Y' date completed										
Quality Impact Assessme	nt	Is this required? Y	I X	If 'Y' date completed						

Effect of process of data recording on mortality indices (depth of coding and palliative care).

Context and Executive Summary

In 2017/18 the Trust reported 1587 spells for patients that died. 386 had specialist palliative care recorded as part of the last episode of care when the patient died. Whilst the number of deaths is accurate the number receiving specialist palliative care and the number of complexities and comorbidities is understated.

We have been able to prove that the number of patients receiving specialist palliative care during their last episode during 2017/18 was 77 (21%) higher. We have also been able to demonstrate that we would need to generate over 100,000 more codes to truly capture the volume of complexities and comorbidities which our patients have. For the patients that died we have calculated that on average they were 4 complexities/comorbidities missing from the documentation and therefore ultimately the coding.

The combination of the Trust a) having high mortality indicators; b) launching its quality plan and c) having known issues around documentation which ultimately impacts coding; meant that it was necessary to establish a more accurate baseline.

Working with CHKS (a specialist healthcare analytics firm) we have been able to plot the impact of the changes around: palliative care; and complexities and comorbidities on the Risk Adjusted Mortality Index and the In Hospital SHMI. We cannot plot the impact on the HSMR or the published SHMI as adjustments will take over a year to take effect due to the way in which they are processed by NHS Digital.

Baseline Position

Mortality comparisons

		Jan 17 - Dec 17	1		Apr 17 - Ma	r 18	June 17 - May 18			
Indicator	Trust	National Peer	Rank (out of 134)	Trust	National Peer	Rank (out of 134)	Trust	National Peer	Rank (out of 134)	
RAMI	107.19	88.65	8th	106.46	88.05	10th	106.28	87.38	9th	
HSMR	113.39	98.76	12th	118.45	99.96	10th	123.3	98.93	4th	
SHMI	112.59	100	13th							
In-Hospital SHMI	74.8	67.28	15th	75.59	66.88	11th	76.58	66.31	8th	

<u>Notes</u>

Data covered to latest HSMR period (May 2018)

SHMI published latest data is to December 2017

RAMI and in-hospital SHMI both include resubmitted local data with additional palliative care and comorbidity coding (HSMR does not include this) Potential impact of coding changes on HSMR of fall of 5 points to move April 17 to March 18 position to 113.5 (18th)

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The impact of better documentation and therefore coding

The impact on the RAMI and In Hospital SHMI is shown in the table below and links to the Apr 17 – Mar 18 comparisons on the table above.

	Before changes	After palliative care coding	After comorbity coding	Change	After additional coding	Overall Change
RAMI	108.87	106.88	106.58	-2.29	106.46	-2.41
In-hospital SHMI	78.13	77.85	76.42	-1.71	75.59	-2.54

This is further detailed on the dashboard below:

Description	Site Numerator	Site Denominator	Apr 17 - Mar 18	Apr 16 - Mar 17	Change	Peer Value
Risk adjusted mortality index 2017	1578	1482	106.46	113	-5.792%	88.05
RXK01 - Sandwell General Hospital	983	865	113.68	114.45	-0.6746%	
RXK02 - City Hospital	568	595	95.39	113.28	-15.785%	
RXK03 - Birmingham Midland Eye Centre (bmec)	1	1.99	50.3	80.04	-37.15%	
RXK27 - Leasowes Intermediate Care Centre	26	10.8	241.8	-	-%	
In-Hospital SHMI 2017	1578	2088	75.59	72.99	3.569%	66.88
RXK01 - Sandwell General Hospital	983	1214	80.98	72.97	10.981%	
RXK02 - City Hospital	568	853	66.57	73.66	-9.622%	
RXK03 - Birmingham Midland Eye Centre (bmec)	1	2.25	44.45	59	-24.652%	
RXK27 - Leasowes Intermediate Care Centre	26	12.1	215.37	-	-%	
Mortality Rate	1578	111571	1.4143%	1.3085%	8.089%	1.2779%
RXK01 - Sandwell General Hospital	983	41233	2.3840%	2.0209%	17.968%	2.3526%
RXK02 - City Hospital	568	47369	1.1991%	1.2867%	-6.807%	1.1797%
RXK03 - Birmingham Midland Eye Centre (bmec)	1	7846	0.012745%	0.026522%	-51.94%	0.012745%
RXK27 - Leasowes Intermediate Care Centre	26	109	23.853%	-	-%	23.853%

