Report to:	Trust Board(Public)	**Agenda item:**	**15**
Date of Meeting:	7 February 2019		

Report Title:	Learning from deaths Q3 2018 - 2019			
Status:	**Information**	**Discussion**	**Assurance**	**Approval**
			✓	
Prepared by:	Dr Belinda Cornforth, Consultant Anaesthetist Claire Gorzanski, Head of Clinical Effectiveness			
Executive Sponsor (presenting):	Dr Christine Blanshard, Medical Director			
Appendices (list if applicable):	Appendix 1 – Mortality dashboard Q3 2018/19 Appendix 2 - Learning from death themes and improvement actions. Appendix 3 – Mortality dashboard explanation of terms			

Recommendation:
Recommendation – assurance that the Trust is learning from deaths and making improvements.

Executive Summary:
A mortality dashboard Q3 18/19 shows the number of reviews, learning themes and improvement actions. The support of bereaved families will be strengthened by the bereavement support service linked to the new Medical Examiners. HSMR has sustained the decrease over the last 2 years and is within the expected range and SHMI has decreased. The relative risk of deaths in high risk groups are within the expected range. Improvement actions in the biggest causes of death are ongoing.

Board Assurance Framework – Strategic Priorities	
Local Services - We will meet the needs of the local population by developing new ways of working which always put patients at the centre of all that we do	☐
Specialist Services - We will provide innovative, high quality specialist care delivering outstanding outcomes for a wider population	☐
Innovation - We will promote new and better ways of working, always looking to achieve excellence and sustainability in how our services are delivered	☐
Care - We will treat our patients, and their families, with care, kindness and compassion and keep them safe from avoidable harm	☒
People - We will make SFT a place to work where staff feel valued and are able to develop as individuals and as teams	☐

Resources - We will make best use of our resources to achieve a financially sustainable future, securing the best outcomes within the available resources	☐

1. Purpose

To comply with the national requirements of the learning from deaths framework, Trust Boards must publish information on deaths, reviews and investigations via a quarterly agenda item and present a paper to a public board meeting.

2. Background

The Learning from Deaths initiative aims to promote learning and improve how Trusts support and engage bereaved families and carers of those who die in our care.

A system of Medical Examiners is to be introduced from 1/4/2019 to strengthen the support of bereaved families and drive improvements.

3.0 Medical Examiners (ME)

We are currently exploring options for delivering the ME service to ensure excellence in care for the bereaved but also ensuring the service remains cost effective. Alternatives under consideration are:

1. Continuing with our current system but introducing a Medical Examiner's Officer to undertake the majority of the interactions with relatives (after prior consultation with the ME's). This will require the current clinicians who discuss death certification with a junior to undergo training to become Medical Examiners, and will also require expansion of the end of life care specialist nursing team.

2. Significantly changing the current system to ensure all conversations wth the bereaved are conducted by consultants. This will require approximately 80 consultant hours/week, training and also administrative support.

4.0 Working with bereavement families

In July 18, the National Quality Board published guidance for NHS Trusts on working with bereaved families and carers on how we should support and engage with families after a loved one has died in our care.

In October 18, the End of Life care team hosted a workshop to ascertain our compliance with the 8 guiding principles and the following actions are planned linked to the new Medical Examiner system:

- Design a 'what to do after a person has died' leaflet and combine it with the national leaflet and purchase document folders to hold all the information needed when a person dies.
- Design condolence cards with staff and patients to be sent to relatives when a person has died.
- Restart the bereavement survey in April 2019 and provide an advice/support service when needed.
- Longer term – design a portal on the Trust's website to signpost people to the right information when a person has died.

5.0 Mortality dashboard, learning, themes and actions

In Q3 18/19, 200 deaths occurred in the Trust. Of these, 193 (96%) were screened to ascertain whether the death needed a full case review. In Q3, 95 (47%) deaths had a full case review. One death was considered probably avoidable, 5 deaths had slight evidence of avoidability and 2 were possibly avoidable but not very likely. Themes arising from the 20 learning points were:

- Sepsis screening and administration of antibiotics within 1 hour of diagnosis.
- End of life care – communication with patients and families, speeding up rapid discharge to preferred place of care and early involvement of the end of life care team or hospital palliative care team.
- DNACPR decisions, documentation and discussion with patients and families.
- Treatment escalation plans being discussed with patients and families on previous admissions.

Improvement actions (have all made progress to be completed by March 19) include:

- Redesign the PICC line service with 2 nurses identified to undertake training
- Introduction of the ReSPECT form led by the Resuscitation Committee
- Continue end of life care education programme
- Development of a frailty unit for acutely unwell elderly patients

- Introduction of NatSIPPs (standard operating procedures) for local procedures.
- Timely escalation of deteriorating patients – introduction of NEWS2 & escalation process. Agree a HANT escalation protocol when workload exceeds the ability to respond promptly (Jan 19).

