

Cover page			
Meeting	Trust Board		
Paper Title	Learning from Deaths Report QTR4 2019-20		
Date of meeting	28 May 2020		
Date paper was written	12 May 2020		
Responsible Director	Dr Arne Rose, Medical Director		
Authors	Tracey Lloyd, Patient Safety Advisor and Mortality Lead Samantha Carling, Patient Safety Team Manager		
Executive Summary			
<p>The Trust has well developed systems for reviewing mortality and has published corporate mortality data quarterly as a dashboard since 2017. Thematic analysis of deaths - with focused reviews generating identified areas for improvement - have been completed each quarter, with action plans confirming delivery.</p> <p>For the year 2019/20, the local reporting requirements have changed. This report includes those changes.</p> <p>This report for Quarter 4 is based on available reports, prepared by the Care Groups, and has been triangulated by the author. Systems and processes to triangulate learning from the various quality measures will be further strengthened during 2020/21.</p>			
Previously considered by	<p>Quality &amp; Safety Committee Quality &amp; Safety Committee 20.5.2020: - escalations:</p> <p>Concerns about the process of reviewing, particularly in Unscheduled Care. A backlog from 1.4.2020 onwards due to COVID needs to be caught up with.</p> <p>Suggestions were made to introduce multi-disciplinary death reviews.</p> <p>Suggestions were made to use a nationally agreed standard for death reviews</p>		
The Board is asked to:			
<input type="checkbox"/> Approve	<input type="checkbox"/> Receive	<input checked="" type="checkbox"/> Note	<input type="checkbox"/> Take Assurance
To formally receive and discuss a report and approve its recommendations or a particular course of action	To discuss, in depth, noting the implications for the Board or Trust without formally approving it	For the intelligence of the Board without in-depth discussion required	To assure the Board that effective systems of control are in place

Link to CQC domain:				
<input checked="" type="checkbox"/> Safe	<input type="checkbox"/> Effective	<input type="checkbox"/> Caring	<input type="checkbox"/> Responsive	<input type="checkbox"/> Well-led

Link to strategic objective(s)	<i>Select the strategic objective which this paper supports</i> <ul style="list-style-type: none"> <li><input type="checkbox"/> PATIENT AND FAMILY Listening to and working with our patients and families to improve healthcare</li> <li><input checked="" type="checkbox"/> SAFEST AND KINDEST Our patients and staff will tell us they feel safe and received kind care</li> <li><input type="checkbox"/> HEALTHIEST HALF MILLION Working with our partners to promote 'Healthy Choices' for all our communities</li> <li><input type="checkbox"/> LEADERSHIP Innovative and Inspiration Leadership to deliver our ambitions</li> <li><input type="checkbox"/> OUR PEOPLE Creating a great place to work</li> </ul>
	Link to Board Assurance Framework risk(s) RR 423 If we do not get good levels of staff engagement to get a culture of continuous improvement then staff morale & patient outcomes may not improve

Equality Impact Assessment	<input checked="" type="radio"/> Stage 1 only (no negative impact identified) <input type="radio"/> Stage 2 recommended (negative impact identified and equality impact assessment attached for Board approval)
Freedom of Information Act (2000) status	<input checked="" type="radio"/> This document is for full publication <input type="radio"/> This document includes FOIA exempt information <input type="radio"/> This whole document is exempt under the FOIA
Financial assessment	No

## Main Paper

### Situation

The Trust has well developed systems for reviewing mortality and has published corporate mortality data quarterly, as a dashboard, since 2017. Thematic analysis of deaths, with focused reviews, generating identified areas for improvement, has been completed, with action plans confirming delivery.

### Background

The Reporting Schedule requires that the Learning from Deaths report will be published quarterly and includes:

- Emerging trends and themes following mortality reviews.
- Evidence of embedded learning, triangulated with other quality measures (Serious Incidents, LeDer reviews, complaints).
- An action plan on identified themes of deaths (including LeDeR findings) based on the findings of the review.
- A copy of the Learning from Deaths dashboard, in line with the date of national reporting submission of the dashboard.