The impact of the changes are that:

- The palliative care coding had the larger effect on RAMI (The new RAMI was specifically designed to be less susceptible to changes in coding, so the smaller impact of the increase in coding is probably unsurprising); whereas
- the comorbidity coding had the larger effect on in-hospital SHMI.

We have been advised by CHKS that scaling the in-hospital SHMI figure to the published SHMI would equate to a change of ~-3.6 for the complexities and comorbidities adjustment and that it is reasonable to assume that this would be the minimum impact on the HSMR. When added to the palliative care impact on the RAMI this would be estimated to have a combined impact of ~5 points to 113.5 (18th out of 134).

It's also worth noting that excluding 'Leasowes Intermediate Care Centre' reduces the HSMR by 1 point. Whilst it is possible that these changes could have a larger impact on the HSMR it is felt that this provides a reasonable position from which to build upon.

Whilst these adjustments help us to better understand the baseline they do not explain the variation between peer Mortality and the Sandwell General Hospital Mortality.

Proposed Actions

The Performance and Insight Department are seeking authorisation from the Medical Director to implement the following actions in response to the SWBH "Quality Plan".

At present the documentation that the clinicians fill in is of insufficient quality - ~10% error rate. External coding audits suggest that our clinical coders performance is very good. The documentation issues negatively impact our mortality statistics and our income recovery.

Ultimately, our solution lies in improving the documentation by clinicians. In the meantime we have set out an approach that:

• Understands a more accurate baseline;

- Acknowledges changes to RAMI and In Hospital SHMI whilst beginning to impact the HSMR and published SHMI;
- Implements a temporary approach to more fully code using historic records and an algorithm developed by our information and coding team;
- Begins to move our coding team to becoming trainers

These actions are being recommended for implementation as part of a suite of responses to provide the most accurate data around documentation, coding and mortality.

To support the documentation issue we are trying an alternate approach to recruiting and retain more qualified clinical coders and reduce our reliance on agency clinical coders, so that our clinical coders can change the focus on training clinicians on what they are not documenting.

Proposed Suite of Changes to be agreed by the Medical Director

- We will automate the specialist palliative care coding by adding the code "Z515" onto the patient episode record where we can see that they have been seen by a specialist palliative care clinician;
- We will automate the palliative care coding by adding the code "Z518" onto the patient episode record where we can see that they have been seen by a palliative care clinician;
- We will automate missing complexity and comorbidity when the patient has had more than one episode of a chronic condition in the last 18 months. E.g. the patient had more than 1 episode of hypertension in the last 18 months and/or the patient had more than 1 episode of diabetes in the last 18 months. (the full list is embedded within this document further down).
- We will use the missing complexity and comorbidity coding as a training programme back into the clinical groups/directorates/specialties.
- We will use any missing coding as a warning (flag rather than automate) when coding so that these can be highlighted back to the clinician. E.g. Patient had1 episode of cancer in the last 18 months or the patient had 1 episode of Hypertension in the last 18 months.
- We will recruit new trainee clinical coders and embark on a programme to train up and retain these new staff.
- After the training programme is over we will implement a programme of clinical group business partnering where each clinical group will have direct access to a specified senior clinical coder.

Detail

Palliative Care

- As an interim solution the Trust is allowing the coding of Specialist Palliative Care by linking to SystemOne where the Specialist Palliative Care team record their contacts.
- The increase in Palliative Care coding should positively affect our HSMR score if HES accept the new coding.
- New processes have been implemented in the Palliative Care team to make sure that they code each contact correctly.
- Our nationally returned data has been amended and the 2017/2018 data has been resubmitted to the Secondary User Service (SUS).