6.0 Bereavement support

In Q3 18/19 there were no concerns raised by families.

7.0 CUSUM alerts

Two new CUSUM alerts arose in Q2:

- COPD and bronchiestasis – 27 observed deaths vs 16 expected with a relative risk of 160 to June 18 - not investigated yet. However, a local COPD audit in December 2018 showed improvement in most elements of the COPD admission checklist compared to the 2016 audit. In addition, compliance with COPD best practice tariff has steadily improved since June 2018 and is close to reaching the 60% standard.
- Secondary malignancies - 33 observed deaths vs 18 expected with a relative risk of 180 to June 18. 29 deaths had a full case review. Of these, 21 patients died in the Hospice. All the deaths were expected and none were considered avoidable. Learning points:
  - Patient discharged back to a nursing home but was returned to the ward as needed oxygen which had not been ordered. Action taken: Respiratory team provided an education session to the staff on the ward on how to order oxygen.
  - High dose analgesia in the last 24 hours of life – reviewed by a palliative care consultant unconnected with the case - analgesia considered appropriate in this complex case. Difficult for a non palliative care professional to assess levels of opioids at end of life. Agreed these cases should be examined by a palliative care consultant unconnected with the case.

Two new CUSUM alerts arose in Q3:

- Cancer of bronchus – 25 observed deaths vs 14 expected with a relative risk of 180 to July 18 – to be investigated and reported in Q4.
- Cancer of brain and CNS – 9 observed deaths vs 2.7 expected with a relative risk of 327 to August 18. 7 deaths had a full case review, 3 of the patients died in the Hospice. All the deaths were expected and none were considered avoidable. Learning points:
  - Patient developed a pulmonary embolism during an inpatient admission. A root cause analysis was reviewed by the Thrombosis Committee. They advised that VTE prophylaxis is not indicated in patients admitted to the Hospice for end of life care, where the risks outweigh the benefit, and where there are no acute medical issues to increase the background risk.

8.0 Death following a planned admission to hospital

In Q3, there were 4 deaths of patients following a planned admission:

1) 72 year old male repatriated from University Hospital Southampton after video assisted thoracic surgery (VATS) with a chest drain in place. Investigated extensively for malignancy but none found. Deteriorated whilst in hospital, with worsening respiratory function and pneumothorax not resolving. Excellent discussions with patient and family about the lack of diagnosis and continuing deterioration. Death not considered avoidable or any learning points.
2) Patient with metastatic prostate cancer repatriated from University Hospital Southampton following insertion of a bilateral nephrostomy due to obstruction. Treated for hospital acquired pneumonia and delirium. The nephrostomy came out and although it was replaced in discussion with the family and the

patient's best interests a decision was made for a palliative approach. Death not considered avoidable or any learning points.

3) See section 9 point 1 on unexpected death.
4) Patient admitted for investigation of abdominal symptoms and found to have a very aggressive metastatic malignancy. Gradually deteriorated and died. Death was unavoidable, no learning points.

9.0 Unexpected death

In Q3, there were 2 unexpected deaths. One was probably avoidable with a greater than 50/50 chance:

1) 89 year old woman who had a recognised complication of a polypectomy. Despite surgical intervention and post-operative intensive care the patient died. Learning points:
   - The decision to remove a complex polyp should be discussed at a colorectal multidisciplinary team meeting.
   - The patient should have had a further opportunity to have a full discussion about the benefits, risks, and alternatives, including doing nothing, prior to choosing the most appropriate procedure.
2) A death subject to a serious incident inquiry related to the administration of Lorazepam.

10.0 Stillbirths, neonatal deaths and child death

One stillbirth in October of a baby with known fetal anomalies. No neonatal deaths in Q3. One child death which is subject to a serious incident inquiry.

11.0 Patients with a learning disability

In Q2 18/19, two patients with learning disabilities died in hospital and found:
1) Although one patient was coded with a learning disability there was no evidence of this in the health care record.
2) A patient with pancreatic cancer and a blocked biliary stent with sepsis had appropriate treatment and best supportive care. No evidence death was avoidable and no learning points.

In Q3 18/19, two patients with a learning disability died and these will be reported in Q4 18/19.