### Assessment

- There have been no avoidable deaths reported this quarter
- There have been no mortality outlier alerts identified during this quarter.
- In view of the Covid 19 pandemic a summative thematic review has been included within the paper
- An audit of Serious Incidents and Deaths is being conducted in 2020. In preparing the data, it has been identified that better cross referencing is needed between the outcome of mortality reviews and identification of deaths to the NRLS. This correlation has not been considered by the Trust before except in the case of avoidable deaths.
- A business case has been developed to increase the capacity in the Patient Safety Team to include a dedicated Trust Mortality post. If additional resource is not secured, this will severely limit the ability of the Patient Safety Team to meet current reporting requirements.

### Recommendation

- The exploratory work to improve the completion of mortality casenote reviews in Unscheduled Care Group has identified the need for a Band 4 co-ordinator to support Governance.
- Explore the use of Datix to ensure better co-ordination between incidents, PALS enquiries, complaints and mortality casenote reviews

## Learning from Deaths

January – March 2020

### 1. Avoidable deaths

There have been no CESDI 3 avoidable deaths reported this quarter, and one incident from last quarter graded as CESDI 3 following investigation (see section 2).

There have been 2 other Serious Incidents reported following which the patient died:

Reported date	STEIS reference	Incident description	CESDI score
03/01/2020	2020/128	Fall SAH #Zygoma	2
25/03/2020	2020/5928	Sub-optimal care	TBC

A description of learning from these two SIs will be provided in next quarter's report.

### 2. Learning and CESDI outcomes from last quarter's incidents

#### 2019/22981 Accidental disconnection of dialysis line (CESDI 3)

A connection between the patient's central venous access and dialysis circuit became undone during haemodialysis. The machine detected the drop in pressure and an alarm sounded. The alarm was then re-set allowing the pumps to re-start and the patient to exsanguinate from the disconnected line. This was not immediately detected because the patient did not raise an alarm and the connection was covered in blankets.

Despite an extensive investigation it has not been possible to establish the exact sequence of events. The Coroner and CQC have been kept informed and the patient's Inquest is scheduled for June. Learning is based on the wider issues found during the investigation and a detailed action plan has been developed, and regularly updated. The details of the learning outcomes were shared in Q3's report.

### 3. Deaths where family, carers or staff have raised a concern about the quality of care provision.

- C725/19 – delay in diagnosis – consider all histology, irrespective of hospital where any surgery is carried out.
- C641/19 – potential delay in diagnosis and communication with family – A more proactive approach is taken identifying dying patients and ensuring meetings to discuss end of life care in a timely manner.
- C595/19 – Clinical management – case of atypical presentation of aortic dissection to be used as a training case through cardiology governance.
- C472/19 – Poor end of life care – several improvements outlined, require support from the EOL team, increased training. Monitored through spot checks, exemplar and RaTe
- C449/19 – Discharge planning for end of life patient – monitoring of discharge checklists, share learning through team huddles and briefs
- C300/19 – End of life care and communication with family – staff to ensure open visiting is permitted to EOL patient visitor/s (Covid 19 guidance to be followed)

### Prevention of Future deaths reports (Regulation 28)

The Trust has received no new Prevention of Future Deaths reports for deaths occurring in Q4

#### **4 . LeDeR reviews**

The Coroner has completed the investigation of a young man who died in August after an 8 month stay on ITU. The post mortem cause of death aligns with the extensive report compiled by one of our ITU Consultants. The coroner and family therefore accept that natural causes were the cause of death and a 'Form B' has been issued. The family however have expressed that the care was sub-optimal.

There were 5 deaths reported in Quarter 4.

1 has been internally reviewed and identified as a CESDI 2

Due to workload pressures, both within the Trust, and the external LeDeR team, the LeDeR reviews are being delayed.