- Our data has been made available to CHKS Ltd and they have calculated a new SHMI and RAMI score for the Trust.
- If Health Episode Statistics (HES) do not accept our data for 2017/18 from SUS then it will take 12 months for this recalculation to work its way through into our HSMR score from HES.
- We also recommend that we do the same for Palliative Care coding as Specialist Palliative Care ("Z515") and Palliative Care ("Z518") are mutually exclusive.

Complexities and Comorbidities

- As an interim solution the Trust is proposing to allow automated coding of complexities and comorbidities that have not been identified by the consultant in the episodic folder.
- Clinical coders will use warnings reports prior to clinical coding.
- New processes will be implemented to help train the clinicians so that this automated coding is not required in the future.
- Once authorisation is received we will generate the missing codes for 2017/18 and April to June 2018 and resubmit to SUS.
- We have run a test version of the data and made this data available to CHKS Ltd who have calculated a new In Hospital SHMI and RAMI score for the Trust.

Stakeholder Management

- It is understood that internal / external auditors may not accept that automated coding is acceptable even with the local coding policy changes documented and so there is a risk we may score poorly with our Information Governance External Audit.
- We will need to inform our local CCG as Specialist Palliative Care is a Payment by Results (PbR) payable item and this will increase. They may challenge us as this is a change in practice.
- We need to be aware that national NHS organisations may challenge us (NHS Digital/NHS England) are our performance will change dramatically overnight.

Annex: Palliative Care Coding 2017-2018 - How we clinically code specialist palliative clinical care

1. Casenote Coding

- The specialist palliative care team document into the inpatient casenotes
- The Clinical Coding Department code from the inpatient casenotes
- 2. System Coding
 - The palliative care team record activities in to SystmOne Palliative Care module.
 - They record details about the contact such as where the activity took place, the type of contact, the date of the contact and most importantly they add the READ code "XalpY"
 - Information department extract these details and match the patient contact date with the patient episode of care but only for contacts of a "face 2 face nature" and ONLY for those where the contact has been recorded as of type "XalpY"
- 3. The number of codes submitted in 2017-2018
 - We submitted 1587 spells for dead patients
 - Of the above number only 368 had specialist palliative care recorded as part of the last episode of care when the patient died.
- 4. What coding did not get submitted
 - The clinical coding team coded everything as normal, so if documentation was in the inpatient casenotes then it was done accordingly
 - Information department extracted the data as per the System Coding definition and included these in the submission
 - The palliative care team did not record the "XalpY" code everytime on all attendances.
 - The palliative care team recorded the "XalpY" code on an Admin Event after seeing the patient rather than against the actual "face to face contact".
- 5. The number of codes we will be submitting for 2017-2018
 - Of the 1587 spells for dead patients an additional 77 spells will now have the last episode with a specialist palliative care code.
 - The total number of spells for dead patients with specialist palliative care coding on the last episode will now be 447 which will be a 21% increase.

Complexities and Comorbidities

1. National Guidance

The NHS England helpdesk classification query resolution site for ICD-10 and OPCS-4, has issued the following guidance on Co-morbidities ICD-10 5th Edition - Query Resolution UID 4323 dated 13th December 2017

The recording of a patient's comorbidities for the current admission is the responsibility of the responsible consultant.

The National Clinical Coding Standards ICD-10 4th Edition states that it is not the responsibility of the clinical coder to analyse information from previous hospital provider spells in order to identify and code relevant conditions.

If a Trust implements a system where the comorbidities recorded by the responsible consultant for a previous spell are to be considered long-term conditions that are always relevant to the patient's current clinical care, then the Trust must have a clinical validation process in place that ensures these comorbidities continue to be current and can be updated or removed if no longer relevant. Such an approach should be documented in local policy and agreed and signed-off by all Trust consultants, along with the Medical Director and the Clinical Governance and Information Governance Leads.