12.0 Patient with a serious mental illness

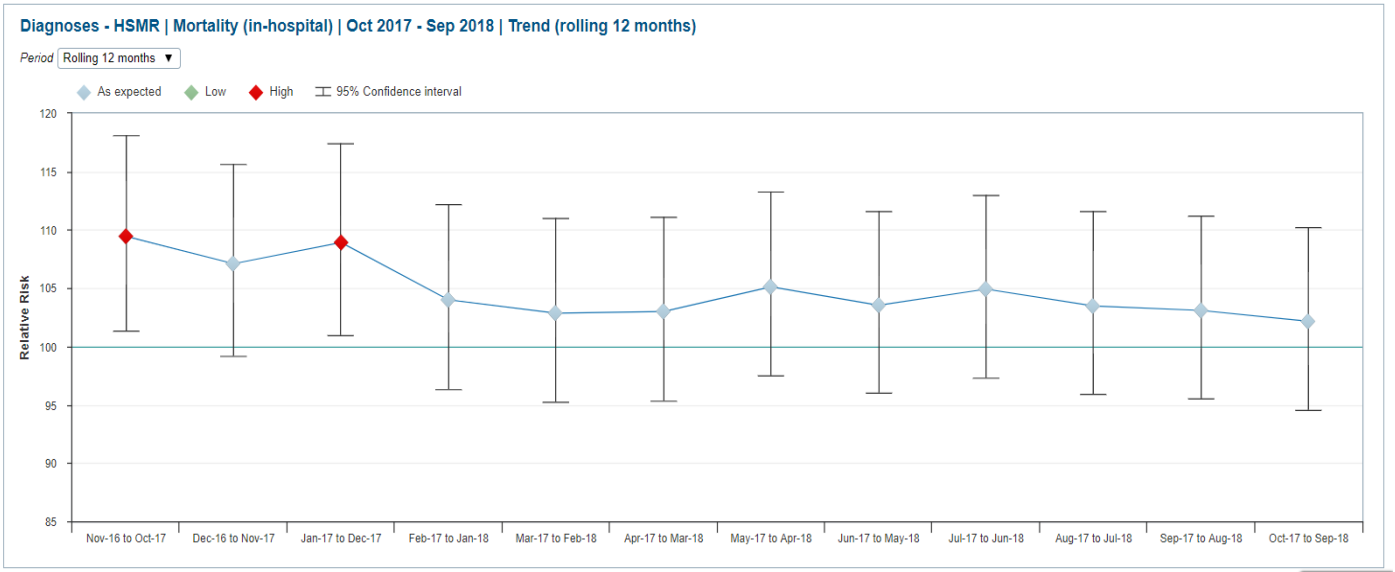
In Q2 18/19, one patient died with a history of schizophrenia under the care of the GP since 2016. Admitted from a nursing home severely dehydrated with diarrhoea and vomiting. Treated by GP at home with anti-emetics and antibiotics. Peri-arrest on admission and died despite active ward based care. Death was not avoidable. Consultant Psychiatrist review of the mental health considered it unlikely to have affected the management decisions. Learning point:

- Improved documentation of best interests in end of life care.

One patient with a serious mental illness died in Q3 and will be reported in Q4 2018/19.

13.0 HSMR trend to September 2018

Table1: HSMR relative risk of all non-elective diagnoses November 2016 – September 2018



14.0 SHMI July 2017 – June 2018

SHMI reduced from 106 to March 18 to 105.1 to June 18 within the expected range.

SHMI adjusted for palliative care reduced from 98 to March 18 to 97.7 to June 18.

15.0 Comorbidity and palliative care coding 18/19

Table 2: Trend in Charlson Comorbidity upper quartile rate

	2015/16	2016/17	2017/18	2018/19
Upper-quartile comorbidity	26.1%	24.2%	24.3%	24.4%
as index of national (100)	105	97	97	98