No completed external LeDeR reviews have been returned to the Trust this quarter for additional learning. This is being followed up with the Commissioning service.

#### **5 Themes from Speciality Mortality Reviews and incidents.**

##### Surgery

The surgical mortality team have agreed to add to the mortality form; a question asking the reviewer to consider whether the patient could have been managed in a non-hospital environment for palliative care. In response to the current pandemic, there is agreement to add additional questions relating to Covid 19, these include; 'was the patient tested and found to be positive for Covid 19 and secondly a question relating to whether there was a delayed presentation of their surgical condition due to the current pandemic leading to a clinic/surgical delay impacting the outcome.

##### Independent Audit of Serious Incidents and Deaths (Niche)

An Independent audit has been commissioned by the CSU, this information has now been supplied to the auditor and we await the outcome

#### **6 Thematic review**

##### **COVID – 19 summary review**

The first patient to die at SaTH from complications of Covid-19 was on the 15<sup>th</sup> March 2020. This patient remains the youngest patient to date to die at SaTH. She was 41 years old but had a significant underlying illness.

In March there were 17 deaths from complications of known Covid-19 infection. A further 74 in-hospital deaths from April have also been included in this paper to provide more numbers to compare SaTH to the emerging national picture.

##### **Age**

**March** Range 41 to 93 years Median average 75 years

**April** Range 48 to 96 years, Median av 79 years

In a published study of the first UK cohort including 20 deaths\*, the average age was 77 years old.

##### **Gender**

**March**, the ratio of Male to female deaths was 10 Male to 7 Female

**April**, the ratio was 38 Male to 36 Female.

The study cited 60% male to 40% female. Combined, the SaTH percentage is 53% male to 47% female.

However, when the combined months deaths are considered by gender in age bands, the ratio of male to female deaths in the under 65 year age group is 14 to 5.

The incidence of infection is thought to be similar between the genders, eliminating many possible socio-economic factors, but the rate of severity and mortality is thought internationally to be higher in younger men. There is some evidence to suggest that the presence of oestrogen and progesterone in pre-menopausal women may be of benefit due to either a direct effect on the immune response, or indirect effect through protection from underlying heart disease.

	Male	Female	Total
Less than 65	14	5	19
65-74	8	7	15
75-84	12	19	31
Greater than 85	14	12	26

At SATH, the 75 to 84 years age band is where female deaths are higher.

### **Ethnic origin**

The proportion of SaTH in-hospital deaths of patients from Black, Asian and minority ethnic groups (BAME) does not appear to follow the trend of concern raised by the national picture

#### 2011 Census (source Intelligence & Research Team, Shropshire Council)

Shropshire Unitary Authority	White British	95.4%	BAME	4.6%
Telford and Wrekin Unitary Authority	White British	89.5%	BAME	10.5%

Deaths by recorded ethnic origin (source SaTH Patient Administration System)

	Number	Percentage
BAME	3	3.3%
White British	82	90.1%
Not stated	6	6.6%

Although the Census data is now old, the percentage of in-hospital deaths of patients from BAME groups does not currently appear higher than the percentage of the general population of Shropshire, Telford and Wrekin.

### **Post code including Care home admissions.**

- SY postcodes – 42 in hospital deaths from 16 postcodes beginning SY1 - SY22
- TF postcodes - 35 in hospital deaths from 8 post codes beginning TF1 - TF13
- WV postcodes –14 in hospital deaths from 3 postcodes beginning WV7 - WV16

There have been in-hospital deaths amongst patients living throughout the geographical county of Shropshire. There are no statistical clusters, but locations with a higher number of Care Homes, have a slightly higher number of deaths.

### **Care homes**

In March only 2 out of the 17 deaths occurred in patients admitted from Care Homes. By April the figure had increased to 48 out of 74 deaths – 64%. The patients were mainly admitted to PRH

predominantly from a variety of Residential Homes who do not have nursing support. The highest number of in-hospital deaths from an individual Care Home was 3 residents.