If such a local policy is implemented, it is important that the Trust considers any implications this may have on the accuracy of the coded data when applying this to all patients (particularly as patients can ask to see their coded record). For example a misdiagnosis or error when documenting a diagnosis within the medical record could be replicated on all of the patient's coded consultant episodes going forward.

2. How we will code

- New processes to generate automated coding have been written this includes marking the automated coding so that it is recognised that it has been automatically assigned.
- New processes to generate automated warnings have been written
- New reports to show the clinical coders will the warnings reports prior to clinical coding will need to be built
- The clinical coder will use the above report to make sure that they are proactively looking for things.
- The automated coding generated will be used as a training programme back into the clinical groups/directorates/specialties
- The senior clinical coders will use the above report to feed into the clinical groups, themes of missing complexities and comorbidities
- A report showing the reliance on automated coding will be built so that a trajectory can be set showing the impact of the training programme back into the clinical groups.

3. **Opportunity**

On the basis of 2017/2018 we ran a sample through of the proposed complexities and comorbidities and this generated an additional 100,000+ codes. As these codes were added into an additional table and not back directly into the clinical coding table we have not seen the compound effect of this.

List of complexities and comorbidities to code:



Clinical Coding Department

1. History

- We have tried to recruit 2 vacancies on 3 occasions in the last 2 years to no avail.
- We have obtained authorisation to pay 15% recruitment and retention premium
- We advertised the vacancies again and had no suitable applicants.
- We are having difficulty recruiting at the same levels of pay as other trusts in our neighbourhood
- We will now recruit two/three trainee clinical coders
- We will use the warning reports of potential missing clinical codes.

2. Recruitment

• Recruit 2 trainee clinical coders and start them on their 12 month initial training period

3. Training

- Once the trainees have been with SWBH for 12 months, we can start the clinical groups business partners.
- We will implement a training programme for the clinicians using the automated coding as a guide to what they are not documenting correctly in the casenotes.

4. Retention

- We will start to pay our current ACC qualified staff 15% Recruitment and Retention Payment. We are looking at how we can do this in tandem with recruiting the apprentices and removing the agency coders so that we remain in budget;
- Paying R&R will hopefully keep our current ACC qualified staff and incentivise any staff we have to become ACC qualified.

Appendix 4

Quality Plan – Change in Approach to Project Deployment

Following a pause in the deployment of the Quality Plan, a refocusing of effort is underway. Building on feedback from workshop sessions at the Trust Leadership Conference in May 2017, the approach to the deployment of the Quality Plan is described below.

Project Approach

Following the successful deployment of the Safety Plan, a similar approach will be used in the deployment of the Quality Plan, that is, a project approach that encompasses:

- Small scale pilots with a "top-down-meets-bottom-up" alignment of priorities and tasks
- Rapid PDSA
- Data driven
- Visual Management in clinical areas
- Fast (good) decisions
- > Effective communication and engagement with staff and patients
- Exec oversight in PMO

Principal focus areas

Six initial focus areas have been identified

- > Sepsis
- Venous Thromboembolism (VTE)
- > Stroke
- Acute myocardial infarction
- Fractured neck of femur
- High risk abdominal surgery

These will colloquially be known as Bugs, Clots, Heads, Hearts, Hips and Tummies.

Initial Focus

Sepsis and VTE will be the first projects launched. They will follow a similar deployment path and will stay true to the Trust's Improvement Methodology, characterised by rapid PDSA and the utilisation of Lean tools.

- > Undertake baseline data analysis on current performance
- > Engage teams from different disciplines to target improvements indicated by data analysis
- Set initial targets for improvement
- > Develop robust data collection and reporting tools to verify performance
- Imbed the new processes as 'standard work' in wards and clinical areas
- Explore improvements specific to pathways and conditions associated with sepsis/VTE and so reduce the incidence of these

Quality plan – Group involvement for project launch – August 2018

Initial approach is to undertake QIP in the Big 6, with initial focus on VTE and sepsis as projects that span all groups. Specialty specific projects for hip fracture, stroke, MI management and high risk abdominal surgery should have already been considered by those specialties. Little rocks are smaller specialty specific programmes that should be developed. Would be good for ophthalmology to consider how to address the 20% risk reduction in visual loss across the subspecialist areas if not done so already.