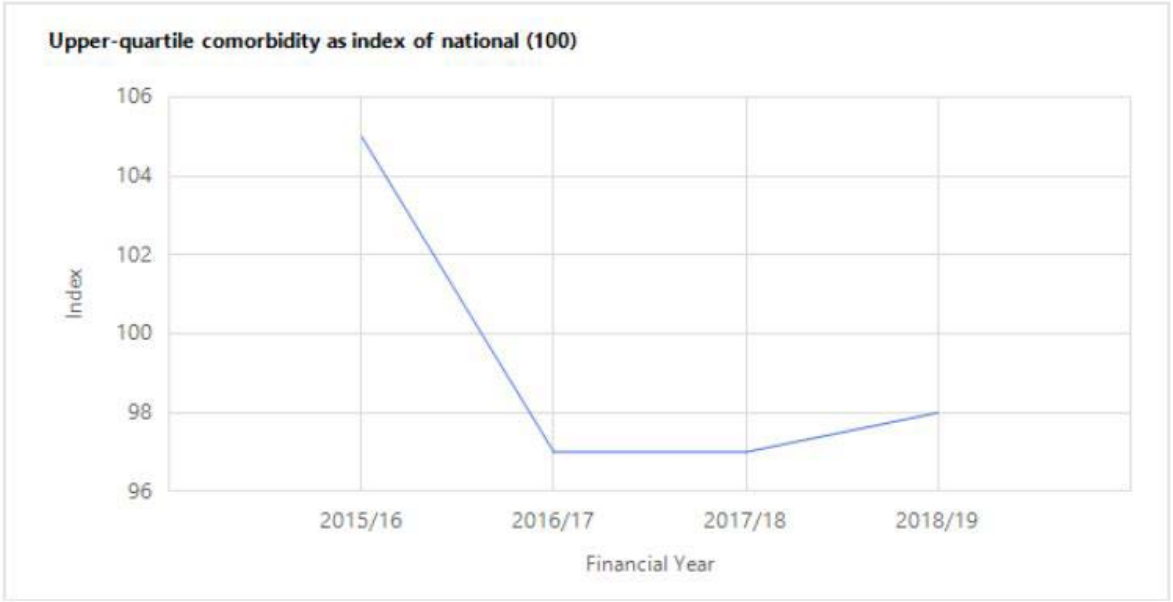
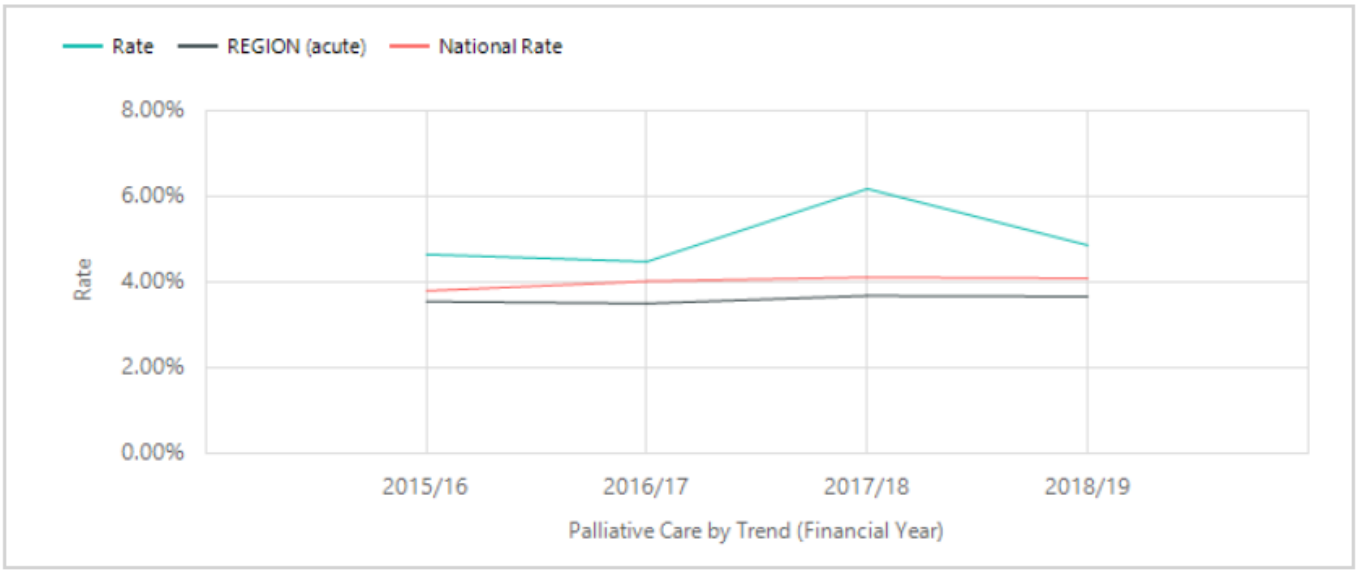


Table 3: Trend in Palliative Care coding rate

Trend (Financial Year)	Non-elective spells	Palliative care	Rate	National Rate	Peer Group Rate
2015/16	9,168	426	4.65%	3.79%	3.54%
2016/17	9,499	425	4.47%	4.02%	3.50%
2017/18	9,750	602	6.17%	4.11%	3.68%
2018/19	4,960	241	4.86%	4.09%	3.66%