There have been no in-hospital deaths of patients with Learning Disabilities and suspected covid-19.

### **Pre – existing chronic conditions**

The UK study\* identified a higher percentage of chronic diseases in the deaths of patients following covid-19 infection.

- All cardiovascular disease 90% including Hypertension 55%
- Diabetes Mellitus 65%
- Renal Disease 30%
- All Respiratory disease 30%
- Malignancy 15%

Due to the timing of this report, an in-depth review has not yet been completed on all deaths from patients with covid 19, but from the death certificates of those patients reported to have died from covid 19, the pre-existing conditions listed in part II as contributing to the death are:-

- All cardiovascular disease 46.1%
- Diabetes Mellitus 26.4%
- Renal disease 17.6%
- All Respiratory disease 25.3%
- Malignancy 9.9%

**\*Reference Tomlins J, Hamilton F, Gunning S et al. Clinical features of 95 sequential hospitalised patients with novel coronavirus 2019 disease (covid 19) the first UK cohort. Journal of Infection 2020 April 27.**

### **Excess deaths**

It is also necessary to measure the impact the current measures to manage Covid 19 are having on deaths from other causes. The largest impact is likely to be in the medium to long term due to delays by the public accessing GP, out-patient and diagnostic services, and cannot yet be known.

Excess deaths, from a 5 year average, have been cited as one measure to calculate any increase in all cause deaths.

Within SATH, as a measure of the immediate impact, this could be measured using a crude number of deaths, however between 2015 and 2019, average monthly activity increased by 2,500 spells, so crude numbers alone may be misleading. A comparison of 5 year average mortality rate may be more accurate, as this will also take into account the reduction in elective surgery and day case activity in March and April 2020.

During Quarter 4, 2019-20, the in-hospital number of deaths and crude mortality rate were below the previous 5 year monthly average however, April has shown an increase, which will need further investigation and a more detailed analysis will be presented in the next report. Deaths from Cardiovascular disease, Stroke and Chronic renal disease will be closely monitored for secondary deterioration from a suspected previous covid-19 infection in the community.

	5 year average	2020	Difference
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	2015-2019		
<b>January</b>			
Deaths	168	167	- 1
Spells	12777	14769	+ 1,992
Mortality rate	1.318%	1.131%	- 0.187%
<b>February</b>			
Deaths	155	140	- 15
Spells	12002	13412	+ 1,410
Mortality rate	1.288%	1.044%	- 0.24%
<b>March</b>			
Deaths	163	142	- 21
Spells	13469	12112	- 1,357
Mortality rate	1.21 %	1.17%	- 0.04%
<b>April</b>			
Deaths	148	158	+10
Spells	12719	7555	- 5,164
Mortality rate	1.162%	2.091%	+ 0.929%

### Research and learning from clinical practice

SATH is participating in several national and international COVID trials about intensive care and ward management of patients – this is managed by Dr Capps and the research team under the direction of the Medical Director.