Plans for Sepsis/VTE: Large scale QI Project with recruitment of junior medical, nursing and service manager to each team. Will need more than one team to be created for each Group

			Quality improvement Project				
Group	Location	Site	Sepsis	VTE team	Specific		
			team				
Medicine	A+E/AMU	Sandwell	Y	Y	?		
	A+E/AMU	City	Y	Y	?		
	In patient wards	Sandwell	Y	Y	CVA		
	In patient wards	City	Y	Y	MI		
WCH	Paediatric wards	Sandwell	Y	Y	?		
	Maternity	City	Y	Y	Neonatal		
Surgery	General	Sandwell	Y	Y	Consent		
	Specialist +	City	Y	Y	Visual		
	ophthalmology				loss		
	Т&О	Sandwell	Y	Y	#NOF		
PCCT	Community	Rowley/City	Y	Y	?		
Imaging					?		
Pathology					?		

- Recruitment of junior medical staff from central process via PG education team with
 - o area of interest expressed (Sepsis/VTE)
 - o current specialty
 - o summary of reason for applying
- Recruitment of nursing and service managers to come from within groups
- Improvement team to provide training in undertaking QI projects
- Project focus for VTE/Sepsis in 3 broad sections
 - o Risks and prevention
 - Early identification and modifiable risk factors
 - Acute assessment and management
 - Barriers and solutions to delayed management
 - o Outcomes
 - Sepsis- site, organism, fluids, AKI, supportive therapy
 - HAVTE site, extent, supportive therapy

- Review of info on discharge to patients to reduce risk of sepsis/VTE
- Project leads to be confirmed
- Cross specialty teams to meet (one representative per Group) to
 - \circ $\,$ Choose leads for each of the above 3 sections for sepsis and VTE $\,$
 - o Review aims
 - o Identify hurdles
 - Review and develop data collection tools
 - Consider training approach to improve clinical care across specialties/disciplines
 - Plan to identify current information given to patients/what should be given
 - Time line recruitment by end of August, QI training early September, project initiation mid September, monthly reports to project steering groups.

	Sepsis Aims	HAVTE Aims
1	to improve the screening for sepsis to 100%	Risk factors identified on
		admission.
2	the delivery of antibiotics within 1 hr for patients	Completion of VTE assessment
	diagnosed with sepsis 100%	tool 100%
3	the Sepsis Action Tool and Sepsis 6 Bundle to be	
	consistently used in patients suspected of sepsis	
	100%	
4	Antibiotics Administered for the treatment of	Anticoagulation prescribed
	sepsis should Follow the Trust Guidelines or have a	according to Trust guidelines
	documented discussion with microbiology for	100%
	planned deviation 100%	
5	Patients with a defined pathway for managing with	
	a Definitive Treatment should have that pathway	
	followed 100%	
6	IV Antibiotic Prescriptions will be reviewed within	
	72 Hours 100%	
7	to maintain the downward trend in deaths where	To have a downward trend in
	Sepsis was a Causal or Contributory Factor	HAVTE
8	we will use the introduction of the Unity EPR to	Patients with HAVTE identified
	collect data on outcomes such as death, admission	and investigated for avoidable
	to ICU or development of AKI for patients	causal factors
	diagnosed with sepsis at or during admission to	
	hospital	

The Groups are asked to please consider:

- What are your current approaches and innovations to improve sepsis management and reduce risk of HAVTE
 - How will that feed into the proposed projects
- Consider the proposed aims and approach to sepsis and VTE QI project (review attached PODs)

- What are the limitations of current assessment tools (sepsis and VTE)
- Approach you will take to identify staff to be involved and leads for the group for each topic
- Thoughts on information that can inform the 3 areas to be focused on for Sepsis and VTE
 - Risks and prevention
 - Acute assessment and management
 - Outcomes
- Report on your approach and development of smaller specialty specific projects under the umbrella of the Quality Plan
 - already defined MI, CVA, #NOF, high risk abdominal surgery, visual loss, neonatal safety plan
 - How are these progressing?
 - o any others identified through specialty QIHDs that you can report on?