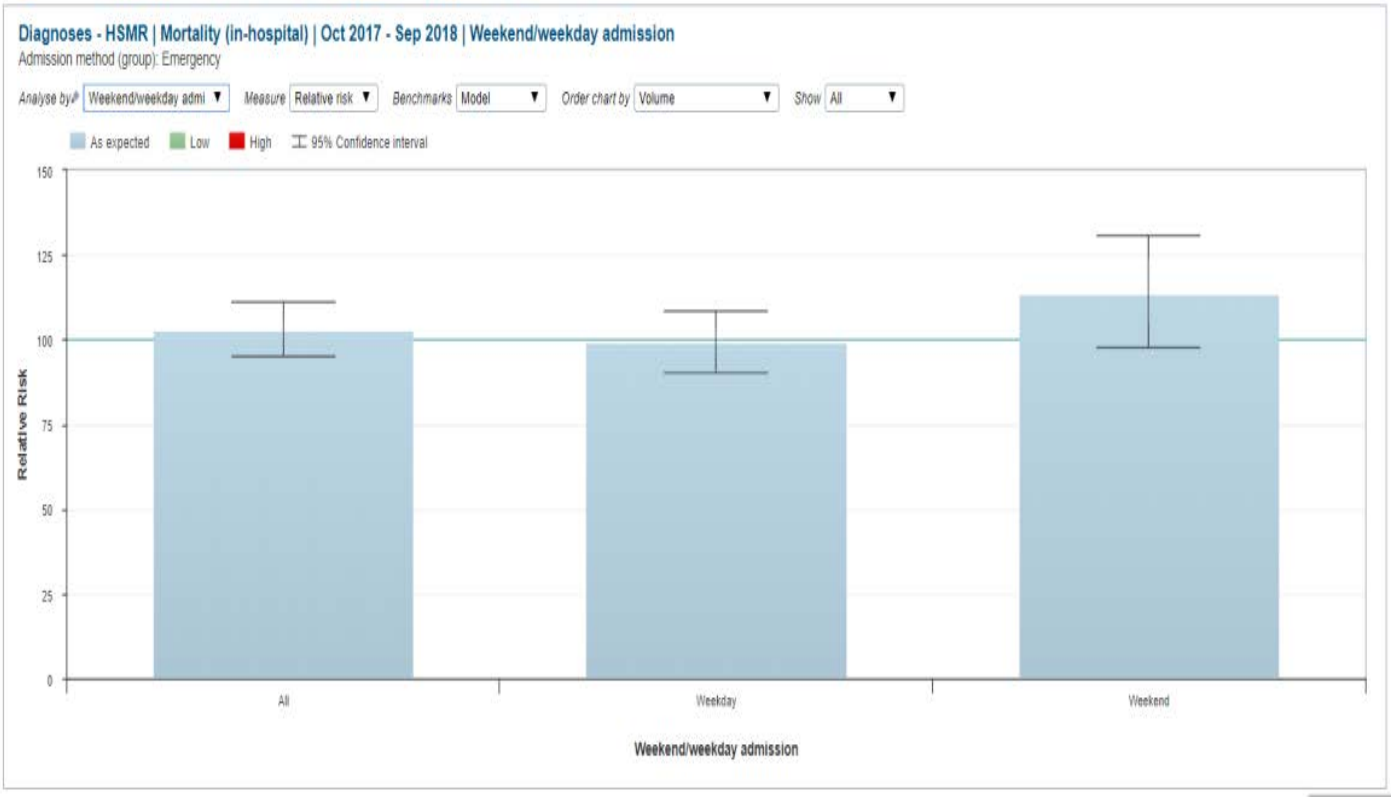


The Trust's palliative care coding rate has decreased in 2018/19 compared to 2017/18.

13.0 Weekday/weekend HSMR

Emergency weekday and weekend HSMR are both within the expected range. No days individually have a statistically significant higher than expected relative risk.

Table 4: Emergency weekday/weekend HSMR October 2017 – September 2018



The emergency weekend HSMR is approximately 10 points higher than the weekday HSMR but there is no statistically significant difference and this is not uncommon. 12 other Trusts in the regional acute peer group have an emergency weekend HSMR that is higher than the weekday HSMR