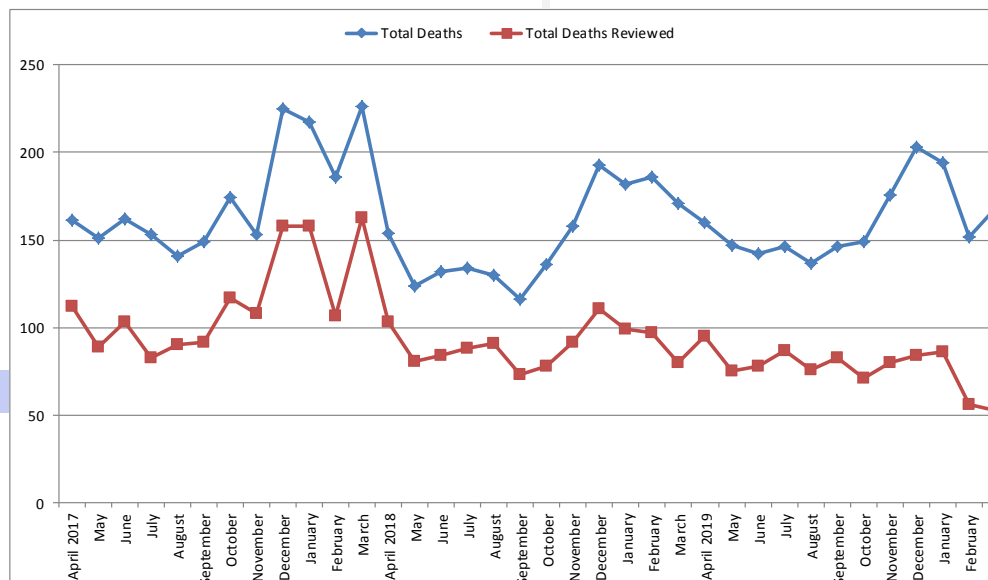
# SATH Mortality Case-note Review Dashboard Quarter 3 2019-20

## Summary of total number of deaths and total number of cases reviewed under the Trust Casenote Review Methodology



### Total Number of Deaths, Deaths Reviewed and Deaths Deemed Avoidable (does not include patients with identified learning disabilities)

Total Number of Deaths in Scope		Total Deaths Reviewed		Total number of deaths considered to have been potentially avoidable (CESDI 3)	
This Month	Last Month	This Month	Last Month	This Month	Last Month
168	152	53	56	0	0
This Quarter (QTD)	Last Quarter	This Quarter (QTD)	Last Quarter	This Quarter (QTD)	Last Quarter
514	528	195	235	0	1
This Year (YTD)	Last Year	This Year (YTD)	Last Year	This Year (YTD)	Last Year
1920	1816	924	1077	4	5



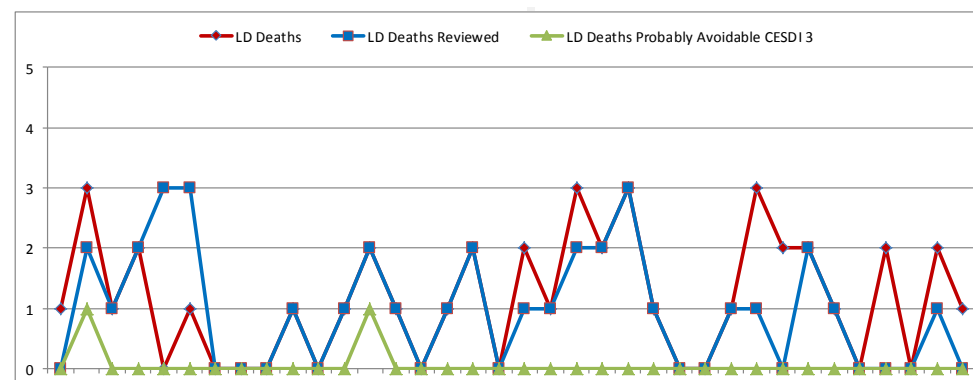
### Total Deaths Reviewed by Methodology Score

CESDI 0		CESDI 1		CESDI 2	
No sub optimal care		Some sub optimal care which did not affect the patient's outcome		Some sub optimal care which might have affected the patient's outcome	
This Month	48	This Month	3	This Month	0
This Quarter (QTD)	173	This Quarter (QTD)	18	This Quarter (QTD)	2
This Year (YTD)	798	This Year (YTD)	104	This Year (YTD)	11






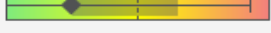

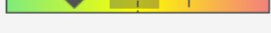

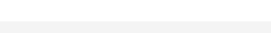
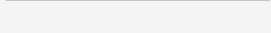



## Summary of total number of deaths of patients with a Learning Disability and, the total number reviewed under the LeDeR and Trust methodology