Appendix 5

Medical examiner progress September 2018

8.1 Background:

The key aims of this service reflect March 2017 Learning From Deaths Guidance and SWBH Learning from Deaths Programme

- Improve accuracy of MCCD
- Support and educate medical staff in the certification of deaths in hospital
- Oversee and facilitate referral to and communication with Coroners
- Talk to and engage relatives around the time of patients death to support, gain feedback and ask contribution to learning from deaths
- Review care and Identify cases for further committee and specialist review
- Identify SUI and incidents in relation to a patient's death
- Complete and support medical staff in the completion of cremation documentation

New guidance and detailed recommendations are due on the role out of medical examiners nationally planned for April 2017 onwards with £20 million for interim set up and £15 million for running ME system initially. Suggestions made that Medical examiners will not be employed by NHS providers where they are based, but this has not been confirmed.

8.2 SWBH progress

- 8 Medical examiners are providing 7 PAs to the ME service since April 2018.
- The priority has been to cover CARES office at Sandwell 3-5 days per week have a ME working in CARES office Sandwell
- >269 cases have been managed by MEs
- All cremation forms at Sandwell have been completed by MEs since start date.
- 80 referred to coroner
- Prior to June few relatives agreed to be contacted, change of approach 56 families have had conversations now.
 - Improve accuracy of MCCD
 - o 74 MCCD changed prior to submission. Since June more pre MCCD discussion
 - A repeat of 2017 MCCD audit to be performed to assess intervention
 - Support and educate medical staff in the certification of deaths in hospital
 - Frequent advice, teaching and support needed to junior staff about MCCD
 - ME team to suggest/provide induction/teaching session/e learning for junior medical staff

- Oversee and facilitate referral to and communication with Coroners
 - More and appropriate cases referred to coroner over time, referral agreed and no inquest is frequent outcome.
 - Planned coroner Sandwell & Birmingham meeting, sharing and feedback and educational session for MEs and medical staff
- Talk to and engage relatives around the time of patients death to support, gain feedback and ask contribution to learning from deaths
 - Offer of conversation changed to do agree to conversation has improved relative engagement
 - 21 families praised the staff providing care. Fed back to wards
 - o Data collection/audit of outcome, compliments and complaints required
 - Praise and complaint themes to be monitored
- Review care and Identify cases for further committee and specialist review
 - All cases reviewed but MRS proforma not used currently.
 - o From September 2018 all cases to include ME completion of MRS proforma.
 - Mandated and referred cases for 2nd stage review by SJR proforma and LfD Committee; process to be established
- Identify SUI and incidents in relation to a patient's death
 - 11 complaints and incidents instigated by ME involvement
- Complete and support medical staff in the completion of cremation documentation
 All SGH cremation forms completed by ME since April 29th

8.3 Output from ME review of cases at Sandwell.

The completion of summary reports from ME data set after case review is under construction but will include the following metrics and further development will be in more detailed analysis by specialty to provide effective feedback.

May/June	No of Deaths	Learning Disability	Family Contact	Declined	Praise	Complaint	2 nd Tier Review	Group review
Total	126	0	44	40	19	6	22	9

8.4 Mortality by Group and specialty

Data from mortality reports shows the following split of deceased patients by Group and specialty area. Further analysis of ME reports will be used to give outcome in more detail by group and specialty. This data is also helpful in identifying numbers of individuals from specialties for training in secondary SJR process.

	April	May	June
Trust	120	123	127
City	42	50	52
Sandwell	78	73	75
General surgery	8	8	7
T+O	4	2	7
Critical Care	1	2	0
Acute medicine	27	27	29
A+E City	6	10	7
A+E Sandwell	14	10	9
Elderly care	29	31	36
Stroke	4	6	3
Cardiology	8	4	10
Gastroenterology	6	14	10
Respiratory	13	11	7

8.5 Medical Examiner Staffing

City Hospital - Since July 2018 we have started half to 1 PA per week ME provision at City Bereavement Office.