Table 5: Regional peer comparison of emergency weekend/weekday HSMR

	Emergency Weekday HSMR			Emergency Weekend HSMR		
REGION (acute)	Relative Risk	Low	High	Relative Risk	Low	High
Gloucestershire Hospitals NHS Foundation Trust	98.9	93.5	104.6	96.7	87.6	106.6
University Hospitals Plymouth NHS Trust	110.8	104.3	117.6	114.1	103.0	126.1
Royal Cornwall Hospitals NHS Trust	96.8	91.0	102.8	95.0	86.0	104.8
North Bristol NHS Trust	98.8	93.0	104.9	108.5	97.7	120.3
Royal United Hospitals Bath NHS Foundation Trust	98.7	91.9	105.7	114.3	102.0	127.6
Royal Devon and Exeter NHS Foundation Trust	114.3	107.1	121.9	115.2	102.4	129.2
The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	102.2	96.0	108.7	98.5	87.9	110.0
University Hospitals Bristol NHS Foundation Trust	97.6	90.2	105.4	122.7	108.4	138.4
Great Western Hospitals NHS Foundation Trust	94.5	88.2	101.2	109.6	97.3	123.1
Taunton and Somerset NHS Foundation Trust	96.3	89.8	103.1	96.6	85.6	108.6
Torbay and South Devon NHS Foundation Trust	95.7	88.8	103.1	104.1	91.7	117.8
Poole Hospital NHS Foundation Trust	106.7	99.2	114.6	104.3	91.7	118.3
Dorset County Hospital NHS Foundation Trust	117.8	107.4	129.0	122.2	105.2	141.2
Salisbury NHS Foundation Trust	101.7	92.8	111.2	111.5	96.0	128.8
Yeovil District Hospital NHS Foundation Trust	86.3	79.0	94.1	100.4	87.1	115.1
Northern Devon Healthcare NHS Trust	101.5	92.1	111.5	118.2	100.2	138.5
Weston Area Health NHS Trust	84.2	75.7	93.4	94.6	78.7	112.8

Overall, the trend for emergency weekend HSMR is fairly stable. There was a peak in the relative risk in April 2018 which was statistically higher than expected. In April 2018, pneumonia was the only diagnosis group with a statistically significantly higher than expected relative risk of 454 with 7 observed deaths vs 1.5 expected.

These 7 deaths have been investigated and compared to the time to initial consultant review within 14 hours of admission and daily review over a weekend. The deaths were reviewed against the British Thoracic Society care bundle standards for community acquired pneumonia

1) chest X ray within 4hrs of admission
2) CXR changes consistent with CAP.
3) SATs recorded within 1 hr of admission
4) Oxygen prescribed within 1 hr of admission
5) CURB score recorded
6) Antibiotics within 4 hrs of admission

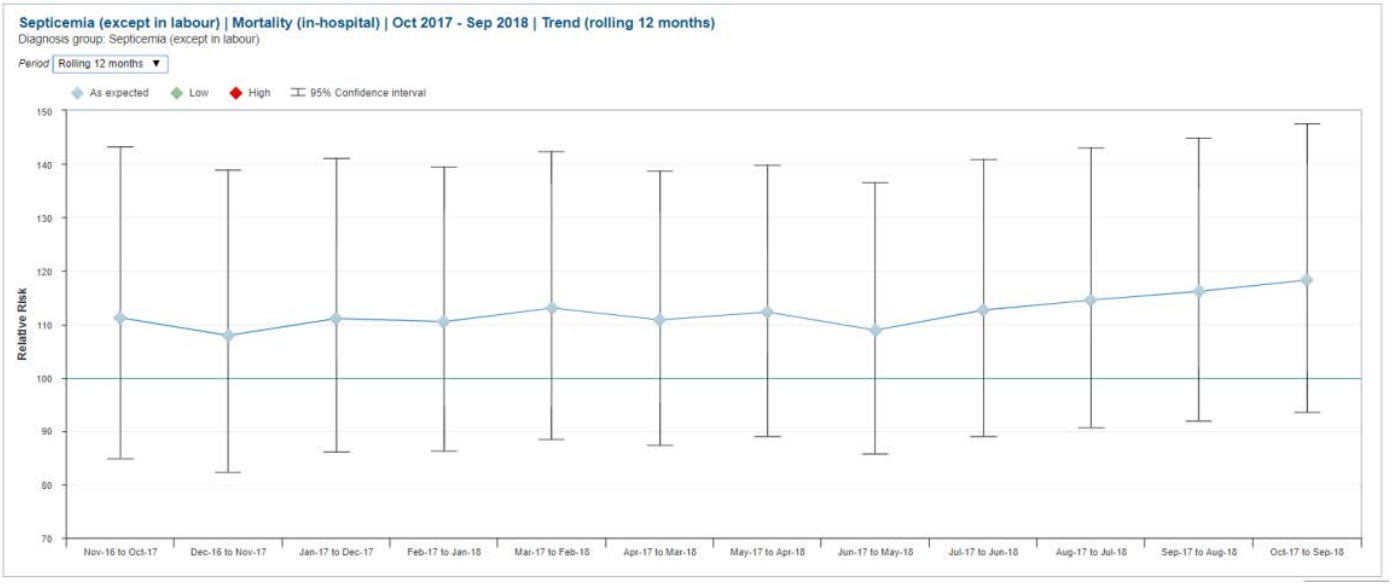
The review found 100% compliance with 5 of the 6 care bundle standards. Only, one of 7 patients had a documented CURB score. This needs improvement, although none of the patients were adversely affected by lack of a score. Six of the 7 patients had a consultant review within 14 hours of admission and all the patients who remained acutely unwell at a weekend had a regular medical review.