### Total Number of Deaths, Deaths Reviewed and Deaths Deemed Avoidable for patients with identified learning disabilities

Total Number of Deaths in scope		Total Deaths Reviewed by Trust or Reported Through the LeDeR Methodology		Total Number of deaths considered to have been potentially avoidable	
This Month	Last Month	This Month	Last Month	This Month	Last Month
1	2	1	0	0	0
This Quarter (QTD)	Last Quarter	This Quarter (QTD)	Last Quarter	This Quarter (QTD)	Last Quarter
3	3	1	1	0	0
This Year (YTD)	Last Year	This Year (YTD)	Last Year	This Year (YTD)	Last Year
14	18	14	18	0	1



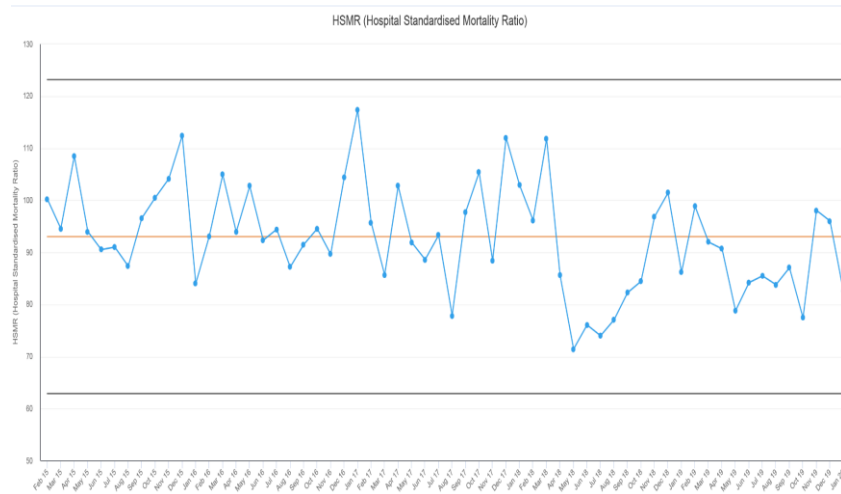
## Mortality Metrics CHKS February 2019 – January 2020

Description	Local Numerator	Local Denominator	Feb 19 - Jan 20	Feb 18 - Jan 19	Peer Value	Performance	Alert
HSMR (Hospital Standardised Mortality Ratio)	1492	1693	88.14	87.51	89.22		-
SHMI (Summary Hospital-Level Mortality Index) +	2253	2179	103.40	99.29	100.64		-
In-Hospital SHMI (Summary Hospital-Level Mortality Index) 2018	1725	2878	59.95	59.11	65.26		-
Mortality Rate	1725	173450	0.9945%	1.0074%	1.1560%		-
RAMI (Risk adjusted mortality index) 2018	1725	1945	88.68	85.91	88.18		-
Rate of Mortality in hospital within 30 days of elective surgery	2	3218	0.06215%	0%	0.12529%		-
Rate of Mortality in hospital within 30 days of Non elective surgery	87	8011	1.0860%	1.0392%	1.3556%		-
% Mortality in hospital within 30 days of emergency admission with a hip fracture (age 65 and over)	6	243	2.4691%	4.255%	4.757%		-
Rates of mortality in hospital within 30 days of emergency admission with a stroke	76	908	8.370%	12.078%	11.890%		-
% Mortality in hospital within 30 days of emergency admission with a heart attack (MI) aged 35 to 74	4	334	1.1976%	0.6515%	3.1505%		-
Deaths in Low Mortality CCS Groups	21	12534	0.16754%	0.12618%	0.10711%		Amber
Post operative pulmonary embolism or deep vein thrombosis	7	26024	0.026898%	0.019444%	0.03770%		-
% Still Births	17	4208	0.4040%	0.4850%	0.3879%		-
Mortality Rate - Admitted via A&E	1321	35161	3.757%	3.993%	3.465%		-