Minority of Cremation forms covered here, but plan for further recruitment to ME posts through September will be to support the CARES office at City, where the initial input has been well received.

8.6 Medical Examiners

Recruitment: A second recruitment drive is planned in September and October. This can come from Group and Directorate commitment to Learning from Deaths, primary care and pathology to be approached and details of DHSC NHSE ME guidance awaited. Post retirement ME sessions to be suggested to post retirement fix contract consultant staff.

Medical examiners officers have been considered to support ME service. At this time until we have ME staff to cover every working day and both sites these posts cannot be supported or rolled out. Automated systems and CARES office staff already provide medical examiners officer tasks.

8.7 Mortality Review process

The present MRS proforma will be maintained to allow for initial review of all deaths.

2nd stage reviews are currently undertaken by the Learning from Deaths Committee. It is expected that this will change in New Year when SJR will be used for 2nd tier review by a cohort of Structured Judgemental reviewers who will need to be identified and trained.

Work is still required here to identify cohort of SJR reviewers. There are 2 in house Tier one SJR trainers as well as regional trainers to work with to implement the training programme for SJR reviews.

Groups and directorates will be asked to discuss the provision of:

- Medical examiners 2-3 per group (or as a percentage of deaths/group)
- Specialities to provide 2-3 SJR reviewers: consultant, senior nurse and SpR
- Specialty LfD lead to attend LfD Committee on a regular basis (3 monthly) and when required

8.8 Medical Examiner Performance Monitoring

Data output from mortality reviews will be reported to EQC as part of Learning from Death Committee monthly report and quarterly review to confirm learning and QI project links.

ME excel data collection has been modified after monthly meetings and feedback, development and evolution of role and outcome monitoring suggestion. The existing spreadsheet used by the medical examiners to record information on each death has been reviewed and will be modified to enable the required information to be recorded and extracted efficiently.

8.9 Funding

Income is now established for all Part A and B cremation forms at Sandwell and all part A at City. At City this will be completed when the medical examiner function is fully implemented. As at the end July 2018 we have received £37,300 income (April-July) which is funding the medical examiner costs. We are not yet up to capacity for medical examiners and still need to recruit to ensure full service can be provided at both City and Sandwell. The scope of the medical examiner function is being clarified to confirm numbers required for recruitment. Income will continue to be monitored to ensure the budget remains balanced.

New guidance and detailed recommendations are due on the role out of medical examiners nationally planned for April 2017 onwards with £20 million for interim set up and £15 million for running ME system initially. Medical examiners will not be employed by NHS providers where they are based, but nothing published to date from DHSC and NHS E

8.10 Improve efficiency and outcomes

- Promoting the medical examiner function to all medical staff
 - o support junior doctors who are required to complete Part A of the cremation forms,
 - o allow timely MCCD for families and cremation forms to funeral directors.
 - Consultant colleagues need to be asked to allow appropriate doctors to attend CARES office between 10-1200hrs (families, office and MEs need this to allow efficient working and ensure ME hours are used efficiently).
- The medical examiner function is now collating feedback information from families so we need to capture, report and action on this.
 - Positive named feedback should be fed back to individuals or wards.
- Learning From deaths and QI projects are part of LfD Committee which with appropriate specialty input will link with specialty/directorate.
 - Report to EQC will also do this.
- Dissemination of learning across the trust from mortality reviews will be reviewed.

8.11 Outstanding issues:

- 1) Reporting template to be generated monthly from ME database with death by site, group and specialty to be recorded
- 2) General teaching on completion of MCCD, resuscitation status and coroner referrals to be developed for junior staff
- 3) Learning outcomes from MEs to go via EQC for action required and to be monitored by Group
- 4) Other routes of feedback from ME function to be considered (medical meetings, newsletter, junior doctor teaching
- 5) Clarification of place of employment of MEs needed based on evolving nhs guidance