16.0 Deaths in high risk diagnosis groups (16/17, 17/18, Q1 & Q2 18/19)

Diagnosis group	Relative risk 16/17	Relative risk 17/18	Q1 18/19	Q2 18/19
Acute and unspecified renal failure	94	87	91	79
Acute cerebrovascular disease	116	84	90	90
Acute myocardial infarction	89	65	77	79
Congestive heart failure	85	99	110	90
Fractured neck of femur	103	76	61	67
Pneumonia	130	94	100	94
Septicaemia (except in labour)	123	111	113	118

Six out of 7 diagnosis groups remain within the expected range but septicaemia has started to show an upward trend over the last 4 data points. Improvement actions centre on a monthly sepsis audit, feedback and education continues reported to the Deteriorating Patient and Sepsis Steering Group. Introduction of NEWS2 in February 19 will include automatic screening for sepsis.

Table 6: Trend in relative risk for septicaemia



17.0 Biggest causes of death (October 17 – September 18) and improvement actions

- Pneumonia (112 cases) – a focus on mouth care as a prevention of hospital acquired pneumonia.
- Septicaemia (84 cases) – see section 16.
- Acute cerebrovascular disease (71 cases) – patient level data submitted to the Sentinel Stroke National Audit Programme score C to September 18. SFT are part of an STP Acute Stroke Improvement collaborative.

18.0 Summary

A mortality dashboard Q3 18/19 shows the number of reviews, learning themes and improvement actions. The support of bereaved families will be strengthened by the bereavement support service linked to the Medical Examiner. HSMR has sustained the decrease over the last 2 years and is within the expected range and SHMI has decreased. The relative risk of deaths in high risk groups are within expected range. Improvement actions in the biggest causes of death are ongoing.

19.0 Recommendation

The report is provided for assurance that the Trust is learning from deaths and making improvements.

Dr Belinda Cornforth
Consultant Anaesthetist
Chair of the Mortality Surveillance Group

Claire Gorzanski
Head of Clinical Effectiveness
15 January 2019

SALISBURY NHS FOUNDATION TRUST
MORTALITY DASHBOARD 2018/2019

	Apr 18	May 18	Jun 18	Q1	Jul 18	Aug 18	Sep 18	Q2	Oct 18	Nov 18	Dec 18	Q3	Jan 19	Feb 19	Mar 19	Q4	Total
Deaths	69	61	55	**185**	53	67	56	**176**	68	60	72	**200**					**561**
1st screen	69	59	55	**183**	50	67	52	**169**	68	57	67	**192**					**544**
% 1st screen	100%	97%	100%	**99%**	94%	100%	93%	**96%**	100%	95%	93%	**96%**					**97%**
Case reviews	29	19	24	**72**	9	26	26	**61**	36	32	27	**95**					**228**
% case reviews	42%	31%	42%	**39%**	17%	39%	47%	**35%**	53%	53%	37%	**47%**					**41%**
Deaths with Hogan score 1	68	58	52	**178**	49	60	54	**163**	65	58	69	**192**					**533**
Deaths with Hogan score 2 - 3	1	3	3	**7**	3	5	2	**10**	3	2	2	**7**					**24**
Deaths with Hogan score 4 - 6	0	0	0	**0**	1	2	0	**3**	0	0	1	**1**					**4**
Learning points	5	8	5	**18**	8	5	3	**16**	6	5	9	**20**					**54**
Family/carer concerns	1	1	0	**2**	0	0	0	**0**	1	0	0	**1**					**3**
CUSUM alerts	1	2	3	**6**	0	0	2	**2**	1	1	0	**2**					**10**
CUSUM investigated	0	1	2	**3**	0	0	1	**1**	0	0	0	**0**					**4**
Deaths investigated as an SII	1	1	1	**3**	0	2	1	**3**	0	1	1	**2**					**8**
Death following an elective admission	0	1	0	**1**	2	0	2	**4**	1	1	2	**4**					**9**
Unexpected	2	1	1	**4**	1	2	0	**3**	1	1	1	**3**					**10**
Stillbirths/ neonatal/child death	2	3	1	**6**	1	2	0	**3**	1	1	0	**2**					**11**
Learning disability deaths	0	0	0	**0**	2	0	0	**2**	0	1	1	**2**					**4**
Reported to LeDeR programme LeDeR	0	0	0	**0**	0*	0	0	**0**	0	0	0	**0**					**0**
Serious mental illness	1	0	0	**1**	0	0	1	**1**	1	0	0	**1**					**3**