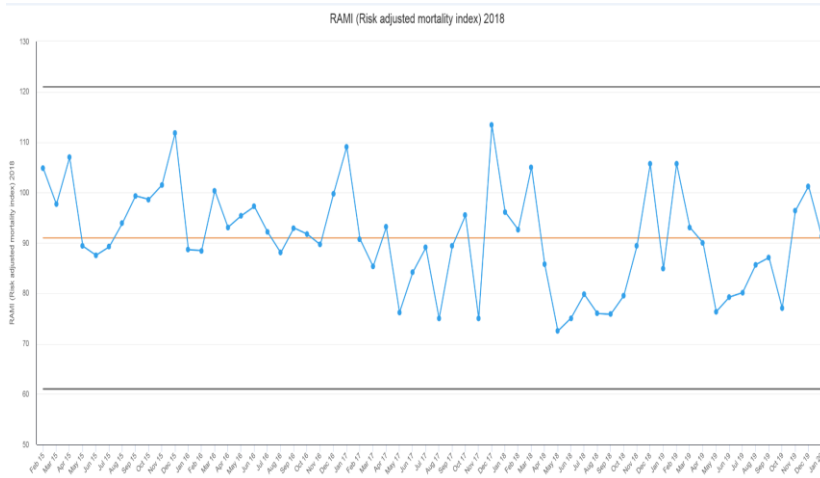
## 5 year Mortality Metrics CHKS February 2015 – January 2020

### SPC run chart

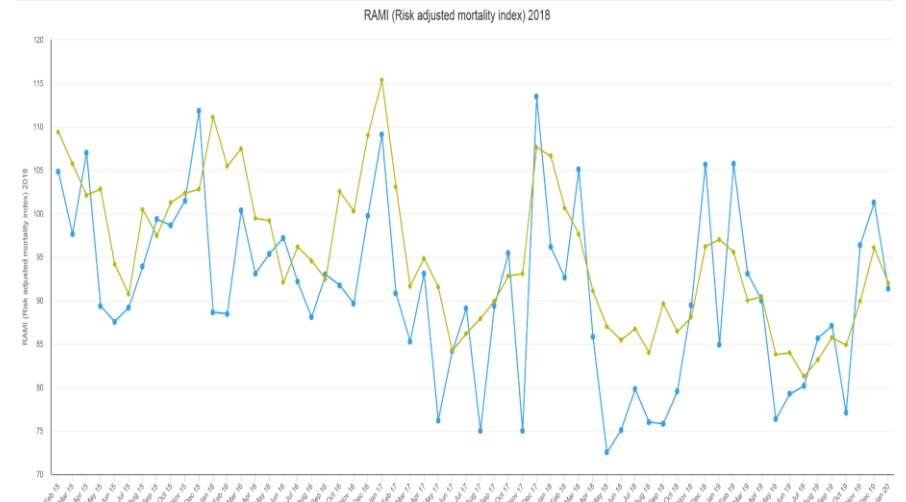
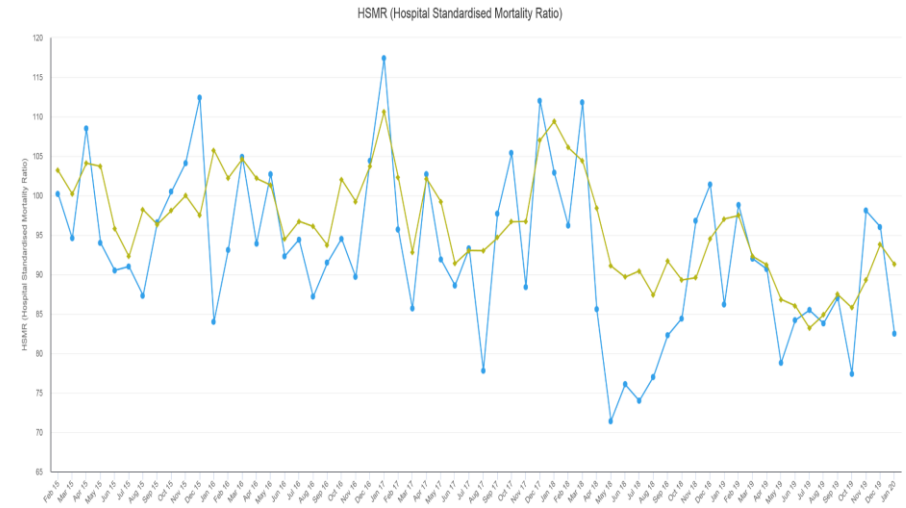
#### HSMR