Note: Appendix 3 - explanatory notes *Cases to be reported to LeDeR

Appendix 2

SALISBURY NHS FOUNDATION TRUST

MORTALITY DASHBOARD THEMES AND ACTIONS 2018/2019

No	Learning points	Action point	By whom	By when	Status
1	Delay in IV access. PICC line service – Monday to Friday service and single handed practitioner	Redesign PICC line service with 2 nurses identified to undertake training	S Williams, Surgical DMT	31/03/19	
2	Plan the introduction of the ReSPECT form (Treatment Escalation Plan & DNAR form)	Work programme to be developed in 2018/19	Resuscitation Committee	31/03/19	
3	Insufficient senior medical review over a weekend of acutely unwell elderly patients which has led to late recognition of deterioration	Development of the frailty service	Dr J Drayson, Medicine DMT	31/03/19	
4	Timely and regular reviews of the ceiling of care as the condition changes.	Continue to provide end of life care training	Specialist Palliative Care team End of Life Care team	31/03/19	
5	Improve documentation of consent, risk and benefits of ward based procedures such as chest drains, lumbar punctures and ascitic taps	Ongoing education programme on consent Implementation of LocSIPPs	B Cornforth Risk Team	31/03/19	
6	Timely escalation of deteriorating patients	1) Introduction of NEWS2 & escalation process. Education programme. 2) Agree a HANT escalation protocol when workload exceeds the ability to respond promptly (Jan 19).	1) M Ford 2) HANT Board	1) 1/2/2019 2) 31/3/2019	

SALISBURY NHS FOUNDATION TRUST
MORTALITY DASHBOARD – EXPLANATION OF TERMS

1. Deaths – the number of adult, child and young people deaths in the hospital and the Hospice.

2. 1st screen - the number of deaths screened by medical staff to decide whether they need a full case review.

3. Case review - the number of deaths subject to a full case review using a structured method. Case record reviews involve finely balanced judgements. Different reviewers may have different opinions about whether problems in care caused a death. This is why the data is not comparable.

4. Deaths with a Hogan score* of 1 – 3. The scores are defined as: 1) Definitely not avoidable 2) Slight evidence of avoidability 3) Possibly avoidable but not very likely less than 50/50.

5. Deaths with a Hogan score* of 4 – 6. The scores are defined as 4) Probably avoidable more than 50/50. 5) Strong evidence of avoidability 6) Definitely avoidable. NHSI guidance 'Any publication that seeks to compare organisations on the basis of the number of deaths thought likely to be due to problems in care is actively and recklessly misleading the reader'.

6. Learning points – the number of issues identified from reviews and investigation (including examples of good practice). The main purpose of this initiative is to promote learning and improve how Trusts support and engage with families and carers of those who die in our care.

7. Family/carer concerns – the number of concerns raised by families and carers that have been considered when determining whether or not to review or investigate a death. All families are offered support from our bereavement service and involved in investigations where relevant.

8. CUSUM (or cumulative sum) alerts - are statistical quality control measure which alerts the Trust to when the number of deaths observed exceeds the number expected in a diagnostic or procedure group. Each death in a CUSUM alert is subject to a full case review to promote learning and improvement.

9. Deaths investigated as a SII (serious incident inquiry).

10. Elective deaths – are patients who died following a planned admission to hospital. Our reviews indicate that the majority of these patients had metastatic cancer and were admitted to hospital for symptom control or a procedure to relieve their symptoms and died from disease progression.

11. Unexpected deaths – of patients who were not expected to die during their admission to hospital are subject to a full case review.

12. Stillbirth – is a baby that is born dead after 24 completed weeks of pregnancy.

13. Neonatal death – is the death of a live born baby during the first 28 days after birth.

14. Child death – the death of a child up to the age of 18. All unexpected child deaths are reviewed by the Wiltshire and Swindon Child Death Overview Panel.

15. Learning disability deaths – all patients with learning disabilities aged 4 to 74 years. The Trust reports all these deaths to the LeDeR programme.

16. LeDeR programme – Learning Disabilities Mortality review programme hosted by the University of Bristol aims to guide improvements in the quality of health and social care services for people with learning disabilities across England. The programme reviews the deaths of people with learning disabilities.

17. Serious mental illness – all patients who die with a serious mental illness.

18. Maternal deaths – is the death of a woman while pregnant or within 42 days of the end of pregnancy from any cause related to or aggravated by the pregnancy or its management. Maternal deaths are rare events.

References

*Hogan H et al, 2015 Avoidability of hospital deaths and association with hospital wide mortality ratios: retrospective case record review and regression analysis. BMJ 2015;351 https://www.bmj.com/content/351/bmj.h3239

NHS Improvement, July 2017. Implementing the learning from deaths framework: key requirements for Trust Boards. NHS Improvement, London.