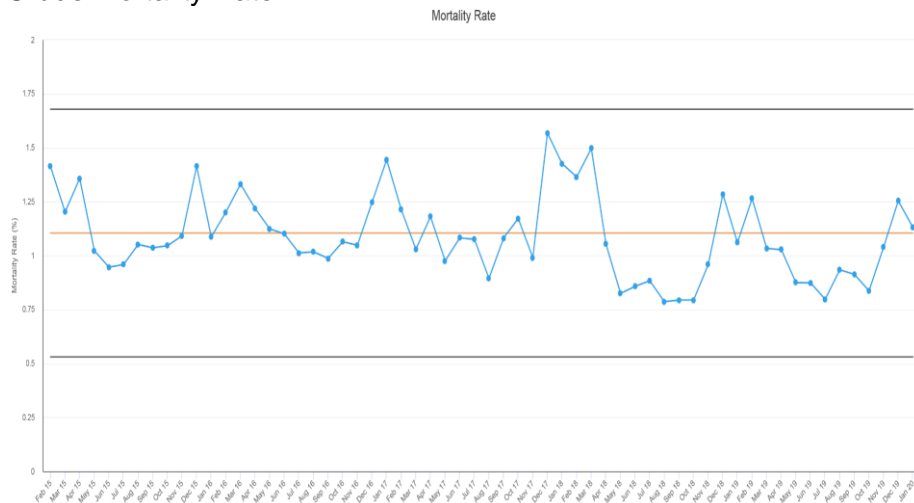
#### RAMI



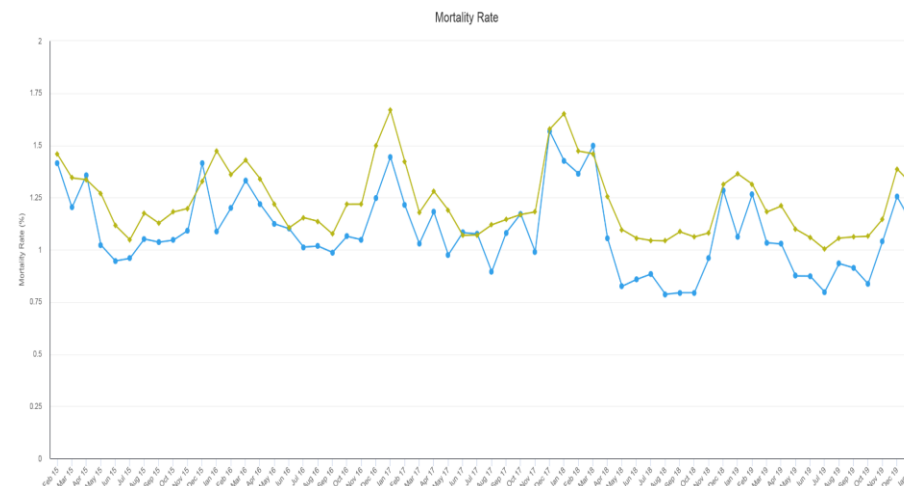
### Monthly variation compared to peer average (Trust blue line)



## SPC run chart Crude Mortality Rate



## Monthly variation compared to peer average (Trust blue line)



## SHMI – note data only available up to November 2019

